AGENDA C-10
APRIL 2003

MEMORANDUM

TO: Council and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME
2 HOURS

DATE: March 14, 2003

SUBJECT: CDQ Program

ACTION REQUIRED

Final action on CDQ "other species" exemption regulatory amendment.

BACKGROUND

Over the past several years, CDQ (Community Development Quota) Program participants have repeatedly identified the "other species" CDQ allocation as being inadequate to support the bycatch needs of CDQ target fisheries, particularly at the individual group level. The "other species" complex is one of the groundfish TAC categories allocated to the CDQ Program. It consists of sharks, skates, sculpins, and octopus. These species are caught concurrently with CDQ target species such as pollock, Pacific cod, sablefish, and Atka mackerel. Failure to harvest all of its target allocations due to inadequate "other species" CDQ could diminish a CDQ group's royalty income. This could in turn impact the accomplishment of projects intended to foster economic development in western Alaska communities.

In 2001 and 2002, the Council addressed the "other species" CDQ issue by requesting that NMFS modify how the CDQ non-specific reserve is calculated. NMFS accomplished this via emergency rulemaking associated with the BSAI groundfish specifications in those years. The CDQ non-specific reserve offers CDQ groups a means to augment the amount of annual "other species" CDQ they receive, but its effectiveness has been diminished since 1999 due to a variety of factors associated with the annual groundfish specifications process. Modifying the contributions to this reserve in 2001 and 2002 ensured that it could in turn contribute adequate quota to the "other species" CDQ category in an amount that would fully support the catch of "other species" in CDQ target fisheries. This modification to the CDQ non-specific reserve was not made during the 2003 annual BSAI specifications process.

At the February 2003 Council meeting, CDQ Program participants requested that the Council take action to exempt "other species" CDQ from being allocated to individual CDQ groups and that this species category instead be managed at the sector level, via alternative in-season management measures available to NMFS. In turn, the Council requested that NMFS develop an analysis specific to this issue for action at the April 2003 Council meeting. This will be initial review of this analysis. However, selection of a preferred alternative and final action by the Council at this meeting could facilitate preparation of rulemaking that would alter the way that NMFS allocates and manages the "other species" CDQ reserve in 2003. If final action is deferred to a future Council meeting, the possibility that NMFS might be able to effect such changes in 2003 is decreased.

NMFS has prepared an Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis to examine alternatives associated with this issue. The alternatives both considered and rejected for analysis are listed below. Should the Council select Alternative 2, this action would represent a regulatory amendment. Should one of the rejected alternatives be considered, it may necessitate an FMP amendment. The analysis was distributed prior to the Council meeting. The executive summary is attached as Item C-10(1)

Alternatives considered:

Alternative 1. No action: continue to allocate the "other species" CDQ reserve among each of the six CDQ groups.

Alternative 2. Allow the "other species" CDQ reserve to be managed as a single reserve rather than as separate allocations to each CDQ group.

Option 1. Eliminate the CDQ non-specific reserve.

Alternatives considered but rejected:

Rejected Alternative 1. Continue to allocate "other species" CDQ to each CDQ group and increase the amount of the CDQ non-specific reserve available to be released to the "other species" CDQ category.

Rejected Alternative 2. Do not allocate "other species" to the CDQ program.

Rejected Alternative 3. Increase the amount of the "other species" TAC that is apportioned to the "other species" CDQ reserve.

Executive Summary

This analysis examines alternatives associated with the management of "other species" Community Development Quota (CDQ). Over the past several years, CDQ Program participants have repeatedly identified the "other species" CDQ allocation as being inadequate to support the bycatch needs of CDQ target fisheries, particularly at the individual CDQ group level. CDQ groups are prohibited from exceeding a given CDQ allocation. The "other species" complex is one of the groundfish TAC categories allocated to the CDQ Program. It consists of sharks, skates, sculpins, and octopus. These species are caught incidentally with CDQ target species such as pollock, Pacific cod, sablefish, and Atka mackerel. Failure to harvest all of its target allocations due to inadequate "other species" CDQ for incidental catch needs could diminish a CDQ group's royalty income. This could in turn impact the accomplishment of projects intended to foster economic development in western Alaska communities.

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Alternatives considered:

Alternative 1. No action: continue to allocate the "other species" CDQ reserve among each of the six CDQ groups.

Under Alternative 1, no action, continuing to allocate the "other species" CDQ reserve to individual groups could constrain some directed fisheries if the amount of "other species" CDQ available to a group is less than the amount needed for "other species" incidental catch amounts in its directed fisheries.

Alternative 2. Allow the "other species" CDQ reserve to be managed as a single reserve rather than as separate allocations to each CDQ group.

Option 1. Eliminate the CDQ non-specific reserve.

Under Alternative 2, the "other species" CDQ reserve would not be allocated among CDQ groups.

Instead, it would be managed at the CDQ reserve level and in conjunction with non-CDQ fisheries. All "other species" catch in groundfish CDQ fisheries would accrue towards the "other species" CDQ reserve, rather than towards specific CDQ group allocations. NMFS would monitor the aggregate catch of "other species" in both the CDQ and non-CDQ fisheries and take appropriate management measures to control the catch of "other species." The overall catch of "other species" would still be subject to existing controls associated with "other species" TAC and OFL. If the OFL was approached, both CDQ and non-CDQ fisheries would be subject to specified directed fishing closures to minimize further catch of "other species."

Option 1 under Alternative 2 would eliminate the CDQ non-specific reserve. If management of "other species" CDQ was shifted to the sector level, this reserve would be unnecessary. CDQ groups would not be accountable for their catch of "other species" to the degree that they would need the flexibility to increase their initial "other species" allocations via the CDQ non-specific reserve. The only other groundfish species contributing to the CDQ non-specific reserve is arrowtooth flounder

Alternatives considered but rejected:

Rejected Alternative 3. Continue to allocate "other species" CDQ to each CDQ group and increase the amount of arrowtooth flounder CDQ reserve that is apportioned to the CDQ non-specific reserve.

This alternative would indirectly increase the amount of "other species" CDQ available to each CDQ group by increasing the amount of arrowtooth flounder that is apportioned to the CDQ non-specific reserve. Each year, NMFS establishes the CDQ non-specific reserve. This reserve is comprised of 15 percent of two species categories, "other species" and arrowtooth flounder, and was designed as a mechanism that would decrease the possibility that the amount allocated to some CDQ species categories would be insufficient to support directed CDQ fisheries.

While increasing arrowtooth flounder's apportionment to the CDQ non-specific reserve offers additional flexibility to try to ensure that CDQ groups have adequate "other species" CDQ available for their fishing needs, determining the appropriate apportionment is difficult. Besides trying to calculate the "other species" needs of future CDQ fisheries and then calculating the appropriate amount of arrowtooth flounder to apportion to the CDQ non-specific reserve, the projected demand for arrowtooth flounder in the CDQ fisheries has to be considered. Significant decreases in the arrowtooth flounder TAC in recent years have contributed to the ineffectiveness of the CDQ non-specific reserve.

Rejected Alternative 4. Do not allocate "other species" to the CDQ program.

Under this alternative, "other species" would not be allocated to the CDQ program. NMFS would no longer allocate 7.5 percent of the "other species" TAC to an "other species" CDQ reserve nor allocate "other species" to individual CDQ groups. Any catch of "other species" in the CDQ fisheries would be subtracted from the general "other species" TAC. The CDQ groups would have to comply with general management measures associated with "other species," such as if this complex were put on bycatch or prohibited catch status. This alternative would require an FMP amendment, since the FMP for the BSAI currently stipulates that CDQ will be issued for all BSAI groundfish species, except for squid. The current regime of strict quota accountability is a means to ensure that CDQ groups keep their catch within the bounds of their allocations, including the catch of incidental species such as sharks, skates, sculpins, and octopus. Not allocating "other species" to the CDQ Program would disassociate the catch

of "other species" in CDQ fisheries from the higher level of scrutiny it is currently given.

Rejected Alternative 5. Increase the amount of the "other species" TAC that is apportioned to the "other species" CDQ reserve.

This alternative would increase the amount of "other species" allocated to the CDQ Program from the BSAI "other species" TAC from 7.5 percent to some greater percentage. "Other species" CDQ would be allocated to each CDQ group and group level accountability for the catch of "other species" would be retained. However, it would be difficult to determine the amount of "other species" that would adequately account for the projected catch of "other species" in the CDQ fisheries.

C-10

Draft for Council Review

Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for a Proposed Regulatory Amendment to Modify the Management of "Other Species" Community Development Quota

Date: March 2003

Lead Agency: National Marine Fisheries Service
Alaska Regional Office
Juneau, Alaska

Responsible Official: James Balsiger, Alaska Regional Administrator

Prepared by: Obren Davis, National Marine Fisheries Service

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Table of Contents

1.0 PURPOSE AND NEED FOR THE ACTION

1.1 Introduction

This Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) analyzes alternatives for the management of the Bering Sea and Aleutian Islands (BSAI) "other species" complex in the Community Development Quota (CDQ) fisheries. Current regulations specify that 7.5 percent of the annual "other species" Total Allowable Catch (TAC) be apportioned to a CDQ reserve, which is subsequently allocated between six different CDQ managing organizations (CDQ groups). The species in the "other species" complex include sharks, skates, sculpins, and octopus. These species are taken incidentally in directed CDQ fisheries, such as pollock, Pacific cod, Greenland turbot, and sablefish. It may be possible that individual CDQ groups catch all of their annual allocation of "other species" before they fully harvest all of their available target species. CDQ groups are prohibited from exceeding a quota amount, and may have to stop participating in some target fisheries if they catch most or all of their "other species" allocation in order to avoid facing enforcement actions. This in turn could have an economic impact on CDQ groups and their affiliated communities if royalties are foregone due to lost fishing opportunities. The objective of this action is to consider ways to manage "other species" CDQ in a manner that would allow CDQ groups to completely utilize their target species allocations without being constrained by their individual "other species" allocations.

1.2 Management Authority

The groundfish fisheries in the exclusive economic zone (EEZ) off Alaska are managed by the National Marine Fisheries Service (NMFS) under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The mission of NMFS is the stewardship of living marine resources for the benefit of the nation, through science-based conservation and management and the promotion of a healthy marine environment. The goals for accomplishing this mission are maintaining sustainable fisheries, recovering protected species, and protecting the living marine habitat. Guidance for achieving these goals is taken from relevant Federal legislation.

The groundfish fisheries of the BSAI are managed under a fishery management plan (FMP) approved by the Secretary of Commerce. The *Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Area* (NPFMC, 2002a) was developed under the Magnuson-Stevens Act and other applicable authority to manage groundfish fisheries for optimal yield and to allocate harvest among different fishery components, while preventing the overfishing and conserving marine resources. The BSAI FMP was originally developed in 1977, and has been amended over 65 times.

Actions taken to amend regulations governing the groundfish fisheries must meet the requirements of Federal laws and regulations. In addition to the Magnuson-Stevens Act, the most important of these are the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Executive Order (E.O.) 12866, and the Regulatory Flexibility Act (RFA).

NEPA, E.O. 12866 and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions which may address the problem. This information is included in Sections 1 and 2 of this document, along with an overview of "other species" management. Section 3 contains information on the affected environment and the expected direct or indirect effects of the alternatives on the environment, including potential impacts on fish habitat, marine mammals, and

endangered species, as required by NEPA. It also includes a section analyzing the distinctions between the direct, indirect and cumulative effects of this action; and a conclusion analyzing the potential significance of the effects identified. Section 4 includes a Regulatory Impact Review, which considers the economic impacts of the alternatives, as required by E.O. 12866. Section 5 addresses the RFA's requirement that the agency consider potential impacts on small entities. The remaining sections include a bibliography, a list of authors and people consulted, and an appendix.

1.3 Background on the CDQ Program and 'other species' management

The CDQ program was established to provide fisheries-related economic development opportunities to eligible western Alaska coastal communities. It began in 1992 with the allocation of 7.5 percent of the annual BSAI pollock TAC to the pollock CDQ reserve. Pacific halibut and fixed gear sablefish CDQ allocations began in 1995, as part of the halibut and sablefish Individual Fishing Quota (IFQ) program. In 1998, annual allocations of all groundfish TACs, prohibited species catch limits, and guideline harvest levels of several crab species were added to the CDQ Program. As part of the latter process, NMFS combined regulations that dealt with existing groundfish CDQ (pollock and fixed gear sablefish) allocations and the new allocations of other groundfish species. The final rule implementing these regulations was published in the Federal Register on June 4, 1998 (63 *FR* 30381). The first complete year of multispecies groundfish CDQ fisheries was 1999. Additionally, the pollock CDQ allocation was increased to ten percent of the BS and AI pollock TACs beginning in 1999, based on requirements stipulated in the American Fisheries Act of 1998 (Pub. L. 105-277).

