THE ALASKA COMMUNITY DEVELOPMENT PROGRAM

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For Presentation to the
Fifth Annual Common Property Conference
of the
International Association for the Study of Common Property
May 24-28, 1995, at Bodo, Norway

In December 1992, about 20 fishing vessels harvested nearly 98,000 metric tons of walleye pollock (*Theragra chalcogramma*) from the Bering Sea and Aleutian Islands (BSAI) area off Alaska, USA. This relatively small and short-duration fishery was unique amongst other commercial marine fisheries off Alaska in that it occurred during a time when the normal open-access fishery for pollock was closed. Fishing for pollock in the Bering Sea was prohibited since mid-September that year. Why were these vessels given special privileges to harvest the United States' (US') public resource of pollock, and who were the beneficiaries?

These questions would be a mystery to a person unfamiliar with recent US federal fisheries management policy off Alaska. To many Alaskans, and especially to those who live on the west or Bering Sea coast of Alaska, however, the answers are clear. The vessels harvesting pollock in the Bering Sea in December 1992, were the first to fish under the new Western Alaska Community Development Quota (CDQ) Program for pollock.

In brief, the regulations implementing the CDQ program establish a CDQ reserve from 7.5 percent of the annual total allowable catch (TAC) of pollock. The CDQ reserve is allocated to community organizations that have an approved Community Development Plan. Each community organization may harvest its allocation itself or may contract with a non-CDQ firm for harvesting services. Although CDQ fishing must be done in compliance with all applicable state and federal regulations, CDQ fishing may occur after the open access quota has been caught and that fishery is closed. This gives the CDQ organizations the potential of supplying the market with pollock products, for example, pollock roe, when supplies may be low and values high. A CDQ organization is responsible for managing its own fishing operations in accordance with its community development plan and must not exceed its CDQ allocation. Revenues from CDQ fishing operations are used by a CDQ organization to pay for its operational costs and to achieve the goals of its development plan. The State of Alaska and the National Marine Fisheries Service administer the CDQ program.

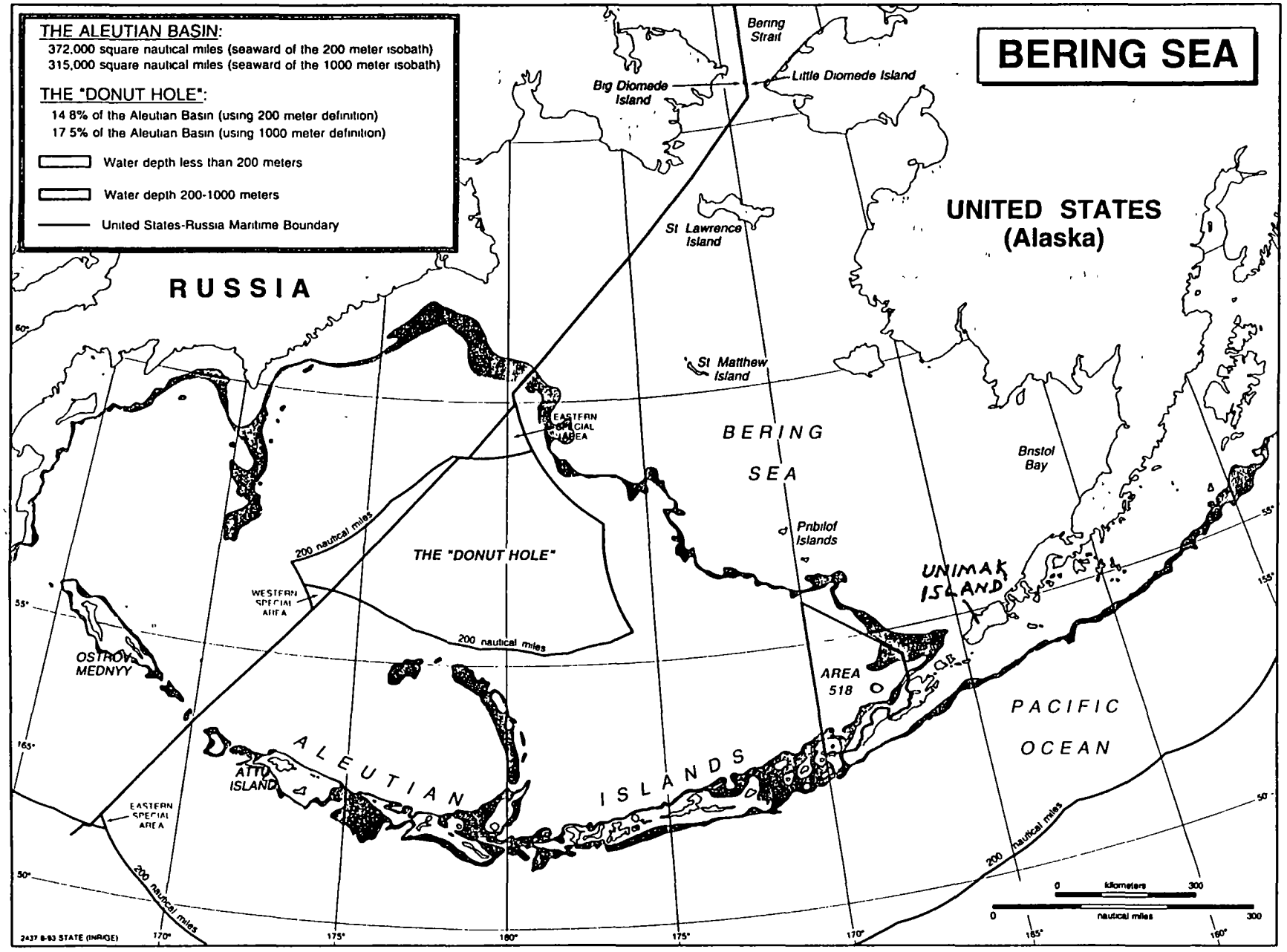
This is the CDQ program in a nutshell. The most interesting part of the CDQ story is not yet told, however. The social, economic, and biological effects of the CDQ program are just now being investigated by others (Pete, 1995; DCRA, 1995, Lind and Terry, 1995). To what extent are the CDQ organizations achieving their respective development objectives? Should CDQ allocations be stopped when development objectives are attained? Are CDQ fisheries less costly to manage than open access fisheries? Systematic answers to these questions are beyond the scope of this paper, unfortunately, but further research may indicate whether CDQ-like management systems are viable fisheries management tools. My perspective today is limited to that of a government fisheries manager, responsible in part for the administration of the program. I will describe more fully the CDQ pollock fishery, the CDQ organizations, and our experience with the CDQ program to date. I will conclude with my own unscientific views of the benefits and costs of the program and potential for future expansion of CDQ allocations.

