DRAFT COUNTRY NOTE ON FISHERIES MANAGEMENT SYSTEMS – UNITED STATES

1. Commercial fisheries in the US range from the subarctic waters of the Bering Sea to the tropical reefs of the US Virgin Islands in the Caribbean. Nearly four hundred years ago coastal fisheries played an important role in the establishment and success of colonies (in what would become the New England states), and today they remain critical to the livelihood of communities all along the Atlantic and Pacific seaboards, the Gulf of Mexico, the Hawaiian Islands, Alaska, and the island trust territories. Tens of thousands of vessels participate in US commercial fisheries targeting hundreds of species.

2. Market-like fisheries management instruments and, specifically, dedicated access privilege programs form but a small subset of the strategies used to manage fisheries in the US. The principal (but by no means the only) statute that governs US fisheries, the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), accommodates the breadth and variety of US fisheries by providing for governance of fisheries through eight regional fishery management councils. The Councils, consisting of representatives from commercial and recreational fishing interests, environmental organizations, state and federal government, and other interests develop and submit to the government for final approval fisheries management plans that address localized needs, while satisfying the federal fisheries statute. Consequently, the US has over forty-six separate federal fishery management plans. (Dozens more fishery management plans have been developed by interstate fishery commissions and individual states to regulate nearshore and estuarine commercial and recreational fishing.) Some plans are for single species fisheries while others manage fisheries for several species and even multispecies complexes, sometimes providing separate management strategies by species, gear type, area, etc. Consequent to its accommodation of so many widely-varied localized fishing situations, US fishery management strategies cannot be succinctly and still meaningfully described.

3. This brief report will consider only those market-like fisheries management instruments in use in the US that provide exclusive and privileged use of fishery resources to individuals and groups. Termed "dedicated access privilege programs" or DAPPs, there are three types in use in the US. Only those considered in this report are listed.

1. Individual quotas (IQs)
   - South Atlantic wreckfish
   - Atlantic purse seine bluefin tuna
   - Alaska halibut and sablefish
   - Atlantic surfclam and ocean quahog

2. Community Quotas
   - Western Alaska community development quota program (CDQP)

3. Fishing Cooperatives
   - Bering Sea pollock
   - Pacific whiting
   - Georges Bank cod hook sector

4. The first IQ program was established for the bluefin tuna purse seine fishery in 1982; the remaining three came in the early 1990's. In 1996, amidst a sharp debate on the merits of individual quotas, the US Congress passed amendments to the MSFCMA, signaling a major turning point in DAPPs. The 1996 MSFCMA amendments established a moratorium on new IQs and spelled out the terms and conditions for CDQPs in western Alaska and the western Pacific. The moratorium on IQs also sparked a movement toward fishing cooperatives. Two groups established fishing cooperatives; one for Pacific whiting in 1997 and another for Bering Sea pollock in 1998. Interestingly, the Bering Sea pollock cooperatives were supported by special legislation, the 1998 American Fisheries Act. Thus, the US Congress, on several occasions, has had a direct hand in the role of DAPPs in US fisheries.

5. When the IQ moratorium expired in October 2002, several Councils began again to study and to develop new DAPPs. One such program, in the Alaska crab fishery, went into effect in 2005 and is a package of IQs, cooperatives, regional landing requirements, and processor quota shares, which confer on processors an exclusive privilege to purchase and process crab. As it is so new and its success is still underdetermined, the Alaska crab DAPP is not considered further in this report.

6. DAPPs account for a much larger share of the US landings by volume than by value. Using data presented by the federal fisheries management agency (National Marine Fisheries Service or NMFS) in its annual reports (Fisheries of the United States) for 2003 and 2004, it appears that DAPPs account for a significant and growing share, but still a good deal less than half, of total harvests. The eight DAPPs reviewed in this survey account for 1.7 million metric tons of landings and USD 500 – 600 million in ex-vessel revenues, or almost 40% by volume and 15 to 18% by value of the national totals. The substantial discrepancy between volume and value DAPP shares reflects the dominant role of Bering Sea/Aleutian Islands pollock. This single fishery accounts for more than 80% of all current DAP harvests, but is of relatively low value, with ex-vessel prices of just USD 135 per metric ton (USD 0.06 per pound).