One of the groundfish species categories allocated to the CDQ Program is "other species." This species category is usually used to support the incidental catch needs of directed CDQ fisheries. Most "other species" catch is discarded, although there is limited retention of skate in the Pacific cod CDQ fishery. During the development of the groundfish CDQ Program, NMFS recognized that the catch of "other species" and other non-target species such as arrowtooth flounder could prevent CDQ fishery participants from fully harvesting their allocations of target species. To address this issue, NMFS created the CDQ non-specific reserve. This reserve is essentially an in-season management tool that CDQ groups may use to augment the initial arrowtooth flounder or "other species" CDQ allocations that they receive each year. The CDQ non-specific reserve is discussed further in Section 2.3.1.

Notwithstanding the management flexibility afforded by the CDQ non-specific reserve, concern exists that "other species," or the lack thereof, will constrain CDQ target fisheries. This includes public comments associated with the multispecies groundfish CDQ Program, periodic discussions between CDQ groups and NMFS since 1999, as well as testimony to the Council at its April and December 2001 meetings. Most recently, CDQ group representatives requested relief from the current "other species" CDQ management regime from the Council at its February 2003 meeting. In turn, the Council requested that NMFS:

> *". . .prepare an analysis. . .for action in April (2003) which would manage 'other species' CDQ allocations similar to BSAI shortraker, rougheye, and northern rockfish, i.e., 'other species' CDQ would be allocated to the CDQ reserve, rather than the individual CDQ groups, maximum retainable bycatch levels would be established for the CDQ fisheries, and that once aggregate CDQ harvests of 'other species' reaches 7.5 percent of the TAC, 'other species' would be treated as a PSC species."*

This request encompasses several fishery management measures used in the non-CDQ groundfish

fisheries, such as sector level allocation management, maximum retainable amounts, and prohibited species catch (PSC). The in-season management of groundfish and PSC catch in the non-CDQ groundfish fisheries differs from the management protocols used in the CDQ fishery, which are based on the specific quota allocations to CDQ groups. In-season management measures are further discussed in Section 2.2.

Additionally, while the Council's request specified that this action pertains to how "BSAI" shortraker, rougheye, and northern rockfish are allocated and managed, NMFS believes that this is a misinterpretation of the current CDQ allocation and management structure. NMFS allocated BS northern and BS shortraker/rougheye to the CDQ reserve level in 2003. NMFS allocated AI northern rockfish and AI shortraker/rougheye rockfish to the individual CDQ group level and will continue to manage these AI rockfish categories at the group level. Therefore, this analysis discusses the management of "other species" CDQ in relation to the current CDQ reserve level management of BS northern and shortraker/rougheye rockfish CDQ.

1.4 Problem statement

The current regulatory and management structure associated with the CDQ Program may pose a barrier to the successful harvest of the full suite of target groundfish species that are now allocated to the program. Each annual groundfish TAC amount contributes a specified percentage to a CDQ reserve category. For most TAC categories, this percentage is 7.5 percent. Each CDQ reserve is then allocated to six different CDQ groups as a specific quota amount, based on an allocation schedule approved by the NMFS. CDQ groups are prohibited from exceeding an allocated CDQ. They may have to stop participating in CDQ target fisheries in which "other species" is incidentally caught if they catch most or all of their "other species" allocation. If they continue fishing and exceed their "other species" allocation, they may face enforcement actions. If NMFS determined that a CDQ group had apparently exceeded its available "other species" CDQ, it would report this information to its Alaska Enforcement Division for additional investigation and referral to NOAA General Counsel. Disposition of such cases may include monetary or other penalties.

The combination of a decrease in available "other species" CDQ and a prohibition against exceeding an allocated CDQ amount has been identified by CDQ groups as a constraint that may prevent them from fully utilizing their target allocations. The Council recognized this problem and addressed it in 2001 and 2002 by requesting that NMFS increase the amount of "other species" available to CDQ groups by modifying the way the CDQ non-specific reserve is calculated. This adjustment is discussed in Section 2.3.1.

The purpose of the CDQ Program is discussed in both the BSAI FMP and in corresponding NMFS regulations. Regulations at 50 CFR 679.1(e) state the goals of the program as follows:

> The goals and purpose of the CDQ Program are to allocate CDQ to eligible western Alaska communities to provide the means for starting or supporting commercial fisheries business activities that will result in an ongoing, regionally-based, fisheries related economy.

The current management of "other species" CDQ may limit the harvest of royalty generating CDQ allocations. Leaving a portion of CDQ target fishery allocations unharvested could have a detrimental impact on the successful completion of a variety of economic development projects that are funded via

such royalties. As this would be contrary to the overall goals and purpose of the CDQ Program, modifying the management of "other species" CDQ may facilitate fostering a greater degree of success in harvesting target groundfish CDQ species and attainment of program goals, while still maintaining BSAI fishery management objectives. The Council's intent for recommending this analysis was to provide a means to assess management alternatives that may alleviate the possibility that annual allocations of "other species" CDQ could constrain the complete harvest of groundfish CDQ target species by individual CDQ groups.

2.0 DESCRIPTION OF THE ALTERNATIVES

2.1 Alternative 1. No action: continue to allocate the "other species" CDQ reserve among each of the six CDQ groups.

This alternative would maintain the current regulatory structure that allocates specific amounts of the "other species" CDQ reserve to individual CDQ groups. The amounts of "other species" quota allocated to each group would continue to be established by a periodic, competitive allocation process. In this process, each CDQ group submits a Community Development Plan (CDP) and request for allocations of CDQ and PSQ species to the State of Alaska. Typically, a CDQ group will calculate the amount of "other species" it thinks would be required to support the "other species" catch in a given target fishery, based on the amount of target species being requested. The sum of each of these "other species" amounts constitutes the overall "other species" allocation amount the group will request.

The State of Alaska reviews the CDQ and PSQ allocation requests from all of the CDQ groups and develops allocation recommendations that it forwards to NMFS for review and approval. As part of its allocation review and recommendation process, the State usually modifies the groups' target species allocation requests. The State must then adjust the groups' non-target species allocation amounts to comport to its target species allocation recommendations. Such adjustments may or may not match how each group calculated the proportion of "other species" CDQ that would be needed to support a certain target species allocation. The most recent CDQ allocation recommendations were approved in January 2003 and are effective from 2003 through the end of 2005.

Once CDQ allocations are approved and fishing for groundfish CDQ commences, each CDQ group has to abide by regulations prohibiting catching more than an allocated CDQ or PSQ amount, including the "other species" category. If a group exceeds its annual allocation in a given species category, it is subject to an enforcement action. Since 1999, there have been several CDQ overages each year. These overages occurred in both target and non-target species categories during the course of CDQ harvesting efforts. Such infractions have resulted in CDQ groups being assessed monetary penalties by NOAA General Counsel. There have been no "other species" overages by individual CDQ groups or at the CDQ reserve level as a whole in the four complete years of groundfish CDQ fishing.

CDQ groups are aware of the possibility that exceeding their individual allocations of non-target species may have an impact on the complete prosecution of their key target species, since lack of adequate incidental catch species may curtail directed fishing for other CDQ species. Each year, a group internally allocates amounts of groundfish target species to its various harvesting partners, along with the amounts of non-target species (such as "other species") that it calculates are needed to support the amount of target species being apportioned to a harvester. CDQ groups may respond to actual incidental catch rates by making in-season adjustments to their partners and fisheries. For example, if the "other species" catch rate in a particular fishery appears to be high, a group may request that vessels fishing for it in that fishery relocate to another area where the catch of "other species" may be lower. Groups may also adjust the amount of non-target species that it has made available to its harvesters or obtain transfers of additional amounts of non-target CDQ amounts from other CDQ groups. Additionally, each CDQ group has what is known as a CDQ non-specific reserve. This reserve may be used to augment a group's initial allocation of "other species" CDQ. It is discussed in greater detail in Section 2.3.1.

Under Alternative 1, no action, continuing to allocate the "other species" CDQ reserve to individual groups could constrain some directed fisheries if the amount of "other species" CDQ available to a group

is less than the amount needed for "other species" incidental catch amounts in its directed fisheries. Determining the exact amount of "other species" that would be need to support the full utilization of each target CDQ fishery is difficult. There is a variety of factors that affect the quantity of "other species" that would be needed to support each annual CDQ target fishery, including, but not limited to: the abundance of each individual species in the "other species" complex; the amount of each target species allocated to the CDQ reserves; the gear type used to prosecute a given fishery; harvest timing and location; and, CDQ harvesters' proficiency in avoiding the catch of "other species." Table 1-1 portrays the "other species" CDQ allocations from 1999 through 2002, as well as the corresponding total catch of "other species" CDQ catch in each of those years. The amount of "other species" available to the CDQ fisheries has not been exceeded in any of these four years.

Table 1-1. "Other species" TAC, CDQ reserves, and catch in 1999-2002.

	1999	2000	2001	2002
TAC	32,860	31,360	26,500	30,825
CDQ Reserve	2,464	2,352	1,988	2,312
Catch	1,908	2,060	1,663	2,311

Note: NSR releases to other species not included. All amounts in metric tons.
Source: NMFS

One metric to consider when attempting to determine how much "other species" the CDQ sector would require to successfully prosecute its directed fisheries is the historic "other species" CDQ catch rate in prior years. Catch data for select CDQ target fisheries in 1999 through 2002 was examined to determine how much "other species" caught was caught in a given target fishery. The ratio of "other species" to designated target species in each target fishery was then calculated for each of these four years. These annual catch rates were then combined to find a historical "other species" CDQ catch rate. Appendix 1 portrays the 1999-2002 groundfish CDQ catch for each of these target combinations, associated "other species" CDQ catch. and calculated "other species" catch rates for each target.

Finally, this historical catch rate of "other species" was applied to the amounts established for the 2003 CDQ reserves for the same targets. This yielded an approximate amount that could be needed to account for the catch of "other species" in each target species group, as well as an aggregate amount of "other species" required to support groundfish CDQ target fisheries in 2003. The target fisheries used for this projection include: walleye pollock; hook and line Pacific cod; combined fixed gear sablefish and Greenland turbot; combined Atka mackerel and Pacific ocean perch; and, a combined flatfish target that includes yellowfin sole, rock sole, flathead sole, other flatfish, and Alaska plaice. Table 1-2 portrays these calculations.

Table 1-2. Estimated "other species" demand in 2003 CDQ target fisheries, based on the complete harvest of each CDQ target reserve.

Target species or species group	CDQ reserve amount(s)	Estimated "other species" catch rate	Projected "other species" catch (mt)
Pollock	149,176	0.08%	121
Pacific cod	15,563	14.17%	2,206
Fixed gear sablefish and turbot	1,055	3.35%	35
Atka mackerel and Pac. ocean perch	5,453	1.13%	62
Combined Flatfish	12,056	6.40%	771
Total estimated "other species" required in 2003.			3,196
2003 allocated "other species" CDQ and amount in non-specific reserve.			2,558
Difference			(638)

Based on the results of the preceding estimation, it appears that there could be insufficient "other species" CDQ available to meet the potential catch of "other species" in all of the CDQ target fisheries combined in 2003. The "other species" demand is estimated to be approximately 3,196 mt. The total available "other species" CDQ reserve and amount that it could be increased via the CDQ non-specific reserve is 2,558 mt. This is a shortfall of approximately 638 mt. However, describing this as a deficit assumes that all CDQ groups will fully prosecute each of their allocated groundfish target categories. CDQ groups have not, with the exception of pollock and to a limited extent Pacific cod, successfully harvested their complete target species allocations since the inception of the groundfish CDQ Program in 1998.

If each CDQ group were to attempt to fully harvest each of its target species allocations in 2003, and the estimated "other species" CDQ demand calculated in this analysis is reasonably accurate, then one or more CDQ groups might have to forgo some fishing opportunities for lack of "other species" incidental catch amounts. In such a scenario it is likely that each group would prioritize its fishing efforts based on the value of each target fishery and choose to concentrate its harvesting efforts and available "other species" quota on fisheries that return the most royalties to them.

Besides calculating the "other species" demand based on the full harvest of CDQ target species in 2003, it is possible to estimate this demand based on the historical harvest of such target species. Table 1-3 shows the historic harvest level of five CDQ target species or species groupings.

Table 1-3. Harvest level of allocated CDQ target species, 1999-2002.