BACKGROUND

To begin, I should set the stage by describing the geography, the fishery resource, and the people affected by the CDQ program. The Bering Sea is bounded by the Bering Strait on the north, the Aleutian Islands on the south, the northeast coast of Russia on the west, and west coast of Alaska on the east (Figure 1). The boundary line between the United States and Russia set by the Convention of 1867 bisects the Bering Sea in roughly a northeast-southwest direction from the Bering Strait to just west of Attu Island in the Aleutian chain. The most prominent, and ecologically significant, feature of the Bering Sea is its extensive continental shelf (depth to 200 m.). About 44 percent of the whole Bering Sea area is over continental shelf and 80 percent of that area is in the eastern and northern areas (FMP, 1991). The continental shelf break off in the eastern Bering Sea extends from just west of Unimak Island and the Pribilof Islands to Cape Navarin in Russia. This huge area, nearly 810,000 square kilometers, is one of the world's most biologically productive marine areas.

The Bering Sea supports about 300 species of fish, most of which are found on or near the bottom; hence they are commonly referred to as groundfish. Of these, pollock, Pacific cod, sablefish, Atka mackerel, and various species of flatfish and rockfish are commonly targeted by the commercial fisheries. Pollock is the most abundant of these species and contributes over 60 percent of the annual commercial groundfish harvest from the eastern Bering Sea.

The first commercial fisheries for groundfish in the eastern Bering Sea were for Pacific cod beginning in the late 19th century (FMP, 1991). The cod fishery reached its peak during


BERING SEA
THE ALEUTIAN BASIN:
372,000 square nautical miles (seaward of the 200 meter isobath)
315,000 square nautical miles (seaward of the 1000 meter isobath)
THE "DONUT HOLE":
14 8% of the Aleutian Basin (using 200 meter definition)
17 5% of the Aleutian Basin (using 1000 meter definition)
Water depth less than 200 meters
Water depth 200-1000 meters
United States-Russia Maritime Boundary
RUSSIA
UNITED STATES
(Alaska)
Bering Strait
Big Diomede Island
Little Diomede Island
St Lawrence Island
St Matthew Island
BERING SEA
Bristol Bay
Pribilof Islands
UNIMAK ISLAND
THE "DONUT HOLE"
200 nautical miles
WESTERN SPECIAL AREA
EASTERN SPECIAL AREA
OSTROV MEDNYY
ATTU ISLAND
ALEUTIAN ISLANDS
AREA 518
PACIFIC OCEAN
kilometers
nautical miles
2437 8-83 STATE (INR/OE)