7. These volume and value figures also highlight marked regional differences in the occurrence of DAPPs. Dedicated access privilege fisheries for pollock, halibut and sablefish give Alaska a dominant role, accounting for about 85% of total DAPP harvests.

Market-like instruments to regulate access

The individual transferable quota and individual fishing quota systems

Introduction:

8. Four US fisheries managed under an individual transferable quota or individual fishing quota system are considered for this report. Three of the four are managed by different Councils and were established to meet different management objectives.

9. The small commercial fishery for wreckfish was developed by the South Atlantic Fishery Management Council (1991). The main reason for establishing the IQ was to prevent overfishing by stemming the rapid increase of capacity that entered the fishery after its discovery. Wreckfish are caught in the deep water of the North Atlantic Gulf Stream with vertical hook-and-line gear. Execution of this fishery is very difficult and the gear is expensive. No recreational fishery exists for wreckfish, nor is it a multispecies fishery.

10. The Alaskan halibut/sablefish fishery IQ was developed during the 1980s and early 1990s and fully implemented in 1995. This IQ program was developed to resolve conservation and management problems that stem from an "open access" regulatory regime. The open access system created a race for fish in which the allowable annual catch limits of halibut and sablefish were harvested within a few days. This race caused marketing and safety problems in addition to gear conflicts, excessive bycatch, and

discard loss of halibut and other species. The IQ program applies to hook-and-line fishing for halibut and sablefish in and off of Alaska. Under the program, quota share units are issued to eligible persons, not vessels, and each individual's fishing quota is derived annually based on the amount of quota share a person holds and the total allowable catch in each area. Certain transfer and IQ-use restrictions were devloped to protect the interests of fishing dependent communities.

11. The third IQ fishery considered is for surfclams and ocean quahogs off of the coast of the mid-Atlantic and New England states. This IQ was established in 1988 to provide predictable and sustainable harvests after allowable fishing time dropped from 96 hours per week in 1978 to six 6-hour trips per quarter in 1988. Currently, about 56 individuals hold quahog shares and 82 hold surfclam shares although only about 35 surfclam vessels and 30 quahog vessels are actually engaged in the federal IQ fishery.

12. The only IQ that is not the product of a Council action regulates the bluefin tuna purse seine fishery, a minor part of the larger multi-gear, international bluefin tuna fishery. In this IQ a small share of the Atlantic bluefin tuna stock's total allowable catch (TAC) is allocated to the five vessel purse seine fleet. Highly migratory species, such as bluefin tuna, are managed directly by the National Marine Fisheries Service, which implements allocations negotiated in proceedings under International Commission for the Conservation of Atlantic Tunas.

13. In the discussion that follows, these four IQs will be considered together except where their differences are especially significant or illustrative.

Exclusivity:

14. These fisheries are very exclusive with regard to the privilege of access. That is, only shareholding persons or vessels are allocated a fixed quota share.

15. With regard to use of the resource, the wreckfish IQ program manages the entire TAC for this species in the South Atlantic. Similarly, for surfclam/ocean quahog, IQ program participants account for almost all of the known fishing mortality. While the halibut/sablefish IQ program also manages the lion's share of the target species' total allocation, bycatch, a halibut CDQ program, and a targeted sablefish trawl fishery share in consumption of the TAC. The tuna purse seine fishery IQ program enjoys only a minority portion of the TAC for the target species.

Duration:

16. The duration of the US IQ shareholding privilege is indefinite. There is neither a sunset clause on the four programs, nor is there a regulatory trigger for dissolution. On the other hand, the IQs are established by the regional fishery management councils and/or federal regulatory action, and may, as appropriate, be dissolved at any time.