	Pollock	Pacific cod	Fixed gear sablefish and turbot	Atka mackerel and Pacific ocean perch	Flatfish
Average annual harvest	99.82%	85.16%	21.89%	79.89%	6.51%

Source: NMFS CDQ catch data

Applying these historical harvest levels to the 2003 CDQ target reserves yields an estimated level of harvest for each of these target species in 2003. Then, the historical "other species" CDQ catch rate is applied to the estimated catch levels to estimate the amount of "other species" CDQ required to support the incidental catch needs of each CDQ target fishery. By this method, 2,107 mt of "other species" CDQ would be required to account of the catch of this species complex in the CDQ fisheries in 2003. The total amount of "other species" available (including the CDQ reserve and that available from the CDQ non-specific reserve) in 2003 is 2,558 mt. This exceeds the estimated "other species" requirement by 451 mt. These calculations are shown in Table 1-4. Thus, if past performance is an appropriate indicator of "other species" demand, there is adequate "other species" CDQ to support CDQ target fisheries in 2003. However, increases in harvest performance could invalidate this estimate.

Table 1-4. Estimated "other species" demand in 2003 CDQ target fisheries, based on historic performance in CDQ target fisheries.

Target species or species group	CDQ reserve amount(s)	Historic catch rate	Estimated catch	Estimated "other species" catch rate	Projected "other species" catch (mt)
Pollock	149,176	99.82%	148,902	0.08%	121
Pacific cod	15,563	85.16%	13,523	14.17%	1,878
Fixed gear sablefish and turbot	1,055	21.89%	231	3.35%	8
Atka mackerel and Pac. ocean perch	5,453	79.89%	4,357	1.13%	49
Combined Flatfish	12,056	6.51%	785	6.40%	50
Total estimated "other species" required in 2003.					2,107
2003 allocated "other species" CDQ and amount in non-specific reserve.					2,558
Difference					451

2.2 Alternative 2. Allow the "other species" CDQ reserve to be managed as a single reserve rather than as separate allocations to each CDQ group.

Option 1. Eliminate the CDQ non-specific reserve.

Currently, CDQ groups are responsible for managing all of their CDQ fisheries so that they do not

exceed any of their CDQ allocations or PSQ limits. NMFS does not open or close CDQ fisheries since they are governed by fixed quotas and strict catch accounting standards, but it does do so in the non-CDQ fishery. NMFS routinely closes directed fishing for specified groundfish species. These closures may be due to a directed fishing allowance for a particular species being reached, a fishery reaching a prohibited species bycatch allowance, or because of overfishing concerns for another groundfish species taken as incidental catch in a particular target fishery. When directed fishing for a species is closed, that species is on 'bycatch' status.
Maximum retainable amounts of the species may still be retained onboard a vessel up to a specified percentage of other retained groundfish.

When harvest of a species approaches its TAC, NMFS may place the species on "prohibited" status, and any subsequent catch of that species must be discarded. If the harvest amount approaches the overfishing level (OFL), then NMFS may close those directed fisheries which harvest that species incidentally, in order to prevent overfishing. More detailed information about catch monitoring and in-season fishery management is available in Section 2.7.8 of the Draft Programmatic Supplemental Environmental Impact Statement (Draft PSEIS) (NMFS 2001a).

Under Alternative 2, the "other species" CDQ reserve would not be allocated among CDQ groups. Instead, it would be managed at the CDQ reserve level and in conjunction with non-CDQ fisheries. This alternative would be a hybrid of current NMFS fishery management practices in the Alaska groundfish fishery. All "other species" catch in groundfish CDQ fisheries would accrue towards the "other species" CDQ reserve, rather than towards a specific allocation. At the beginning of each year, "other species" CDQ would be placed on bycatch status. This would minimize the likelihood that the available amount of "other species" CDQ would be reached during the prosecution of directed CDQ fisheries, since CDQ groups would not be able to target on species such as skate (a species in the "other species" complex). There is a market for skate, and CDQ groups occasionally retain skate during their Pacific cod harvesting operations.

Placing "other species" on bycatch status would mean that any retained amounts of "other species" CDQ could not exceed a certain proportion of the amount of other CDQ species on board a vessel. Additionally, "other species" would be placed on prohibited species status for the CDQ fisheries if the entire "other species" CDQ reserve amount was caught, which means that no "other species" could be retained at all. After this point, NMFS would monitor the aggregate catch of "other species" in both the CDQ and non-CDQ fisheries. Further fishery restrictions would not occur unless the OFL for this species complex is approached by the combined catch of both of these fishery components. If this occurred, both CDQ and non-CDQ fisheries would be subject to specified directed fishing closures to minimize further catch of "other species."

This alternative would reduce the possibility that "other species" catch in the CDQ fisheries could constrain a group or groups' harvest CDQ target species by elevating the accounting of "other species" CDQ catch to the CDQ reserve level. Primary management of "other species" catch would be at this level and secondary management of "other species" would be at the combined CDQ and non-CDQ aggregate catch level. The overall catch of "other species" would still be subject to existing controls associated with "other species" TAC, ABC, and OFL levels. Beginning in 2003, this management protocol was implemented for two CDQ species categories, BS northern rockfish and BS shortraker/rougheye rockfish. NMFS did not allocate these two species categories to the group level, as discussed in its decision to approve the 2003-2005 CDQ allocation decision (NMFS 2003a). Instead, these two CDQ species categories are managed at the reserve level. NMFS will monitor the total catch

of BS northern rockfish and BS shortraker/rougheye rockfish by the CDQ sector, along with the non-CDQ fisheries catch of these species during 2003. If the total overall catch in one of these categories approaches the OFL, NMFS will determine which directed fisheries, including CDQ fisheries, would need to be closed to prevent overfishing these species.

An examination of the non-CDQ and CDQ "other species" allocation and catch levels from 1999-2002 illustrates that the combined catch in both of these fisheries components is still within the bounds for the "other species" ABC and OFL in these years. This is illustrated in Table 1-5. Additionally, the combined catch of "other species" in both the CDQ and non-CDQ fisheries was less than the annual TAC for each of those years.

Table 1-5. 1999-2002 "other species" TAC and catch (metric tons).

	1999	2000	2001	2002
Overfishing limit (OFL)	129,000	71,500	69,000	78,900
Acceptable Biological Catch (ABC)	32,860	31,360	33,600	39,100
Total Allowable Catch (TAC)	32,860	31,360	26,500	30,825
Actual catch				
CDQ component	1,908	2,060	1,663	2,311
Non-CDQ component	18,677	24,030	24,239	26,287
Total 'other species' catch	20,585	26,090	25,902	28,598
Remaining TAC	12,275	5,270	598	2,227
Percent of TAC remaining	37%	17%	2%	7%
TAC exceeded?	No	No	No	No
OFL approached?	No	No	No	No
Directed fishery closures necessary to minimize "other species" combined catch?	No	No	No	No

Source: NMFS catch data and annual groundfish specifications.

Alternative 2 would continue the allocation of the "other species" CDQ reserve to the CDQ Program, discontinue allocating amounts of the "other species" reserve to individual CDQ groups, and shift the management of "other species" CDQ catch to the reserve level. NMFS considers it desirable to continue to allocate "other species" to the CDQ Program, rather than eliminate this allocation (as is discussed in Section 2.3.2) in order to continue to account for the catch of "other species" by CDQ fishery participants separately from the catch of "other species" in the non-CDQ fishery component.

The original intent of the groundfish CDQ Program was to allocate amounts of all BSAI groundfish, Pacific halibut, and crab catch limits to the CDQ Program. Concurrent with the development of this allocative regime, higher level catch monitoring and accounting protocols were developed than are typically found in open access or non-quota fisheries. Catch in excess of an allocated groundfish CDQ

amount was prohibited. Additionally, each specific CDQ allocation and catch thereof became subject to scrutiny during actual fishing operations and during periodic CDQ allocation cycles. The State of Alaska also assesses whether CDQ groups have promoted conservation-based fisheries by ". . . taking actions that will minimize bycatch. . ." as part of the State's suite of CDQ program standards (6 AAC 93.017). Alternative 2 would support the Council's quota accountability objectives, while reducing the possibility that inadequate individual allocations would hamper groups from successfully harvesting their target species allocations and achieving CDQ Program objectives.

Option 1 under Alternative 2 would eliminate the CDQ non-specific reserve. If management of "other species" CDQ was shifted to the sector level, this reserve would be unnecessary. CDQ groups would not be accountable for their catch of "other species" to the degree that they would need the flexibility to increase their initial "other species" allocations via the CDQ non-specific reserve. The only other groundfish species contributing to the CDQ non-specific reserve is arrowtooth flounder. This has not been identified as a species that poses a potential risk to constraining CDQ fisheries nor a species that would need to be augmented from the CDQ non-specific reserve. There was a single release of quota from the CDQ non-specific reserve back into a group's arrowtooth flounder CDQ allocation in the four years between 1999 and 2002. Table 1-6 portrays the allocation and catch information for arrowtooth flounder. NMFS recommends Option 1 if Alternative 2 is selected as the preferred alternative.

Table 1-6. 1999-2003 arrowtooth flounder and "other species" TACs, CDQ reserves, catch, and CDQ non-specific reserve use.

	1999		2000		2001		2002		2003	
Allocation Information	Arrow-tooth	other species	Arrow-tooth	other species	Arrow-tooth	other species	Arrow-tooth	other species	Arrow-tooth	other species
TAC (metric tons)	134,354	32,860	131,000	31,360	22,011	26,500	16,000	30,825	12,000	32,309
CDQ reserve	10,076	2,464	9,825	2,352	1,651	1,988	1,200	2,312	900	2,423
Contribution Rate	15%	15%	15%	15%	50%	15%	50%	15%	15%	15%
Contribution to CDQ NSR	1,511	370	1,474	353	826	298	600	347	135	363
Total NSR available	1,881		1827		1124		947		498	
CDQ Performance	Arrow-tooth	other species	Arrow-tooth	other species	Arrow-tooth	other species	Arrow-tooth	other species	Arrow-tooth	other species
Balance after contribution to NSR	8,565	2,094	8,351	1,999	826	1,690	600	1,965	765	2,060
Amount received from NSR releases	0	1,120	0	975	0	839	15	917	n/a	n/a
Total CDQ available	8,565	3,214	8,351	2,974	826	2,529	615	2,882	n/a	n/a
CDQ catch	787	1,908	286	2,060	146	1,663	302	2,311	n/a	n/a
Pct of available CDQ harvested	9%	59%	3%	69%	18%	66%	49%	80%	n/a	n/a
Percent of total NSR used	60%		53%		75%		98%		n/a	

2.3 Alternatives considered but rejected

2.3.1 Rejected Alternative 3. Continue to allocate "other species" CDQ to each CDQ group and increase the amount of arrowtooth flounder CDQ reserve that is apportioned to the CDQ non-specific reserve.

This alternative would indirectly increase the amount of "other species" CDQ available to each CDQ group by increasing the amount of arrowtooth flounder that is apportioned to the CDQ non-specific reserve. Each year, NMFS establishes the CDQ non-specific reserve. This reserve is comprised of 15 percent of two species categories, "other species" and arrowtooth flounder, and was designed as a mechanism that would decrease the possibility that the amount allocated to some CDQ species categories would be insufficient to support directed CDQ fisheries.

When the groundfish CDQ Program was implemented in 1998, NMFS recognized that the catch of non-target species such as "other species" might prevent the full harvest of CDQ target species. To address this possibility, NMFS created the CDQ non-specific reserve to provide CDQ Program participants a means to avoid having their target fisheries be constrained by the catch of some non-target species. Species or species groups that contribute to the CDQ non-specific reserve are low-valued species for which no target fishery typically exists. These species have an adequate buffer between the TAC and the OFL to accommodate additional amounts of catch accruing to them from CDQ harvesting operations. The CDQ non-specific reserve was originally comprised of a portion of the CDQ reserves of squid, arrowtooth flounder and "other species." In 2001, squid was removed as a species allocated to the CDQ Program, leaving arrowtooth flounder and "other species" as the sole contributors to the CDQ non-specific reserve (66 *FR* 13672, March 7, 2001).

A CDQ group may request that any or all of the amount in its CDQ non-specific reserve be transferred back into either of the species categories that contributed to it. CDQ groups have exercised the option to release amounts from the CDQ non-specific reserve to their "other species" species category every year since 1999, transferring much or all of the amount available in their annual CDQ non-specific reserve into the "other species" CDQ species category. CDQ groups do this to reduce the possibility that the catch of "other species" might limit the group's catch of CDQ target fisheries.

The amount that arrowtooth flounder apportioned to the CDQ non-specific reserve was increased from 15 to 50 percent in 2001 and 2002. This had the practical effect of increasing the amount of "other species" that each CDQ group was could harvest in both of the years. Table 1-6 depicts information related to the 1999 through 2002 arrowtooth flounder and "other species" TAC amounts, CDQ non-specific reserve amounts, and the degree to which CDQ groups utilized their CDQ non-specific reserves. For purposes of this analysis, squid was omitted from CDQ non-specific reserve calculations, as it only contributed a negligible amount (22 mt) to the CDQ non-specific reserve in 2000.