World War I. Canadian and US fishers began a commercial fishery for Pacific halibut in the area in 1928. Japanese fishers began exploring the eastern Bering Sea groundfish stocks in 1930. Russian groundfish fisheries began in 1958 and grew to become the second largest among the seven countries conducting groundfish fisheries in the eastern Bering Sea. The growth of these fisheries was largely facilitated by the advent of technology that allowed fishing with large trawls from vessels that could operate great distances from their home ports and could process the catch on board or deliver it to factory vessels.

The US groundfish fisheries in the eastern Bering Sea grew rapidly after enactment of the Magnuson Fishery Conservation and Management Act in 1976. This law established a 200-mile-wide area, now called the exclusive economic zone, adjacent to US territorial waters. The law also established eight Regional Fishery Management Councils and gave them responsibility for developing fishery management policy within their respective areas. The Regional Councils' policies are manifested in fishery management plans and plan amendments which, if approved by the Secretary of the US Department of Commerce (Secretary), are implemented by federal regulations. The North Pacific Fishery Management Council (Council) developed the Fishery Management Plan for the Groundfish Fishery in the Bering Sea and Aleutian Islands Area. This plan was approved and first implemented in 1981 (FMP, 1991).

This fishery management plan established an optimum yield for all groundfish species of between 1.4 million and 2.0 million metric tons (mt). Annually, the Council specifies a TAC for each species of groundfish, the total of which is within this range. These TACs are based on a scientific assessment of the biological and economic status of the fisheries. Pollock accounts for the majority of the optimum yield with a TAC historically between 1.0 million and 1.3 million mt. Foreign fisheries were annually allocated a portion of the pollock TAC when it was not entirely harvested by the domestic US fishery. After this plan was established, however, the foreign fisheries and the US-foreign "joint venture" fisheries were rapidly displaced by the growing US domestic fisheries in the Bering Sea. The foreign fishery for pollock in the Bering Sea ended in 1987, and US-foreign joint venture fishery for pollock ended in 1990.

Although the US pollock fishery in the eastern Bering Sea is relatively young (about 14 years), it has adopted and improved on the methods of the original foreign fisheries. It is now a high-technology trawl fishery that processes most of the catch at sea, but also delivers a significant portion to shore-based plants. It is also highly capitalized. The Council has amended the fishery management plan several times in recent years to slow the race for this low value but high volume species. Currently the annual pollock TAC is divided 65 percent/35 percent respectively

between the offshore processing component of the industry and the inshore processing component. The TAC is further divided 45 percent/55 percent respectively between an early season (January through April 15) fishery which produces the highly valued pollock roe and other products, and a later season (August 15 through December) which produces primarily surimi and fillet products.

The degree of capitalization in this fishery is indicated by the rate of harvests. In 1994, the offshore roe season quota was 330,671 mt in the Bering Sea. This quota was fully taken after only 29 days of fishing, and further fishing for pollock by this sector was prohibited until the beginning of the non-roe season. Maximum catch rates observed by quota monitors in my office in 1994 were 83,758 mt per week in the offshore roe season and 77,771 mt per week in the non-roe season; the inshore sector attained maximum catch rates of 30,293 mt in the roe season and 36,023 mt in the non-roe season. The inshore-offshore combined maximum catch rate in 1994 was 26,197 pounds per minute.

The fisheries of the western Alaska CDQ communities stand in stark contrast to the industrial pollock fisheries in the Bering Sea. Although the indigenous people in this area of Alaska have harvested marine resources from the Bering Sea probably since the last ice age, their materials and methods would be considered primitive relative to the modern pollock fishery. Most traditional harvests of fish and marine mammals are made close to shore and on rivers. Salmon, herring, and halibut are the traditional fin-fish fisheries of western Alaska residents. Except for the Bristol Bay salmon fishery, however, most of the western Alaska coastal fisheries provide a relatively low income to local fishermen. Many residents of the western Alaska CDQ communities rely on a variety of employment and subsistence hunting and fishing to make a living (DCRA, 1995).