NMFS increased the arrowtooth flounder's apportionment to the CDQ non-specific reserve in 2001 and 2002 based on Council recommendation. The Council was responding to requests from CDQ groups that they be offered some form of relief from the possibility that a shortfall of "other species" might constrain CDQ target fisheries. NMFS implemented this change to arrowtooth flounder's apportionment to the CDQ non-specific reserve via emergency interim rules. Further explanation about the need and rationale for these actions are contained in these rules, which were published July 17, 2001 (66 FR 37167) and January 8, 2002 (67 FR 956). In 2003, the amount of arrowtooth flounder allocated to each CDQ group's non-specific reserve reverted to the 15 percent contribution specified in regulations.

It is difficult to determine if the increased apportionment of arrowtooth flounder to the CDQ non-specific reserve in 2001 and 2002 was adequate to address the perceived shortfall of "other species," since CDQ groups did not harvest the full amount of each of their target allocations in those years. Based on actual CDQ harvesting performance in each of those years, there would have been enough "other species" CDQ to account for the catch of "other species" without increasing the amount the apportionment of arrowtooth flounder to the CDQ non-specific reserve. The percent of available CDQ target allocations harvested in 2001 ranged from 99 percent of pollock to 1 percent of flatfish. In 2002, that range went from 99 percent of pollock to 17 percent of flatfish. Table 1-1 and Table 1-5 shows that the amount of "other species" CDQ caught in 2001 and 2002 was less than the "other species" CDQ reserve in those two years. Additional "other species" was available via transfers from the CDQ non-specific reserve.

While increasing arrowtooth flounder's apportionment to the CDQ non-specific reserve offers additional flexibility to try to ensure that CDQ groups have adequate "other species" CDQ available for their fishing needs, determining the appropriate proportion is difficult. Besides trying to calculate the "other species" needs of future CDQ fisheries and then calculating the appropriate amount of arrowtooth flounder to apportion to the CDQ non-specific reserve, the projected demand for arrowtooth flounder in the CDQ fisheries has to be considered. Adequate information is not available to accurately forecast the future CDQ catch needs in both of these species categories to the degree that a permanent selection of an appropriate contribution rate from arrowtooth flounder to the CDQ non-specific reserve is possible. Additionally, consideration of impacts to the CDQ non-specific reserve should not have to be major factor when the Council makes recommendations for groundfish TAC levels. Therefore, NMFS does not endorse an alternative that would modify the contribution rate of arrowtooth flounder to the CDQ non-specific reserve.

2.3.2 Rejected Alternative 4. Do not allocate "other species" to the CDQ program.

Under this alternative, "other species" would not be allocated to the CDQ program. NMFS would no longer allocate 7.5 percent of the "other species" TAC to an "other species" CDQ reserve nor allocate "other species" to individual CDQ groups. Any catch of "other species" in the CDQ fisheries would be subtracted from the general "other species" TAC. The CDQ groups would have to comply with general management measures associated with "other species," such as if this complex were put on bycatch or prohibited catch status. This alternative would require an FMP amendment, since the FMP for the BSAI currently stipulates that CDQ will be issued for all BSAI groundfish species except for squid.

Table 1-5 shows the overall catch of "other species" in both the CDQ and non-CDQ fisheries from 1999 through 2002. It does not appear that the overall catch of "other species" would have triggered changes to the status of this species complex or directed fishery closures. While this alternative would alleviate the possibility that the catch of "other species" could constrain CDQ target fisheries, it also reduces "other species" catch accountability to a coarser level. The current regime of strict quota accountability

is a means to ensure that CDQ groups keep their catch within the bounds of their allocations, including the catch of incidental species such as sharks, skates, sculpins, and octopus. Not allocating "other species" to the CDQ Program would disassociate the catch of "other species" in CDQ fisheries from the higher level of scrutiny it is currently given. This could lead to CDQ groups decreasing their focus on attempting to minimize "other species" catch.

NMFS feels it is important to maintain at least program level accountability for the harvest of incidentally caught species and that CDQ groups should continue to strive to minimize the catch of "other species." The sector level management proposed under Alternative 2 would accomplish this objective. NMFS does not recommend further analysis of Alternative 4 because Alternative 2 would address the issue but would continue to keep separate accounting of "other species" catch by the CDQ and non-CDQ fishery components. With separate accounting at the CDQ reserve level (Alternative 2), CDQ groups may pay more attention to the incidental catch of "other species" than they would if catch by both components was combined.

2.3.3 Rejected Alternative 5. Increase the amount of the "other species" TAC that is apportioned to the "other species" CDQ reserve.

This alternative would increase the amount of "other species" allocated to the CDQ Program from the BSAI "other species" TAC from 7.5 percent to some greater percentage. "Other species" CDQ would be allocated to each CDQ group and group level accountability for the catch of "other species" would be retained. However, it would be difficult to determine the amount of "other species" that would adequately account for the projected catch of "other species" in the CDQ fisheries. Moreover, increasing the amount of "other species" allocated to the CDQ Program would require a decrease in the amount of "other species" apportioned to the non-CDQ fisheries. NMFS does not recommend further analysis of Alternative 5 because Alternative 2 would address the "other species" CDQ issue without reducing "other species" available to the non-CDQ fishery component's "other species" TAC.

3.0 ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

An environmental assessment (EA) is required by the National Environmental Policy Act of 1969 (NEPA) to determine whether the action considered will result in significant impact on the human environment. If the action is determined not to be significant based on an analysis of relevant considerations, the EA and resulting finding of no significant impact (FONSI) would be the final environmental documents required by NEPA. An environmental impact statement (EIS) must be prepared for major Federal actions significantly affecting the human environment.

An EA must include a brief discussion of the need for the proposal, the alternatives considered, the environmental impacts of the proposed action and the alternatives, and list of document preparers. The purpose was discussed in Section 1, along with background information about the CDQ Program and its allocation of "other species." Alternatives were presented in Section 2. The economic impacts of the alternatives are discussed in Sections 4 and 5. This section discusses the environmental impacts of the alternatives, including impacts on essential fish habitat, threatened and endangered species, and marine mammals.

The environmental impacts generally associated with fishery management actions result from (1) the harvest of fish stocks, which may result in changes to food availability to predators and scavengers, changes in the population structure of target fish stocks, and changes in the marine ecosystem community structure; (2) changes in the physical and biological structure of the marine environment as a result of fishing practices, e.g., effects of gear use and fish processing discards; and (3) entanglement/entrapment of non-target organisms in active or inactive fishing gear.

3.1 Description of fisheries

Detailed descriptions of the BSAI groundfish fishery many be found in a variety of public documents. These contain discussions or specific information pertaining of the groundfish CDQ fishery. Each of these are readily available in printed form or via the Internet at links given in the Section 9. These reports include:

Alaska Groundfish Fisheries Draft Programmatic Supplemental Environmental Impact Statement (NMFS 2001a). This report contains detailed fishery descriptions and statistics in Section 3.10, "Social and Economic Conditions," and in Appendix I, "Sector and Regional Profiles of the North Pacific Groundfish Fisheries."

Economic Status of the Groundfish Fisheries off Alaska, 2001 (Hiatt *et al.* 2002), which is an appendix of the annual *Stock Assessment and Fishery Evaluation Report for the Groundfish Resources of the BSAI.* The former document is produced by NMFS and updated annually. It summarizes a wide range of fishery information through the year 2001.

Steller Sea Lion Protection Measures Supplemental Environmental Impact Statement (NMFS 2001c. This contains several sections with useful background information on the groundfish fishery (although the majority of information provided is focused on three important species - pollock, Pacific cod, and Atka mackerel). Section 3.12.2 provides extensive background information on existing social institutions, patterns, and conditions in these fisheries and associated communities, Appendix C provides extensive information on fishery economics, and Appendix D provides extensive background information on groundfish markets.

Stock Assessment and Fishery Evaluation Report for the Groundfish Resources of the BSAI (NPFMC, 2002b). This report is published in three sections: Stock Assessment, Fishery Evaluation, and Ecosystems Considerations. It is produced by BSAI Groundfish Plan Team on behalf of the Council.

3.2 Location of groundfish fisheries

The non-CDQ and CDQ groundfish fisheries occur in the north Pacific Ocean and Bering Sea within the U.S. EEZ, ranging from 50° N. to 65° N. The alternatives considered in this EA would affect groundfish fishing conducted under the CDQ Program. Detailed descriptions of all aspects of the BSAI groundfish fisheries are given in the Draft PSEIS for the Alaska Groundfish Fisheries (NMFS 2001a, Section 3). Groundfish CDQ fisheries are conducted by a subset of the vessels that currently conduct non-CDQ fishing operations in the various federal management areas in the Bering Sea and Aleutian Islands.

3.3 The "other species" complex

The BSAI FMP describes five categories of species or species groups that are likely to be taken in the groundfish fishery, including prohibited species, target species, "other species," forage fish species, and non-specified species. The species in the "other species" group are currently of slight economic value and are not generally targeted upon, even though this category contains species with economic potential. This category also contains species which are important ecosystem components (NPFMC 2002a, p. 286). These include three species of shark, approximately 15 skate species, approximately 58 sculpin species, and three octopus species. The specific species contained in this category has been compiled from Bering Sea and Aleutian Islands fishery survey data. Both the ABC and OFL for the "other species" complex are calculated based on the average catch of these species from 1978 to 1995 (NPFMC 2002b, p. 669). The "other species" OFL, ABC, TAC, and CDQ reserve for 1999 through 2002 are shown in Table 1-5 .

3.4 Environmental impacts of the alternatives

The two alternatives considered by this action include Alternative 1, no action, and Alternative 2, allow the "other species" CDQ reserve to be managed at the CDQ reserve level rather than allocating it among individual CDQ groups. Neither alternative would significantly change the total amount of groundfish harvested in the Alaska groundfish fishery. Neither action is likely to change the location or timing of CDQ harvest or the type of gear used to prosecute groundfish CDQ fisheries. Selection of Alternative 2 would allow the existing "other species" CDQ management regime to be modified from occurring at the CDQ group level to occurring at the CDQ reserve level.

3.5 Effects on target species

Neither alternative would have an adverse effect on groundfish CDQ target species. Alternative 1 would continue to allocate "other species" CDQ to each CDQ group. Insufficient annual amounts of "other species" to account for the catch of "other species" could result in a group forgoing the complete harvest of all of its allocated target species. Alternative 2 could allow CDQ groups to fully utilize their allocated target species by shifting to reserve level "other species" CDQ allocation and accounting. Exceeding other groundfish CDQ allocations would still be prohibited.

3.6 Effects on the 'other species' complex

"Other species" is generally considered a non-target species in both the CDQ and non-CDQ fishery. Alternative 1 would allocate the annual "other species" CDQ reserve to individual groups, and each CDQ group would be prohibited from exceeding its "other species" allocation. Under Alternative 2, "other species" would be allocated to the CDQ Program, but would no longer be allocated to each CDQ group. The catch of "other species" CDQ in the groundfish fishery would be primarily managed at the CDQ reserve level, with secondary management at the combined CDQ and non-CDQ fishery component level. NMFS does not anticipate any adverse impact on "other species" if Alternative 2 was adopted, as the overall catch of "other species" would still be subject to existing controls associated with "other species" TAC, ABC, and OFL levels. If the combined catch of "other species" by both of these fishery components approaches the OFL, NMFS would determine which directed fisheries in the Bering Sea or Aleutian Islands, including CDQ fisheries, would need to be closed to prevent overfishing "other species."

3.7 Effects on prohibited species

Neither Alternative 1 or 2 is expected to change the expected catch of prohibited species. Each CDQ group would still be allocated a specific annual allocation of each of the BSAI prohibited species categories. CDQ fishery participants would continue to be subject to existing prohibited species catch restrictions, prohibitions, and area closures.

3.8 Effects on endangered species

The Endangered Species Act of 1973 as amended (16 U.S.C. 1531 *et seq*; ESA), provides for the conservation of endangered and threatened species of fish, wildlife, and plants. The program is administered jointly by NMFS for most marine mammal species, marine and anadromous fish species, and marine plant species and by the U.S. Fish & Wildlife Service (USFWS) for bird species, and terrestrial and freshwater wildlife and plant species.

The designation of an ESA-listed species is based on the biological health of that species. The status determination is either threatened or endangered. Threatened species are those likely to become endangered in the foreseeable future [16 U.S.C. § 1532(20)]. Endangered species are those in danger of becoming extinct throughout all or a significant portion of their range [16 U.S.C. § 1532(20)]. Species can be listed as endangered without first being listed as threatened. The Secretary of Commerce, acting through NMFS, is authorized to list marine fish, plants, and mammals (except for walrus and sea otter) and anadromous fish species. The Secretary of the Interior, acting through the USFWS, is authorized to list walrus and sea otter, seabirds, terrestrial plants and wildlife, and freshwater fish and plant species.

In addition to listing species under the ESA, the critical habitat of a newly listed species must be designated concurrent with its listing to the "maximum extent prudent and determinable" [16 U.S.C. § 1533(b)(1)(A)]. The ESA defines critical habitat as those specific areas that are essential to the conservation of a listed species and that may be in need of special consideration. Federal agencies are prohibited from undertaking actions that destroy or adversely modify designated critical habitat. Some species, primarily the cetaceans, which were listed in 1969 under the Endangered Species Conservation Act and carried forward as endangered under the ESA, have not received critical habitat designations.

Federal agencies have an affirmative mandate to conserve listed species (Rohlf 1989). One assurance of

this is that Federal actions, activities or authorizations (hereafter referred to as Federal actions) must be in compliance with the provisions of the ESA. Section 7 of the Act provides a mechanism for consultation by the Federal action agency with the appropriate expert agency (NMFS or USFWS). Informal consultations, resulting in letters of concurrence, are conducted for Federal actions that have no adverse effects on the listed species. Formal consultations, resulting in biological opinions, are conducted for Federal actions that may have an adverse effect on the listed species. Through the biological opinion, a determination is made as to whether the proposed action poses "jeopardy" or "no jeopardy" of extinction to the listed species. If the determination is that the action proposed (or ongoing) will cause jeopardy, reasonable and prudent alternatives may be suggested which, if implemented, would modify the action to no longer pose the jeopardy of extinction to the listed species. These reasonable and prudent alternatives must be incorporated into the Federal action if it is to proceed. A biological opinion with the conclusion of no jeopardy may contain a series of management measures intended to further reduce the negative impacts to the listed species. These management alternatives are advisory to the action agency [50 CFR 402.24(j)]. If a likelihood exists of any taking occurring during promulgation of the action, an incidental take statement may be appended to a biological opinion to provide for the amount of take that is expected to occur from normal promulgation of the action. An incidental take statement is not the equivalent of a permit to take.

Twenty-three species occurring in the GOA and/or BSAI groundfish management areas are currently listed as endangered or threatened under the ESA. These are listed in Table 3-1. The group includes great whales, pinnipeds, Pacific salmon and steelhead, two types of eiders, and an albatross.

3.8.1 Section 7 consultations

Because groundfish and crab fisheries are Federally regulated activities, any negative effects of the fisheries on listed species or critical habitat and any takings that may occur are subject to ESA Section 7 consultations. NMFS initiates the consultation and the resulting biological opinions are issued to NMFS. The Council may be invited to participate in the compilation, review, and analysis of data used in the consultations. The determination of whether the action "is likely to jeopardize the continued existence of" endangered or threatened species or to result in the destruction or modification of critical habitat, however, is the responsibility of the appropriate agency (NMFS or USFWS). If the action is determined to result in jeopardy, the opinion includes reasonable and prudent measures that are necessary to alter the action so that jeopardy is avoided. Section 7 consultations have been done for all the species listed in Table 3-1, some individually and some as groups.

Steller sea lions

In 1990, NMFS designated the Steller sea lion as a threatened species under the ESA. NMFS designated critical habitat in 1993 (58 *FR* 45278) for the Steller sea lion based on the Recovery Team's determination of habitat sites essential to reproduction, rest, refuge, and feeding. Listed critical habitats in Alaska include all rookeries, major haulouts, and specific aquatic foraging habitats. In 1997, based on biological information collected since the species was listed as threatened in 1990 (60 *FR* 51968), NMFS reclassified Steller sea lions as two distinct population segments under the ESA (62 *FR* 24345). The Steller sea lion population segment west of 144° longitude (a line near Cape Suckling, Alaska) is listed as endangered; the remainder of the U.S. Steller sea lion population maintains the threatened listing. The Final Supplemental Environmental Impact Statement for Steller Sea Lion Protection Measures (NMFS 2001b, Section II, Appendix A), contains the most recent Biological Opinion on Steller Sea Lions, completed in October 2001. A final rule promulgating Steller sea lion protection measures in the Bering

Sea and Aleutian Islands was published January 2, 2003 (68 *FR* 204). The groundfish CDQ fisheries that incidentally catch "other species" must comply with these measures, which disperse fishing effort over time and area.

Neither of the alternative considered under this action would change fishing activities in a manner that would have effects on Steller sea lions that have not already been considered in previous consultations.

Seabirds

Breeding and non-breeding seabird populations ranging into the BSAI include: northern fulmars, storm petrels, albatrosses, shearwaters, cormorants, gulls, kittiwakes, auklets, murrelets, puffins, eiders, and others. Three listed seabirds occur in the BSAI. Two are threatened: the Steller's eider and the spectacled eider. The short-tailed albatross is an endangered species. The current populations status, complete history of section 7 consultations, and NMFS action undertaken as a result of those consultations are described in section 2.9.5 of the Draft PSEIS (NMFS 2001a). The Draft PSEIS also contains information about the population biology and foraging ecology of these three listed species in section 3.5.

Formal consultations on the effects of the groundfish fisheries on the short-tailed albatross under the jurisdiction of the USFWS were conducted in 1989, 1995, and 1997. The 1989 consultation concluded that the BSAI groundfish fisheries would adversely affect the short-tailed albatross but would not jeopardize the continued existence of the species. An incidental take of up to two birds per year was allowed. Subsequent consultations for changes to the fishery that might affect the short-tailed albatross also concluded no jeopardy and established non-discretionary reasonable and prudent measures to minimize the impact of the possible incidental take. The 1997 consultation resulted in an incidental take limit of up to 4 birds during the 2-year period 1997-1998 and limited the scope of the consultation to the groundfish hook-and-line fisheries. A consultation issued by the USFWS on March 19, 1999 continued the no jeopardy conclusion and established the requirement to immediately reinitiate consultation if incidental takes exceeded four short-tailed albatrosses over two years' time. NMFS requested and was granted an extension of the 1999 Biological Opinion and its accompanying Incidental Take Statement by the, which otherwise would have expired on December 31, 2000. Two section 7 consultations with USFWS were initiated in 2000, and have not been concluded as yet.

None of the alternatives considered for this rule are expected to have an impact on the short-tailed albatross in any manner not previously considered. This analysis considers either retaining or modifying the current "other species" CDQ management regime, including managing the catch of "other species" CDQ at the sector level in lieu of CDQ group level management. The "other species" TAC would not change under any of the alternatives, and no changes are anticipated in the types of gear used in the groundfish CDQ fisheries in which "other species" are caught. No additional impacts on short-tailed albatross or their critical habitat are expected if Alternative 2 were selected.

Impacts of the alternatives on endangered or threatened species

None of the alternatives under consideration would affect the fisheries in a way not previously considered in the above consultations. Alternative 1 would continue the status quo. Alternative 2 would modify how NMFS allocates and manages the "other species" CDQ complex. None of the alternatives should affect takes of listed species. Therefore, none of the alternatives are expected to have a significant impact on endangered or threatened species, or their critical habitat.

Table 3-1. Species currently listed as endangered or threatened under the ESA and occurring in the BSAI groundfish management areas.

Common Name	Scientific Name	ESA Status
Northern Right Whale	*Balaena glacialis*	Endangered
Sei Whale	*Balaenoptera borealis*	Endangered
Blue Whale	*Balaenoptera musculus*	Endangered
Fin Whale	*Balaenoptera physalus*	Endangered
Humpback Whale	*Megaptera novaeangliae*	Endangered
Sperm Whale	*Physeter macrocephalus*	Endangered
Snake River Sockeye Salmon	*Onchorynchus nerka*	Endangered
Short-tailed Albatross	*Phoebaotria albatrus*	Endangered
Steller Sea Lion	*Eumetopias jubatus*	Endangered and Threatened [1]
Snake River Fall Chinook Salmon	*Onchorynchus tshawytscha*	Threatened
Snake River Spring/Summer Chinook Salmon	*Onchorynchus tshawytscha*	Threatened
Puget Sound Chinook Salmon	*Onchorynchus tshawytscha*	Threatened
Lower Columbia River Chinook Salmon	*Onchorynchus tshawytscha*	Threatened
Upper Willamette River Chinook Salmon	*Onchorynchus tshawytscha*	Threatened
Upper Columbia River Spring Chinook Salmon	*Onchorynchus tshawytscha*	Endangered
Upper Columbia River Steelhead	*Onchorynchus mykiss*	Endangered
Snake River Basin Steelhead	*Onchorynchus mykiss*	Threatened
Lower Columbia River Steelhead	*Onchorynchus mykiss*	Threatened
Upper Willamette River Steelhead	*Onchorynchus mykiss*	Threatened
Middle Columbia River Steelhead	*Onchorynchus mykiss*	Threatened
Spectacled Eider	*Somateria fishcheri*	Threatened
Steller Eider	*Polysticta stelleri*	Threatened
Northern Sea Otter	*Enhydra lutris*	Candidate

[1] Steller sea lions are listed as endangered west of Cape Suckling and threatened east of Cape Suckling.

3.9 Marine Mammal Protection Act

Under the Marine Mammal Protection Act (MMPA), NMFS categorizes all U.S. commercial fisheries (State and Federal) into one of three categories based on the level of incidental serious injury and mortality of marine mammals that occurs in each fishery. The categorization of a fishery determines whether participants in that fishery are subject to certain requirements of the MMPA, such as registration, and observer coverage.

Species listed under the ESA that are present in the BSAI were listed in the previous section. Marine mammals not listed under the ESA that may be present in the BSAI include cetaceans, [minke whale (*Balaenoptera acutorostrata*), killer whale (*Orcinus orca*), Dall's porpoise (*Phocoenoides dalli*), harbor porpoise (*Phocoena phocoena*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), and the beaked whales (e.g., *Berardius bairdii* and *Mesoplodon spp.*)] as well as pinnipeds [Pacific harbor seal

(*Phoca vitulina*), northern fur seal (*Callorhinus ursinus*), spotted seal (*Phoca largha*), and ribbon seal (*Phoca fasciata*)], and the sea otter (*Enhydra lutris*).

Take of the above listed marine mammals has been and continues to be monitored through fishery observer programs. Because of the low incidence of problems and the fact that neither Alternative 1 or Alternative 2 associated would affect the size of the CDQ groundfish fishery or the gear types used, no effects are anticipated that would affect marine mammals under either of the alternatives considered for this action.

3.10 Coastal Zone Management Act

Implementation of each of the alternatives considered under this action would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Management Program with the meaning of section 30(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

3.11 Effects on Marine Benthic Habitat and Essential Fish Habitat

Inclusively, all the marine waters and benthic substrates in the BSAI management areas comprise the habitat of all marine species. Additionally the adjacent marine waters outside the EEZ, adjacent State waters inside the EEZ, shoreline, freshwater inflows, and atmosphere above the waters, constitutes habitat for prey species, other life stages, and species that move in and out of, or interact with, the fisheries' target species, marine mammals, seabirds, and the ESA listed species. The Draft PSEIS assesses the impacts of the groundfish fisheries in the BSAI on such habitat, including a detailed discussion of gear impacts in section 3.2 (NMFS 2001a).

Neither of the alternatives analyzed would change the amount of the CDQ target species allocated to the CDQ Program nor the types of fishing gear used to prosecute groundfish CDQ species. Selection of Alternative 2 could allow CDQ fishery participants to harvest the full amount of annual CDQ reserves allotted to them, rather than having some directed fisheries constrained by group-level allocations of "other species."

3.12 Effects on the ecosystem

The most recent SAFE report (NPFMC 2002b) completed for the BSAI groundfish fishery contains an *Ecosystems Considerations* section. This reviews the most recent information available on various components of the BSAI ecosystem, such indicators relating to physical oceanography, habitat, target groundfish, forage species, marine mammals, seabirds, and other aggregate indicators which relate to trophic levels of catch in the BSAI fishery management areas. NMFS does not expect either Alternative 1 or Alternative 2 to have additional effects on the BSAI ecosystem beyond those already discussed in the 2002 SAFE or the Environmental Assessment prepared for the 2003 BSAI Total Allowable Catch Specifications (NMFS 2003_).

3.13 Social and economic consequences

The social and economic consequences of the alternatives considered for this action are described in Sections 4 and 5, including a description of the fishery. Section 4.6 and Section 5.8 provide detailed descriptions of the fishing operations and communities that could be affected by this action. Section 4.9

and Section 5.9 summarize the impacts of this action on fishing operations and communities.

Overall, selection of Alternative 2 would facilitate changing regulations to provide NMFS additional flexibility in managing the catch of "other species" by relaxing CDQ group specific "other species" allocation and catch accounting requirements. CDQ reserve level "other species" CDQ fishery management would allow each CDQ group a greater possibility of harvesting their complete CDQ target allocations, and thus maximizing the economic benefits that they gain from such allocations.