Based on the 1990 US Census, the total population of the 55 CDQ communities was 21,037 (DCRA, 1995). Alaska Natives comprise 77 percent of this population. Twenty five percent of this population was below the poverty level in 1989, and the median incomes in all of the CDQ communities was lower than the median income for the State of Alaska, which was $41,408 that year. Job opportunities are few. The infrastructure of most CDQ communities would be considered substandard relative to what most US citizens take for granted. In 1989, 29 percent of the houses in the CDQ communities had no telephone, and 37 percent had no plumbing. Five-gallon buckets or outhouses remain the primary means of sewage disposal in most communities. Social ills such as alcohol abuse, teen pregnancy, and suicide are high in this area (DCRA, 1995).

Part of the reason for the economic underdevelopment of this area is its extreme remoteness. Although several roads exist

within the area, none connect to any roads outside the area. Travel between many of the CDQ communities is limited to boats, airplanes, and in the winter, snow machines. The CDQ community closest to Alaska's major city, Anchorage, is 300 air miles from that city and the farthest is over 1200 air miles from that city. These distances result in high transportation costs of imports and exports from the area, which explains, in part, why investment in fish processing plants and other industrial development in the area has been limited. Most employment is limited to educational, government, and retail trade occupations. Consequently, a high dependence exists on transfer payments administered by State and Federal governments.

THE CDQ PROGRAM DEVELOPMENT

The CDQ program was conceived against this background of a highly developed industrial fishery occurring adjacent to highly undeveloped coastal communities. The rapid overcapitalization of the US domestic fisheries off Alaska with the transition from foreign to domestic domination of the grounds has caused predictable problems. The race for fish began as more efficient vessels entered the pollock and other groundfish fisheries. At first, a US fisher could plan on using his vessel for 10 or 11 months during the year fishing groundfish in the Bering Sea and Gulf of Alaska. By the early 1990s, however, he found that some annual groundfish quotas were being attained and seasons closed in periods of weeks instead of months. Exceptional factory trawler effort in the Gulf of Alaska pollock fishery in 1989 caused an early closure of that fishery and left shore plants without product. Complaints of grounds preemption, gear conflicts, bycatch of non-targeted species, and missed marketing opportunities were heard with growing frequency.

To respond to these complaints, the Council recommended roe stripping limitations, closed areas, and seasonal allocations of the TAC to slow the pace of fishing and distribute fishing effort in the pollock fishery. Most significantly, in 1990, the Council began talking about dividing the pollock TAC between inshore and offshore components of the industry as a first step toward reducing fishing effort through some sort of limited access system. Also that year, the Council published its intent to develop a limited access regime for the groundfish fisheries.

As the resource allocation arguments progressed, persons representing the interests of Bering Sea coastal communities recognized that the great Alaska pollock "pie" was about to be carved up. The principal beneficiaries of any allocation scheme would be only those already involved in the pollock fishery, and the greater their involvement, the bigger would be their piece of the "pie." Hence, before it was too late, the idea of a CDQ allocation of pollock was developed to provide a diversified and stabilizing source of income to certain Bering Sea coastal

communities by tapping into a commercially significant fishery that was virtually at the communities' doorstep.

Advocates of a CDQ allocation of pollock successfully linked this allocation to the inshore-offshore debate in the Council. After much argument and analysis, the Secretary ultimately approved an inshore-offshore allocation scheme for pollock that included the Western Alaska Community Development Quota program. This approval occurred on March 4, 1992.

The Secretary, however, only approved the CDQ Program in principle on that date. Consequently, the first regulations implementing the inshore-offshore allocations established only the CDQ reserve of 7.5 percent of the pollock TAC and not the whole CDQ program (Federal Register, 1992a). During the spring and summer of 1992, staff from the Alaska Department of Fish and Game, and the Alaska Department of Community and Regional Affairs worked in consultation with National Marine Fisheries Service (NMFS) staff to design the CDQ program criteria and operations. The program had to be adopted by the Council and implemented by federal regulations before allocations of the CDQ reserve could be made to community organizations. This administrative work was accomplished at a rate unprecedented for a major fisheries program. The Council adopted the State's plan for the CDQ program in April 1992. The National Marine Fisheries Service published proposed implementing regulations soliciting public comment October 7, 1992, and final regulations were published November 23, 1992 (Federal Register, 1992b). The first allocation of pollock from the CDQ reserve was made on December 9, 1992 (Federal Register, 1992c).