3.14 Cumulative effects

The Draft PSEIS presents a comprehensive assessment of the cumulative effects of the environmental factors, including external factors and consequences, associated with alternatives considered for the management of the BSAI groundfish fishery. Alternative 2 under this action would modify NMFS' allocation and in-season management of the "other species" CDQ complex. It would not alter or modify the established BSAI groundfish specifications or harvest controls associated with the "other species" complex. No additional past, present, or reasonably foreseeable cumulative impact issues have been identified beyond those considered in the Draft PSEIS.

3.15 Conclusions and FONSI

To determine the significance of impacts of the action analyzed in this EA, NMFS is required by NEPA, 50 CFR § 1508.27, and NOAA Administrative Order 216-6 to consider the following:

Context: The setting of the alternatives considered under this action are the groundfish CDQ fisheries of the BSAI. Any effects of the action are limited to these areas. The effect of the alternatives on society within these areas is limited to the participants in the groundfish CDQ Program. CDQ groups harvest a variety of groundfish CDQ species throughout the course of a given calendar year, either directly with their own vessels or indirectly via fishing industry partners.

Intensity: A listing of considerations to determine intensity of the impacts are in 50 CFR § 1508.27(b) and in the NOAA Administrative Order 216-6. Each consideration is addressed below in order as it appears in the regulations.

Adverse or beneficial impact determinations are required to be considered in this action. This is a relatively minor action within the comprehensive context of groundfish fishery management in the BSAI. Impacts associated with the considered alternatives are limited to CDQ groups participating in the groundfish CDQ fishery. It is not anticipated that this action would significantly affect the quality of the human environment. Direct impacts on the environment from this action are expected to minimal, since the management of the "other species" CDQ complex would still fall under the overarching BSAI groundfish specifications and fishery management regulations.

Public health and safety issues have not been associated with this action. This action deals with allocative and catch accounting issues, not at-sea operational issues.

The fisheries associated with this action take place in the geographic area of the Bering Sea and Aleutian Islands, typically in the Exclusive Economic Zone (3-200 miles offshore). Cultural resources and ecologically critical areas occur on land adjacent to these areas. The marine waters where CDQ fisheries occur contain ecologically critical areas. Adverse effects on the characteristics of these areas are not anticipated to occur with this action.

This action is not considered to be controversial. Modification of "other species" CDQ management could further the overall goals of the CDQ Program.

The action analyzed in this EA are limited in scope, and it is anticipated that there will be minimal or no risk to the human environment if an alternative other than the 'no action' alternative were selected.

Future actions related to this action may result in impacts. Changes may occur in the environment or fishing practices that may result in significant impacts, as well as additional information regarding the "other species" resource. Additional environmental analysis documents would then be prepared to inform decision makers of potential impacts to the human environment and the means to minimize or mitigate such impacts.

Cumulatively significant impacts are discussed in Section 3.14. No additional past, present, or reasonably foreseeable cumulative impact issues have been identified beyond those considered in the Draft PSEIS (NMFS 2001a).

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. This consideration is not applicable to this action.

This action will have no effect on ESA listed species in the BSAI because it would not alter the fishing practices in the groundfish CDQ fishery and CDQ fishery participants would still have to adhere to applicable regulations associated with the conservation of listed species.

This action poses no know violation of Federal, State or local laws or requirements for the protection of the environment. Additionally, it poses no know possibility for the introduction of non-indigenous species because it does not affect the activities of vessels that may introduce such organisms into the marine environment.

4.0 REGULATORY IMPACT REVIEW

4.1 Introduction

This Regulatory Impact Review (RIR) evaluates alternative regulatory actions to address the management and accounting of "other species" in the groundfish CDQ fishery conducted in the Bering Sea and Aleutian Islands. The "other species" complex contains numerous species of sharks, skates, sculpin, and octopus. Such species are usually caught incidentally with targeted species such as Pacific cod, walleye pollock, and Atka mackerel.

4.2 What is a Regulatory Impact Review?

This RIR is required under Presidential Executive Order (E.O.) 12866 (58 *FR* 51735; October 4, 1993). The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the order:

> In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

E.O. 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to:

- Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, local or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

4.3 Statutory authority

The National Marine Fisheries Service (NMFS) manages the groundfish CDQ fisheries of the Bering Sea and Aleutian Islands management area (BSAI) in the Exclusive Economic Zone (EEZ) under the Fishery Management Plan (FMP) for that area. The North Pacific Fishery Management Council (Council) prepared the FMP under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Regulations implement the FMP at 50 CFR part 679. General regulations that also pertain to U.S. fisheries appear at subpart H of 50 CFR part 600.

4.4 Purpose and need for action

The "other species" complex is one of approximately three dozen groundfish and prohibited species categories that are annually apportioned to the CDQ Program. As originally designed by the Council and implemented by NMFS, a percentage of each target, non-target, and prohibited species managed under the BSAI FMP is allocated to the program as CDQ reserves. The program also receives allocations of various crab species and Pacific halibut. These reserves are subsequently allocated between six CDQ groups, each of which represents a portion of 65 CDQ-eligible communities in western Alaska. Groundfish CDQ catch retention, reporting, and accounting requirements were structured to hold CDQ fishery participants responsible for adhering to specific catch limits of all allocated CDQ species.

There is a possibility that individual CDQ groups could catch all of their annual allocation of "other species" before they fully harvest all of their available target species. Since CDQ groups are prohibited from exceeding a CDQ allocation, they would have to cease directed fishing activities for CDQ target species once they had caught all of their available annual "other species." This in turn could have an economic impact on CDQ groups and their affiliated communities if royalties are foregone due to lost fishing opportunities. Failure to harvest all of their directed fishery allocations would decrease individual group's royalty income. This could in turn impact the accomplishment of specific projects intended to foster economic development in western Alaska communities. The objective of this action is to consider ways to manage "other species" CDQ in a manner that would allow CDQ Program participants to completely utilize their target species allocations without being constrained by individual "other species" allocations.

4.5 Alternatives considered

The two alternatives considered for this action have been described in detail in Section 2.1 and 2.2 of this analysis. This section summarizes those alternatives. Three other alternatives were also considered for this action but rejected. Those alternatives are discussed in Section 2.3.

Alternative 1. Status quo: continue to allocate the "other species" CDQ reserve among each of the six CDQ groups.

This alternative would maintain the current regulatory structure that allocates specific amounts of the "other species" CDQ reserve to individual CDQ groups. The amounts of "other species" quota allocated to each group would continue to be established by a periodic, competitive allocation process. Once CDQ allocations are approved and fishing for groundfish CDQ commences, each CDQ group has to abide by regulations prohibiting catching more than an allocated CDQ or PSQ amount, including the "other species" category. Under Alternative 1, continuing to allocate the "other species" CDQ reserve to individual groups could constrain some CDQ fisheries if the amount of "other species" CDQ available to a group is less than the amount actually needed for "other species" incidental catch amounts in its annual directed fisheries.

Alternative 2. Allow the "other species" CDQ reserve to be managed as a single reserve rather than as separate allocations to each CDQ group.

Under Alternative 2, the "other species" CDQ reserve would not be allocated among CDQ groups. Instead, it would be managed at the CDQ reserve level and in conjunction with non-CDQ fisheries. All "other species" catch in groundfish CDQ fisheries would accrue towards the "other species" CDQ

reserve, rather than towards specific CDQ group allocations. NMFS would monitor the aggregate catch of "other species" in both the CDQ and non-CDQ fisheries and take appropriate management measures to control the catch of "other species." The overall catch of "other species" would still be subject to existing controls associated with "other species" TAC and OFL. If the OFL was approached, both CDQ and non-CDQ fisheries would be subject to specified directed fishing closures to minimize further catch of "other species." These closures are determined in-season by NMFS fisheries management staff.

4.6 Description of fishery

General descriptions of the BSAI groundfish fishery, including social and economic components, may be found in the reports referenced in Section 3.1. Additional reports that provide more comprehensive information about the socioeconomic impacts and programmatic impacts of the CDQ Program include:

An Assessment of the Socioeconomic Impacts of the Western Alaska Community Development Quota Program (Northern Economics 2002).

Regulatory Impact Review/Initial Regulatory Flexibility Analysis for Proposed Amendment 71 to the FMP for BSAI Groundfish (NMFS 2002b).

The groundfish CDQ fishery is a component of the BSAI groundfish fishery. Since 1992, CDQ groups have entered into a variety of business relationships with established groundfish harvesting and processing companies. These agreements usually involve a fishing or processing company paying royalties for access to a group's quota. Such royalties are usually based on a fixed dollar rate per weight of quota harvested or a percentage of the sales price for the harvested fish or its derivative products. Additionally, CDQ groups often negotiate agreements that specify that a given partner will provide employment, training opportunities, access to business expertise, and other benefits. Royalties gained harvesting CDQ allocations have provided an income stream that has allowed CDQ groups to invest in a variety of fishery related businesses and assets. Direct investment in harvesting and processing companies has offered the CDQ groups additional leverage and opportunities in businesses directly involved with the BSAI groundfish fisheries. Royalties, as well as revenues subsequently derived from investments of royalties, provide the financial means to develop local coastal fisheries and affiliated operations.

CDQ harvesting operations encompass a cross-section of the various target and gear specific fisheries in the BSAI and are woven into the larger fabric of the BSAI groundfish fishery. Between 47 and 59 vessels participated in groundfish CDQ fisheries each year between 1999 and 2002, as portrayed in Table 4-1. This includes catcher vessels, catcher-processors, and motherships using a variety of gear types. This does not include the numerous small vessels (less than 32 foot LOA) that operate in the halibut CDQ fisheries and a limited set of vessels that participate in crab CDQ fisheries. CDQ fishing may occur concurrently with the prosecution of a given non-CDQ target fishery, as happens in the BS pollock fishery. It may also take place prior to or after a given non-CDQ season, as occurs with the Pacific cod fishery. CDQ fisheries are not restricted to the full suite of seasons, gear apportionments, area closures, or seasonal prohibited species catch allowances as are non-CDQ fisheries. Hence, access to CDQ offers harvesters and processors preferred access to a groundfish resource, a means to expand operations, and a way to make more efficient use of capacity.

Table 4-1. Vessel and processor participation in the groundfish CDQ fishery, 1999-2002.

	1999	2000	2001	2002
Processors	5	5	5	3
Vessels	56	59	47	47

Source: NMFS CDQ catch report data.

Annual CDQ harvesting performance varies substantially, depending on target species. Species that return the highest royalties to CDQ groups receive the greatest emphasis for complete harvesting each year. Species with lower royalty returns do not seem as likely to be completely harvested. However, lower royalty rates are not the only reason that some CDQ target species are not fully utilized. There are other factors that impact the prosecution of CDQ fisheries. The closure status of non-CDQ fisheries may affect performance. For example, if the non-CDQ yellowfin sole fishery is open throughout a given year, vessel operators have little incentive to fish for yellowfin sole CDQ, since they would have to pay a royalty for such catch. Operational difficulties also impact CDQ fisheries, such a mechanical or fishing gear problems on vessels. The high rate of killer whale predation of sablefish caught on longline gear in the Bering Sea may at times preclude the prosecution of that fishery. Finally, the lack of availability of harvesting partners may contribute to the less than full harvest of some CDQ allocations.

The CDQ sector displays a range of success in fully harvesting its allocated CDQ target species. Pollock and Pacific cod, two of the highest valued CDQ species from a royalty perspective, have shown a high average harvest rate during the years 1999 through 2002. Harvest of other primary targets has fared less well. Table 1-3 displays the average harvest level for five different allocated CDQ target species or target species groupings.

Royalties accruing from the harvest of CDQ allocations are substantial. The initial pollock CDQ allocation in 1992 yielded $13.2 million in royalties. In 2001, total CDQ royalties exceeded $42.5 million, of which $36.7 million were pollock royalties. Royalties have steadily increased over the last decade. This increase in royalties over time stems from a variety of factors. The original pollock CDQ Program has evolved into a multispecies CDQ Program encompassing a full suite of groundfish, halibut, and crab species. Higher pollock and cod TACs in recent years have meant correspondingly higher CDQ allocations. Investment in fishing vessels and companies have given CDQ groups leverage to negotiate higher royalty rates and access to additional dividends. Finally, the investment in other projects or financial instruments has supplied CDQ groups with the benefit of additional financial returns and revenue beyond those accruing from royalties alone. Table 4-2 shows aggregate CDQ royalties from 1999 to 2001.

Table 4-2. Annual CDQ royalties, 1999-2001.

	1999	2000	2001
Pollock	$25,918,992	$32,996,456	$36,721,924
All species	$35,595,802	$40,402,155	$42,558,941

Source: State of Alaska, DCED 2002

The two groundfish species that yield the most royalty income to the CDQ Program are pollock and Pacific cod. In 2001, these two species accounted for 93 percent of total CDQ royalties. Two crab

species, which are unaffected by this "other species" CDQ action, accounted for 6 percent of total CDQ royalties. Royalties from the CDQ targets of sablefish and turbot, Atka mackerel and Pacific ocean perch, combined flatfish, and Pacific halibut accounted for 1 percent of CDQ royalties, or approximately $425,000.

4.7 Benefits of the alternatives

The primary benefit associated with the harvest of groundfish CDQ allocations is the payment of harvest royalties to CDQ groups. The more groundfish CDQ that is harvested, the more royalties that accrue to CDQ groups. Alternative 2 proposes managing the catch of "other species" at the CDQ sector level, which could alleviate the possibility that one or more CDQ groups would have to forego harvesting some of their royalty generating target species for lack of "other species" quota. This could benefit all six CDQ groups by helping them maximize their potential annual royalties, and, by extension, the benefits that such royalties bestow on 65 affiliated communities. These benefits include investment in fisheries development projects at the local or regional level, vocational training, and educational funding. However, modifying the management of "other species" CDQ does not in and of itself address a variety of other factors that affect whether each CDQ target species is fully prosecuted each year.

Vessel operators and processor that partner with CDQ groups to harvest and process groundfish CDQ also benefit from CDQ allocations via their access to additional resource. Both alternatives considered by this action would continue to extend such access to these entities. Selection of Alternative 2 would assist in ensuring that "other species" did not become a limiting factor in whether CDQ target allocations were completely harvested. This would be advantageous to the CDQ groups' harvesting partners as well, as they could enjoy additional profits if they have access to full amounts of annual CDQ target allocations.

NMFS does not anticipate that managing the "other species" CDQ reserve at the sector level would impact the species comprising the "other species" complex or the non-CDQ fisheries.
The overall catch of "other species" would still be subject to current management restrictions associated with the "other species" TAC, ABC, and OFL levels. If the combined catch of "other species" by both of these fishery components approaches the ABC level, NMFS would determine which directed fisheries in the Bering Sea or Aleutian Islands, including CDQ fisheries, would need to be closed to prevent overfishing "other species."

4.8 Costs of the alternatives

Alternative 1, no action, would continue to allocate "other species" CDQ to individual CDQ groups. This could lead to some CDQ groups being unable to harvest all of their allocated target species for lack of adequate "other species" quota. NMFS expects that the CDQ groups would prioritize their fisheries and harvest those species that return the most royalties to them. CDQ harvesting and processing partners might have to forego any profits they might receive from amounts of CDQ targets species left unharvested by a group without adequate "other species" CDQ to harvest all of its target species. Alternative 2 would not incur costs to either CDQ groups or other BSAI groundfish fishery participants.

4.9 Impacts on fishing communities

There are currently 65 communities participating in the program. The total population of these communities is around 27,000 people. These communities have aggregated into six different CDQ

groups to administer their CDQ allocations and economic development projects. The six groups include: Aleutian Pribilof Island Development Corporation, Bristol Bay Economic Development Corporation, Central Bering Sea Fishermen's Association, Coastal Villages Region Fund, Norton Sound Economic Development Corporation, and Yukon Delta Fisheries Development Association. The Council and NMFS allocate a portion of the BSAI groundfish, prohibited species, halibut, and crab catch limits to these communities. The communities must use the proceeds derived from the harvest of CDQ allocations to start or support commercial fishery activities that will result in ongoing, regionally-based commercial fishery or related businesses, as well as fostering training and educational opportunities for local residents.

Alternative 1 would continue to allocate "other species" to individual groups. CDQ groups prepare Community Development Plans that detail the projects and investments that they plan on undertaking on behalf of their communities. Each group prepares annual budgets and revenue forecasts based on a variety of income sources, including fishery royalties. Incomplete harvest of a group's target species allocations due to inadequate amounts of "other species" could decrease a group's budgeted royalties for a given species or species, with affiliated impacts on the investment in and implementation of CDQ projects. However, as most CDQ royalties are derived from the pollock CDQ fishery, a species that has a low incidental catch of "other species," it seems likely that most projects would not be significantly impacted by a modest decrease in projected royalties in a given year, if such decreases were solely attributed to a shortfall in "other species." Alternative 2 would discontinue using group level accounting of "other species" and shift to CDQ reserve level management. This could potentially benefit CDQ communities by ensuring that their royalty related projects would not be impacted on account of a group's lack of adequate "other species" to fully prosecute their CDQ target fisheries.

4.10 Summary of the benefits and costs

The benefits and cost of the alternatives are summarized below.

	Alternative 1	Alternative 2
	No action. Continue to allocate the "other species" CDQ reserve among each of the six CDQ groups.	*Allow the "other species" CDQ reserve to managed as a single reserve rather than as a separate allocation.*
Benefits	No change in benefits.	Individual CDQ groups face reduced probability of losing royalties due "other species" induced closures. Annual CDQ allocation simplified by elimination of individual allocations of "other species." This is a minor benefit. In-season monitoring of "other species" CDQ would be easier, as NMFS managers have fewer allocations to monitor. This is a minor benefit.
Costs	No change in costs.	There is little risk that "other species" CDQ reserve will be exceeded; the potential cost for this is very small.
Net benefits	No change in net benefits.	It has not been possible to monetize the benefits or costs of this action. However, the qualitative analysis suggests the net benefits of this action would be positive.
E.O. 12866 significance	Does not appear to be significant.	Does not appear to be significant.
Notes: Alternative 1 (no action) is the no action alternative and provides the baseline against which the costs and benefits for action alternatives have been estimated.		

4.11 Summary of the significance criteria

A "significant regulatory action" under E.O. 12866 means any action that is likely to result in a rule that may:

- Have an annual effect on the economy of $100 million or more or adversely affect in a material

way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the executive order.

The combined value of CDQ royalties in 2001, the most recent year that complete CDQ royalty information in available, was approximately $42.5 million. As noted in Section 4.6, pollock CDQ royalties accounted for $36.7 million of this amount, or 86 percent of total royalties. Harvests of other groundfish, crab, and halibut CDQ yielded the remainder of CDQ royalties. Historically, pollock CDQ has by far been the highest royalty generator for CDQ groups. The pollock CDQ fishery catches very small amounts of "other species" and would probably not be impacted by either alternative considered in this action. Selection of Alternative 2 could positively impact the groundfish CDQ fishery, but the amount of CDQ royalties that CDQ groups might receive under this alternative is unknown. Changes associated with selection of Alternative 2 do not appear to have the potential to result in ". . . an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs the environment, public health or safety, or State, local, or tribal governments or communities . . ."

NMFS has not identified any factors that would (a) "Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency"; (b) "Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof"; or (c) "Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the executive order."

5.0 Initial Regulatory Flexibility Analysis

5.1 Introduction

This Initial Regulatory Flexibility Analysis (IRFA) evaluates alternatives for the management of the Bering Sea and Aleutian Islands (BSAI) "other species" complex in the Community Development Quota (CDQ) fishery. Changing the way that "other species" CDQ is managed is being considered because the current regime of allocating the "other species" CDQ reserve to individual CDQ groups has been identified as potentially constraining to each group's ability to fully prosecute their CDQ target fisheries. Alleviating such a constraint would improve the possibility that CDQ groups will be more able to fully prosecute their CDQ target species and maximize their harvesting royalties.

5.2 The purpose of an IRFA

The Regulatory Flexibility Act (RFA), first enacted in 1980, was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a Federal regulation. Major goals of the RFA are: (1) to increase agency awareness and understanding of the impact of their regulations on small business, (2) to require that agencies communicate and explain their findings to the public, and (3) to encourage agencies to use flexibility and to provide regulatory relief to small entities. The RFA emphasizes predicting impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize the impacts while still achieving the stated objective of the action.

On March 29, 1996, President Clinton signed the Small Business Regulatory Enforcement Fairness Act. Among other things, the new law amended the RFA to allow judicial review of an agency's compliance with the RFA. The 1996 amendments also updated the requirements for a final regulatory flexibility analysis, including a description of the steps an agency must take to minimize the significant economic impact on small entities. Finally, the 1996 amendments expanded the authority of the Chief Counsel for Advocacy of the Small Business Administration (SBA) to file *amicus* briefs in court proceedings involving an agency's violation of the RFA.

In determining the scope, or 'universe,' of the entities to be considered in an IRFA, NMFS generally includes only entities that can reasonably be expected to be directly regulated by the proposed action. If the effects of the rule fall primarily on a distinct segment of the industry (e.g., user group, gear type, geographic area), that segment would be considered the universe for the purpose of this analysis. NMFS interprets the intent of the RFA to address negative economic impacts, not beneficial impacts, and that focus is reflected in analyses that are designed to address RFA compliance.

Data on cost structure, affiliation, and operational procedures and strategies in the fishing sectors subject to the proposed regulatory action are insufficient, at present, to permit preparation of a "factual basis" upon which to certify that the preferred alternative does not have the potential to result in "significant adverse impacts on a substantial number of small entities" (as those terms are defined under the RFA). Because, based on all available information, it is not possible to 'certify' this outcome, should the proposed action be adopted, a formal IRFA has been prepared and is included in this package for Secretarial review.

5.3 What is required in an IRFA?

Under 5 U.S.C., Section 603(b) of the RFA, each IRFA is required to contain:

- A description of the reasons why action by the agency is being considered;
- A succinct statement of the objectives of, and the legal basis for, the proposed rule;
- A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate);
- A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;
- An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule;
- A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the proposed action, consistent with applicable statutes, and that would minimize any significant economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives, such as:

    1. The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;

    2. The clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;

    3. The use of performance rather than design standards;

    4. An exemption from coverage of the rule, or any part thereof, for such small entities.

5.4 What is a small entity?

The RFA recognizes and defines three kinds of small entities: (1) small businesses, (2) small non-profit organizations, and (3) small government jurisdictions.

Small businesses. Section 601(3) of the RFA defines a 'small business' as having the same meaning as 'small business concern,' which is defined under Section 3 of the Small Business Act. A 'small business' or 'small business concern' includes any firm that is independently owned and operated and not dominant in its field of operation. The SBA has further defined a "small business concern" as one "organized for profit, with a place of business located in the United States, and which operates primarily within the United States or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor . . . A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the firm is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture."

The SBA has established size criteria for all major industry sectors in the United States, including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it

is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts not in excess of $3.5 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the $3.5 million criterion for fish harvesting operations. Finally, a wholesale business servicing the fishing industry is a small business if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established "principles of affiliation" to determine whether a business concern is "independently owned and operated." In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party, with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805, are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership under the following conditions: (1) If a person owns or controls, or has the power to control, 50 percent or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, that person is considered an affiliate of the concern; or (2) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors or general partners controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such a relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

Small organizations. The RFA defines "small organizations" as any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. The six CDQ groups associated with this action are considered small organizations under the RFA, both because they are not-for-profit corporations and because they represent 65 CDQ eligible communities, which are considered small governmental jurisdictions.

Small governmental jurisdictions. The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of fewer than 50,000.

5.5 What is this action?

The alternatives considered for this action are fully described in Section 2.0 of the environmental assessment (EA), and are summarized again in Section 4.5 of the Regulatory Impact Review (RIR). Alternative 1, no action, would maintain allocations "other species" CDQ to individual CDQ groups and hold each group accountable for not exceeding their "other species" allocation. Alternative 2 would continue to established a "other species" CDQ reserve, but would not allocate it to individual CDQ groups. The catch accounting of "other species" CDQ would occur at the CDQ reserve level.

5.6 Reason for considering the proposed action

A complete description of the purposes of this action can be found in Section 1.0 of the EA. Section 4.4 of the RIR also discusses the purpose and need for this action. The current "other species" CDQ management structure could potentially constrain the complete harvest of CDQ target allocations. This has repercussions on the amount of royalties that CDQ groups collect, which in turn could affect the success of economic development projects in CDQ communities. This action examines ways to decrease the possibility that CDQ groups will be unable to fully harvest their target allocations for lack of supporting amounts of "other species."

5.7 Objectives of, and legal basis for, the prosed action

The objective of this action is to consider modifying the management of "other species" CDQ to facilitate greater success in harvesting royalty-generating CDQ species. This would support the overall goals and purpose of the CDQ Program, while still maintaining BSAI fishery management objectives.

The legal basis for this action is discussed in Section 4.3 of the RIR that accompanies this IRFA.

5.8 Number and description of small entities regulated by the proposed action

The entities that will be regulated by this action are the six CDQ groups (representing 65 western Alaska communities) that are eligible for the CDQ Program. These groups include: Aleutian Pribilof Island Development Corporation, Bristol Bay Economic Development Corporation, Central Bering Sea Fishermen's Association, Coastal Villages Region Fund, Norton Sound Economic Development Corporation, and Yukon Delta Fisheries Development Association.