CDQ PROGRAM OPERATIONS

Eligibility

To be eligible for an allocation of pollock from the CDQ reserve, a community or group of communities:

- Must be located within 50 miles of the Bering Sea coast of Alaska, but not on the Gulf of Alaska coast, anywhere from the Bering Strait to the most western Aleutian Island;
- Must be certified as a native village under the Alaska Native Claims Settlement Act (P.L. 92-203);
- Must have residents that collectively conduct more than 50 percent of their commercial or subsistence fishing in the waters of the Bering Sea; and
- Must not previously have developed fish harvesting or processing capability that can support substantial groundfish fisheries participation in the Bering Sea (currently, Unalaska and Akutan are the only two communities that would be excluded from a CDQ allocation under this provision).

Application Procedure

The State of Alaska invites CDQ allocation proposals once every two years. A CDQ proposal takes the form of a community development plan that includes:

- A request for a percentage of the CDQ reserve;
- goals and objectives concerning the development projects that will be undertaken;
- a business plan including employment creation, business and loan relationships, budget formulation, and related information to assure that the proposal is realistic; and
- information about the managing organization that demonstrates an ability to manage a fishing operation and comply with regulations.

Community development plan proposals are submitted to the State of Alaska and thoroughly reviewed by the Departments of Community and Regional Affairs, Fish and Game, and Commerce and Economic Development. This process includes public hearings. The Governor of the State then consults with the Council and subsequently recommends to the Secretary specific allocations of the CDQ reserve among competing community development plan proposals. The Secretary then approves or disapproves the Governor's recommendations after reviewing the Governor's findings, the record of public comments, and other information to determine if mandated eligibility and approval criteria have been met. The Secretary did not disapprove any of the Governor's CDQ allocation recommendations in 1992 and 1994. Once approved, the allocation percentages are published in the Federal Register, the official publication of the US federal government.

Monitoring

Monitoring the performance of a community development plan and the pollock harvesting under that plan is a cooperative effort involving the plan's management organization, and the State of Alaska and US governments. The management organization is responsible for assuring that its vessels comply with all applicable fishing and reporting regulations. A key responsibility is to assure that a CDQ organization's harvest does not exceed its allocation of the pollock TAC. The State oversees compliance with plan objectives and provides professional assistance as necessary. The three mentioned State agencies are involved in this process. The State requires quarterly reports, conducts several meetings with each group annually, requires annual audits, and retains the right to conduct review of any CDQ organization's accounts at any time. The federal oversight agency is NMFS. We conduct daily monitoring of catch, monitoring of plan amendments, and general regulatory oversight. An approved community development plan can

be suspended or terminated by the Secretary at any time based on a finding of non-compliance with applicable regulations or on the Governor's recommendation. Unused amount of any CDQ allocation may be made available to the non-CDQ fishery before the end of the fishing year.

EXPERIENCE WITH THE CDQ PROGRAM

A total of 55 western Alaska communities met the eligibility requirements for a CDQ allocation and all are currently involved. As the CDQ program waxed toward reality in the summer of 1992, the communities held meetings and selected representatives (DCRA, 1995). The communities eventually coalesced into six different organizations, each representing from 1 to 17 communities (Table 1).

Each CDQ organization contracted with an established seafood company to provide harvesting and processing of the organization's pollock allocation. This provided a basis for joint venture investments and transferring skills. Seafood companies competed for harvesting contracts with CDQ organizations because they offered the possibility of extending an ever decreasing pollock season in the open access fishery. This provided a market for CDQ harvesting opportunity that allowed a CDQ organization to select an industry partner based on the ability of the partner to fit the organization's development goals. Initially, most of the CDQ organizations had agreements with industry partners that provide a fixed price per metric ton and some form of profit sharing, but a steep decline in pollock prices stimulated several organizations to switch to a base price and profit sharing (DCRA, 1995). The CDQ harvesting agreements are variable, however; lease payments for harvesting CDQ pollock have been in the range of $150 to $225 per metric ton. The CDQ allocations to date have ranged from 5 percent of the CDQ reserve to 27 percent (Table 1).

Goals and Objectives

The overall goal of the CDQ Program is to provide the means for starting or supporting commercial seafood activities in Western Alaska that will result in ongoing, regionally-based commercial seafood or related businesses. Each CDQ organization attempts to attain this overall goal, however, in different ways that suit its specific objectives. All of the organizations are using CDQ-derived funds for training, education, jobs, and infrastructure development but each group has a slightly different philosophical approach as indicated by the following development philosophies:

- APICDA: Create income and infrastructure generating business opportunities for the CDQ group in local communities and businesses.