Each of these groups has received allocations of groundfish CDQ for the period from 2003 through 2005. Each of them has received CDQ allocations since 1992. These groups directly or indirectly commercially harvest these allocations. Commercially valuable allocations include Alaska pollock, Pacific cod, sablefish, Greenland turbot, Atka mackerel, and a variety of flatfish species. Most of these allocations are harvested by other fishing companies on behalf of the CDQ groups. CDQ groups receive royalties from the successful harvest of CDQ from these companies, as well as access to employment and training opportunities for their communities' residents. Royalties and income from CDQ harvesting activities is used to fund economic development projects in CDQ communities. In 2001, the CDQ groups received a total of $42.5 million from the harvest of CDQ allocations. CDQ Program activities and

royalties are discussed in Section 4.6 of the RIR associated with this action.

5.9 Impacts on regulated small entities

The costs of the alternatives were discussed in Section 4.8 of the RIR. However, it has not been possible to monetize the costs associated with either alternatives. Alternative 1 could impact individual CDQ groups if their annual allocation of "other species" CDQ was inadequate to support the incidental catch of this species complex in other CDQ target fisheries. Leaving commercially valuable species unharvested diminishes the amount of royalties that CDQ groups can receive. Alternative 2 would change the accounting of "other species" to the CDQ reserve level. This would probably level out disparate allocations of "other species" across CDQ groups and allow each of them a greater chance of harvesting their complete suite of CDQ target allocations without being constrained by the catch of "other species." A higher success rate in harvesting valuable CDQ species should correlate to increased CDQ royalties accruing to CDQ groups.

It is likely that the adverse impacts of this proposed action are small. Either alternative would allow the small entities affected by this action to continue to harvest all or most of their most valuable CDQ allocations.

5.10 Recordkeeping and reporting requirements

The IRFA should include "a description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record . . ."

This action would not impose new recordkeeping or reporting requirements on the regulated small entities.

5.11 Federal rules that may duplicate, overlap, or conflict with the proposed action

An IRFA should include "An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule . . ."

This analysis did not reveal any Federal rules that duplicate, overlap or conflict with alternatives considered for this action.

5.12 Description of significant alternatives

An IRFA should include "A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities."

This EA/RIR/IRFA has evaluated two alternatives for consideration: (1) no action, and (2) management of "other species" CDQ at the reserve level. Detailed descriptions of these alternatives are found in Sections 2.1 and 2.2 of the EA. The no action alternative may not fully support the overall goals and purpose of the CDQ Program. Alternative 2 would modify NMFS' management of "other species" CDQ in a way that could assist CDQ groups in harvesting their CDQ target allocations more completely, thus increasing program royalties and associated community benefits.

Three alternatives were also considered but rejected. These are described in section 2.3 of the EA. Alternative 3 would increase the apportionment of arrowtooth flounder to the CDQ non-specific reserve. This management modification was actually done in 2001 and 2002 as a ways to address the "other species" CDQ issue, but is an awkward mechanism to use for the long term management of "other species" CDQ. Alternative 4 would discontinue the allocation of "other species" to the CDQ Program. Alternative 5 would increase the allocation "other species" to the CDQ Program. Alternatives 4 and 5 were not analyzed in detail because Alternative 2 would address the "other species" CDQ issue without entirely relaxing CDQ group accountability for "other species" or reducing the amount of "other species" available to the non-CDQ fishery component.

PUBLIC TESTIMONY SIGN-UP SHEET FOR AGENDA ITEM C-10 CDQ

PLEASE SIGN ON THE NEXT BLANK LINE.
LINES LEFT BLANK WILL BE DELETED.

	NAME	AFFILIATION
1.	ERIC OLSON	BBEDC
2.	SIMON KINEEN	NSEDC
3.	DAVE WOOD	U.S. Seafoods
4.	GERRY MERRIGAN	Pribilof Fisheries
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C-10
Eric Olson

Proposed Regulatory Amendment to Modify CDQ Other Species Management

4/7/03

The Council requested that NMFS prepare both a regulatory amendment package and an emergency rule to address this management issue. It arises due to the CDQ groups' decision to harvest their cod quotas with longline gear[1] to reduce other bycatch and discards, including crab and halibut, which was encouraged by the State and the Council.

The Non-Specific Reserve was established to provide additional o. species quota, and was effective until the major increase in pollock abundance and TAC. The increase in pollock, cod and Atka mackerel required reduction of other TACs, including the arrowtooth, to stay below the Council's 2 million mt cap. The current situation is an unintended consequence of an ecosystem management decision.

The CDQ groups asked the Council to examine methods for addressing limiting bycatch species in 1998, and the Council moved a package of possible changes out for analysis. However, the complex AFA, Stellar sea lion and CDQ policy packages stalled the CDQ fishery management package. Next, the issue was supposed to dealt with in the comprehensive overhaul of o. species management, which is proceeding slowly. This necessitated a separate action.

The EA/RIR analysis shows that the current system of CDQ 'o. species' allocation and management does not allow CDQ groups to harvest their full target allocations. These findings are sufficient for the Council to take final action at this meeting to change the system.

However, the analysis overlooks several important factors that make the shortage more acute than indicated this year. Please refer to the attached table.

1. By far the greatest demand for o. species is in the CDQ longline cod fishery. The analysis uses average 1999-2002 CDQ cod bycatch rates to project the 'demand' for o. species without recognizing several important factors:

- The main CDQ cod fishery occurs following the non-CDQ A season. Bycatch rates for o. species tend to go up in the spring as the species mix. While it is difficult to parse out the change in rates, it appears that the average rate is closer to 16% (the 1995-1998 longline CP average rate).
- Cod utilization should increase as more o. species becomes available, and should be close to 100% this year, assuming o. species is not contraining.
- The CDQ o. species bycatch rate was significantly influenced by a shortage of o. species for at least one of the four years. In the spring 2001 CDQ cod fisherythere was a significant shortage of o. species. CDQ

[1] The o. species TAC is largely based on fleetwide average catch (Tier 6), so that the o. species to cod catch is significantly higher than the ratio of CDQs. About half the non-CDQ cod catch is taken with trawl gear, which has a much lower o. species bycatch rate. The groups' decision to use longline gear was taken

partners had to work very hard to keep below a 14% rate (the average CDQ groups had available for the cod fishery, and the average bycatch rate). Without quick action, the groups will be faced with a repeat of that year.

- Part of the reason the average cod utilization rate was low is the lack of o. species. At least one group's partners stopped harvesting CDQ early in the 2001 spring fishery because the costs of avoiding skates were too high. The partner intended to finish up after the B season. However, B season went late and a lot of cod was left in the water.
- Groups have a responsibility to harvest all of their quotas, and fund the low o. species rate fisheries —pollock, longline sablefish and turbot, and Atka mackerel fisheries go first, and some o. species is held in reserve. On average the o. species available for the CDQ longline cod fishery has been 14%. The fact that the bycatch rate has been 14% has more to do with that's what's available than what the 'natural' bycatch rate is.
- The analysis does not examine the difference between groups. Two of the six groups have relatively low o. species allocations, forcing their partners to fish on smaller fish and at lower catch rates in avoiding skates. Two other groups can allocate the average 14% ratio to their longline fisheries. The last two groups have more o. species, and may transfer some of the surplus to the two groups that are short, but are not going to short themselves.

2. The analysis assumes that bycatch can be managed with the precision of the target species. The reality is that 40% of the cod fishery occurs later in the year. A substantial amount of o. species and a safety margin must be held for that fishery. A safety margin of 30-50 tons in reserve per group is essential for prudent management, adding 300 mt to the 'demand' under a hard cap system.

3. Four of the groups have pooled their flatfish and Atka mackerel quotas for this allocation period in an attempt to increase flatfish utilization. This happens to coincide with a large gap in the 2003 open access fisheries due to high halibut bycatch in the rocksole fishery. This is the first time such an opportunity to increase the CDQ flatfish harvest has occurred, but it depends on getting immediate relief on o. species. If the CDQ groups know that there will be enough o. species for their fall cod fishery, they can allocate more o. species now for an early flatfish fishery.

4. The historic CDQ o. species rate in the flatfish fishery is almost certainly low in predicting future demand. Open access rates average 18% for flathead, 6% for rock sole and 3% for yellowfin sole. Depending on the mix harvested, the rate could vary considerably, and is expected to average about 8% this year due to a higher flathead utilization rate.

Summary

The analysis stops short of addressing several factors that make the shortage acute this year and underestimates the demand for o. species in 2003, as:

1. the longline bycatch rates used represent a constrained cod fishery;

2. the groups need to maintain reserves of 250-300 mt of o. species for in-season management in the current system; and

3. the o. species rate used for the flatfish fisheries does not reflect the flathead sole fishery, which has a significantly higher o. species rate than yellowfin. Without relief on o. species, this fishery will not be possible.

4. There are no significant impacts to other fisheries, and the total impact on o. species harvest should be very small. If CDQ o. species catch were to go up 40%, which is unlikely, the total catch would go up about 3%

Unless an ER is implemented:

- experience indicates that most groups will be forced to fish in areas of very small cod to keep their o. species rates low. This is not good for the cod resource and harms the groups and their partners economically'
- some groups' may be forced trawl for cod to limit their o. species catch at the expense of other bycatch and considerably increased discards. Alternatively, they may have to to stop fishing altogether before harvesting their full quotas;
- the new flatfish endeavor will have to be curtailed, resulting in continued underutilization of those quotas.

Concerns from NMFS:

- Failure by the Council to take action earlier could be construed as 'inaction.'

This does not accurately describe the Council's workload or the practicality of addressing this issue. The issue was to have been dealt with while revamping o. species management, which has been delayed.

- That the proposal changes the nature of the CDQ program by moving from hard caps by species at 7.5% of each TAC to bycatch management.

The NSR allowed the o. species allocation to the CDQ program to exceed 7.5% by supplementing with it with arrowtooth. The Council and Secretary allowed exceptions for squid and o. species due to the difficulties hard caps create.

Revised Table 1-4. Historic and Projected Other Species Rates and Catch

Target Species or Group	CDQ Reserve	99-02 Ave. Rate	Estimated 'o. species rate	99-02 Utilization	Estimated 2003 Utilization	Estimated 2003 Target Catch	Projected 'o. species catch (mt) At Est. Target	Based on 99-02 Utilization	At 100% Utilization
Pollock	149,176	0.08%	0.08%	99.82%	99.95%	149,101	121	121	121
Cod	15,563	14.17%	***16.00%***	85.16%	***99.00%***	15,407	***2,465***	1,878	***2,490***
Fixed gear sablefish and turbot	1,055	3.35%	3.35%	21.89%	21.89%	231	8	8	35
Atka mackerel and POP	5,453	4.00%	4.00%	79.89%	79.89%	4,356	174	49	218
Combined Flatfish	12,056	6.40%		6.51%		785		50	771
Flathead Sole	1,500	6.40%	***18.00%***	6.51%	***60.00%***	900	***162***		
Yellowfin Sole	6,281	6.40%	***3.00%***	6.51%	***60.00%***	3,769	***113***		
Rocksole	3,300	6.40%	***6.00%***	6.51%	***0.00%***	-	-		
Reserve @ 50 mt/group							***300***	-	***300***
Total Estimated 'other species' required for 2003							3,343	2,107	3,935
2003 allocated 'o. species and amount in NSR							2,558	2,558	2,558
Difference							(785)	451	(1,377)
% of o. Species TAC (excluding 'reserve' which is an essential management tool, not catch)							8.9%	6.2%	10.7%

9:31 AM 4/7/03

did not testify

Alaskan Leader Fisheries

F/V Alaskan Leader
F/V Bristol Leader

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Mr. Dave Benton, Chairman
North Pacific Fishery Management Council
Anchorage, Alaska 99510

RE: Agenda Item C-10, CDQ Other Species

Chairman Benton:

For the past several years, the Bristol Leader and Alaskan Leader have participated in the harvest of CDQ species in the Bering Sea/Aleutian Islands. We have had difficulties throughout this time period in harvesting CDQ cod, while attempting to avoid the "other species" complex. We have been forced to travel extensively around the Being Sea trying to find an area where our skate catch is minimal, while still attempting to harvest cod. This has been difficult, as the skate biomass appears to be thriving. The consequences to this practice have been that CDQ revenues have been diminished, as well as the revenues to the vessel and crews.

As you know, National Marine Fisheries Service implemented emergency rules to temporarily resolve this problem. The CDQ groups and companies partnering with them need the long-term fix. We strongly urge the Council to take final action at this meeting to adopt Alternative 2. We also ask that the Council request NMFS to adopt this by emergency action for 2003 in order to ensure that we can adequately prosecute the CDQ fisheries.

Sincerely,

Robert J. Wurm,
Managing Partner