TABLE 1

CDQ GROUP	NUMBER OF COMMUNITIES	% ALLOCATION OF CDQ RESERVE	
		1992/1993	1994/1995
Aleutian Pribilof Island Community Development Association (APICDA)	5	18	18
Bristol Bay Economic Development Corporation (BBEDC)	13	20	20
Central Bering Sea Fishermen's Association (CBSFA)	1	10	8
Coastal Villages Fishing Cooperative (CVFC)	17	27	27
Norton Sound Economic Development Corporation (NSEDC)	15	20	20
Yukon Delta Fisheries Development Association (YDFDA)	4	5	7

- BBEDC: Create an investment fund with which to invest in the seafood industry outside local, highly capitalized fisheries.
- CBSFA: Use CDQ income to leverage local infrastructure development.
- CVFC: Invest in ownership of offshore processor and use vertical integration and CDQ allocations to generate local employment.
- NSEDC: Increase participation and profitability by residents in regional fisheries and invest in the seafood industry.
- YDFDA: Train community residents as fishermen and finance vessel and gear loans and infrastructure development.

Economic Impacts to Date

An April, 1995, report to the Council by the State (DCRA, 1995) concludes that the CDQ program is contributing to the process of economic development within the western Alaska region. The report views economic development in terms of (a) economic growth as measured in job and income creation, (b) local control, and (c) sustainability.

Positive economic growth has been realized. Financial reports from the CDQ organizations indicate that they have collected a total of about $53 million in royalties during the 1992-1994 period (DCRA). Some of this revenue was distributed in the form of wages and benefits, and some is held in investment accounts by the CDQ organizations. For the western Alaska region that incorporates the 56 CDQ communities (CDQ region), wages and benefits realized from CDQ jobs totaled about $2.5 million in 1993, and $5.2 million in 1994. Relative to the wages and benefits received in the region in 1989 (based on 1990 census), the CDQ wages in 1993 represented growth of 1.1 percent, and the CDQ wages in 1994 represented growth of 2.4 percent. Although the State's report does not indicate whether the 1993 and 1994 wages were deflated to 1989 dollars, a positive growth trend is apparent over the two most recent years of CDQ operations.

The State's report also makes a rough estimate of the average annual income per CDQ job of $14,500 in 1993, and $13,400 in 1994. These data agree with a recent survey of CDQ households by Mary Pete of the University of Alaska. She found that CDQ employment contributed between $1,500 and $35,000 to participants for between 1 and 11 months of CDQ-related work.

The most dramatic figures indicating the economic impact of the CDQ program on the CDQ region are in terms of "basic" employment in the region, i.e. employment in resource extraction, construction, and manufacturing industries. In 1989, "basic" employment in western Alaska was only 679 jobs which accounted

for only about 11 percent of total employment. This indicates the regions' heavy dependence on support and service jobs. Employment in CDQ-related work in 1993 and 1994, however, added 25 percent and 57 percent, respectively, to the 1989 basic employment figure. Although CDQ-related work appears to represent a small percentage of the total number of jobs in the CDQ region, it seems to account for increasing growth in "basic" employment in the CDQ region.

Development in the form of local control and sustainability is more difficult to measure. Although control of the CDQ piece of the pollock pie is shared with industry partners, infrastructure development that stems from CDQ revenues is under local control. Major infrastructure projects completed or underway include the building of docking, ice delivery and gear storage facilities, and harbor improvements. One CDQ organization is investing in the development of new salmon products. The CDQ organizations also have invested in vocational and technical training, and the funding of higher education scholarships. Such investment in the CDQ region's physical and human capital, if well directed and of sufficient duration, could result in the CDQ program's ultimate goal of sustainability.

Catch Monitoring

Managing the CDQ fishery requires more intensive monitoring than the open access fishery. In the open access pollock fishery, the entire fleet harvests from a common pool until the prescribed catch limit is reached. Estimating catch rates and attainment of the quota is difficult but statistical error is integrated over all the firms fishing in the fleet, and all are similarly affected by a closure of the fishery. In the CDQ fisheries, individual quotas are assigned to individual CDQ organizations. Catch estimation must be more precise because statistical error in determining the catch of a single firm could negatively affect that one firm. Catch estimates that are too high could prevent the firm from realizing the full value of its allocation, while catch estimates that are too low theoretically could have a negative biological effect on the stock.

Currently, NMFS uses two sources of data for monitoring the open access fishery. These sources include reports from observers on vessels and in processing plants, and information contained in weekly production reports submitted by fish processors. For monitoring purposes, NMFS combines these two sources to produce a third "blend" database which is considered the official record of catch. The official record of catch of the CDQ fishery, however, is based only on daily observer reports. The observer data provide a more precise estimate of the CDQ catch than the "blend" data because we require CDQ fishing vessels to carry two observers (instead of one for non-CDQ vessels). Further, CDQ operations must have either scales

for accurately weighing fish or fish holding bins with volumetric dimensions certified by a marine engineer.

A harvesting firm that has an agreement with a CDQ organization to harvest its CDQ allocation may be expected to behave in the same manner as a firm operating under an individual transferrable quota (ITQ) system. That is the firm would have an incentive to under report its catch. This tendency is minimized in the CDQ program by the requirement to have two observers on each CDQ harvesting vessel, and the fact that CDQ catch reports are made by the observers; not the harvesting firm. In addition, the CDQ implementing regulations require that the relative success of a CDQ organization in harvesting a previous CDQ allocation be taken into account in awarding future CDQ allocations. For example, exceeding a CDQ allocation or any related violation may be considered a failure and therefore result in partially or fully precluding the violating CDQ organization from a future CDQ allocation (CFR, 1995).

Generally, each CDQ organization appears to stay within its respective quota better than the open access fishery for pollock. This result is likely due to the more intensive monitoring of the CDQ fishery, and the slower paced fishing enjoyed by a CDQ operation that does not have to race to take its share of the harvest. In addition, a strong economic incentive is provided by State and federal oversight that could result in a reduced CDQ allocation if a CDQ organization is found to be abusing its CDQ harvesting privilege. Overall allocations and catches of pollock by CDQ organizations for 1993 and 1994 are given in the Table 2.

NMFS scientists have hypothesized that the operational difference between open access and CDQ fisheries would result in higher catch utilization rates (Lind and Terry, 1995). Based on only two years of data, the discard rate of pollock in the CDQ pollock fishery is lower than that in the open access fishery for pollock. In 1993, the CDQ fishery discarded 2.3 percent of the pollock catch as compared to the open access fishery's discard rate that year of 4.7 percent. In 1994, both fisheries improved their retention rate of pollock. The discard rate in the CDQ fishery dropped to 0.9 percent that year while that of the open access fishery dropped to 2.0 percent. The differences between the product values per metric ton of pollock produced by the CDQ and open access pollock fisheries were also significant. As a proportion of total pollock product, the CDQ fishery in 1994 was able to produce more of the highly valued pollock roe than did the open access fishery. The CDQ fishery that year also bettered the open access fishery in the proportion of fillets and minced pollock produced, while the open access fishery produced proportionately more surimi and meal/oil. These early data suggest that the CDQ fishery may be somewhat more efficient in its utilization of the resource than is the open access fishery.

TABLE 2

ALLOCATION AND CATCH OF POLLOCK FOR EACH CDQ GROUP IN THE BERING SEA (mt)				
CDQ GROUP	ALLOCATION		CATCH	
	1993	1994	1993	1994
APICDA	17,550	17,955	17,034	17,954
BBEDC	19,500	19,950	19,580	19,929
CBSFA	9,750	7,980	9,663	7,969
CVFC	26,325	26,933	26,446	26,902
NSEDC	19,500	19,950	19,197	19,946
YDFDA	4,875	6,982	4,858	6,986
	97,500	99,750	96,778	99,686

UPDATE AND CONCLUSIONS

No action had been taken to re-authorize the pollock CDQ program in May, 1995, when I originally drafted this paper for the IASCP conference. The demise of the program was scheduled for the end of 1995. At its meeting in June 1995, however, the Council approved a recommendation to the Secretary to re-authorize the pollock CDQ program for three years along with the inshore-offshore allocations. This action was under review by the Secretary in September 1995 (Federal Register, 1995). In anticipation of Secretarial approval, the Governor has proceeded with reviewing applications from the six CDQ organizations for CDQ allocations for the period 1996 through 1998. The Governor's CDQ allocation recommendations were approved by the Council at its meeting in September 1995. The recommended allocation of the CDQ reserve among the six CDQ organizations for 1996-1998 follows and can be compared with previous years' allocations in Table 1. Specific reasons for changing the allocation of previous years are beyond the scope of this paper but generally relate to the relative performance of the CDQ organizations.

CDQ Organization	Recommended Allocation For 1996-1998
APICDA	16%
BBEDC	20%
CBSFA	4%
CVFC	25%
NSEDC	22%
YDFDA	13%

Another CDQ event in 1995, was the beginning of CDQ fishing for halibut (*Hippoglossus stenolepis*) and sablefish (*Anoplopoma fimbria*). The halibut and sablefish CDQ program is sufficiently complex to warrant a separate paper. Two distinguishing features are noteworthy for comparison to the pollock CDQ program, however. One is that the CDQ reserves for these species is proportionately larger than that for pollock. The halibut CDQ reserve varies by Bering Sea subarea from 20 to 100 percent of the total catch limit of halibut in the affected subareas. In 1995, the CDQ reserve for halibut amounted to 1,198,000 pounds or about 543 mt. The sablefish CDQ reserve is 20 percent of the TAC for sablefish caught with fixed gear in the Bering Sea and Aleutian Islands area, which in 1995, amounted to 490 mt. Secondly, CDQ allocations of halibut generally are harvested directly by residents of the CDQ communities while pollock and sablefish CDQ allocations are harvested by contracted firms. The reason for this difference is that halibut can be harvested by relatively small boats close to shore. The halibut and sablefish CDQ program was implemented as part of an ITQ system for the fixed gear fisheries for these species. A full comparison of the halibut/sablefish CDQ program with the pollock CDQ program will be the subject of future study.

Finally, at its meeting in June 1995, the Council approved for recommendation to the Secretary a license limitation program for all fisheries under its purview, except halibut and fixed gear sablefish. This limited access management proposal includes a CDQ reserve of 7.5 percent of the TAC of all groundfish species in the Bering Sea and Aleutian Islands area not already included in an existing CDQ program. If this proposal is approved and implemented by NMFS, it would increase the amount of fishery resources available to CDQ organizations by about 50 percent.

The pollock CDQ program has not been in operation long enough to draw firm conclusions about whether the economic development that appears to be fostered by the CDQ program is durable. Moreover, I leave such conclusions to those social scientists trained in recognizing the signs of sustainable development. From my un-scientific point of view, however, benefits from the Bering Sea pollock fishery clearly have been directed to the western Alaska region under the CDQ program. Some would argue that the program is simply another social welfare program for an underprivileged class of people, and that this is no business of federal fisheries management. I would disagree. Our business is to derive the greatest sustainable benefits from the fishery resources of the US for the people of the US. Providing a means for certain people to develop their fisheries infrastructure through an explicit allocation may have long-term benefits to the people of the US if the allocation results in a more efficient use of the resource and reduces the dependence of the people on other forms of welfare. One cost of this kind of allocation is in more intensive monitoring of catches. Another is in lost benefits to those persons who would have harvested the resource were it not for the community allocation. Hence, the CDQ program is a transfer of wealth or tax that may be justified to meet specific social and economic objectives. In this sense, the CDQ program is no different from other forms of government subsidy of commercial fisheries. Using a public fishery as a source of capital to enable investments in regional development is a public policy that is as legitimate as using that fishery to produce capital for a fully developed industry (Cunningham, 1994).

I find two intriguing possibilities with community quota programs. One is the official recognition of the special interest that coastal communities have in the fishery resources adjacent to their coasts. This local or regional special interest appears to be an extension of the national interest exercised by coastal states when they established exclusive jurisdictions over coastal resources. One common theme in establishing the US 200-mile exclusive economic zone and the Western Alaska pollock CDQ program seems to be the desire to lay claim to economic benefits from commercially valuable resources adjacent to our shores, regardless of any ethnic or historical use argument.

The other possibility apparent from the CDQ program is a potential to use community quota allocations as a management tool to improve the efficiency of an otherwise open access fishery. Currently in Alaska, more conventional forms of limited access, such as individual transferrable quota and license limitation systems, may not be politically practicable. The latter do not resolve the race-for-fish problem endemic to open access, and the former are perceived by the public only to help the rich get richer. In addition, while "privatizing" the public resources may be economically efficient, the public perception of large vertically integrated firms militates against sole ownership systems (Edwards et. al., 1993). In such circumstances, community allocations or CDQ-like programs appear to hold promise for improved fishery management.

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