Quality of the title:

17. Under the MSFCMA, IQs are established to provide opportunities for exclusive use of a portion of the fishery resource, but at no time does the federal government endow the share with the trappings of property nor shareholders with the expectations of ownership. In fact, the MSFCMA §303(d)(3) states that the IQ "may be revoked at any time," and "shall not confer any right of compensation to the holder." As noted above, IQs exist at the discretion of the regulatory bodies that established them. That notwithstanding, once an IQ is established, industry members and financiers may behave as if a property right for the in situ resource exists. This behavior has over time resulted in rationalization of the fisheries, increased stock conservation, and generally, increased net benefits for harvesters in the form of profitability or satisfaction.

Transferability:

18. While similar in exclusivity, duration, quality, and flexibility, the main differences between US IQs are in transferability and divisibility. Surfclam/ocean quahog shares can be held permanently or temporarily by any person or corporation that is eligible to own a vessel, although actual vessel ownership is not required. Transfers between shareholders and to non-shareholders are common and administratively simple.

19. Similar to the surfclam/ocean quahog fishery, transfers between shareholders and non-shareholders in the wreckfish fishery are relatively simple. Anyone can purchase shares from a shareholder. But to gain a permit and to participate in the wreckfish fishery, a fisher must own wreckfish shares and have access to a vessel. Actual vessel ownership by the shareholder is not required, but the qualifying vessel owner must be the employee, contractor, or agent of the shareholder.

20. At the beginning of each year, each wreckfish shareholder is issued coupons in various denominations, the total of which reflects his/her percentage of the total allowable catch for the year. Although *shares* may be purchased by anyone, annual coupons may be transferred only between shareholders.

21. The halibut/sablefish IQ program is a bit more restrictive. One must have a transfer eligibility certificate (TEC) to be able to receive quota share. To qualify for a TEC, the applicant must be a US citizen and must have at least 150 days of participation in any US fishery. Thus, even crew members who do not own fishing vessels may acquire halibut/sablefish quota share in relatively small increments.

22. Participants in the tuna purse seine IQ program may transfer shares to other shareholders in the sector. Also, if a vessel leaves the fishery, its shares may be consolidated on a vessel remaining in the fishery. There are only five vessels in the IQ program. Historically, most of the transfers have been between the three vessels which are owned by a single entity.

Divisibility:

23. Each fishery allows shares to be divided into relatively small lots. However, the ease of transferability in each fishery determines the potential for divisibility to result in more participants in the fishery.

24. Surfclam/ocean quahog shares are highly divisible to very small lots and may be transferred to non-shareholders. Halibut/sablefish shares are also highly divisible and may be transferred to anyone with a TEC. Wreckfish IQ shares may be transferred between fishers in any amount, but each year's TAC allocation (issued in coupons) may only be transferred in the denominations issued and may be transferred only amongst shareholders. Tuna purse seine IQ shares cannot be transferred to non-shareholders, so divisibility does not result in more participants in the fishery.

Flexibility:

25. The flexibility of these IQ management programs is very strong. Gear in all four fisheries either is restricted by regulation or limited by practicality. The tuna purse seine and wreckfish fisheries have seasonal limitations. Halibut fishing is sometimes restricted from conservation areas. In general, though, technical restrictions are fewer in these IQ fisheries than in non-IQ managed fisheries.

Synthesis:

26. IQs in the US have strong potential to create stable, sustainable, and rationalized fisheries. Exclusivity, flexibility, and, in most cases, divisibility are strong. By statute, duration is indefinite and not guaranteed. Similarly, the quality of title is technically weak, but the stability of the IQ fisheries has led to shareholder behaviors and to values associated with shares that suggest shares are treated by industry as entitled property. While transferring shares is allowed in all of the fisheries, the number of parties to whom shares may be transferred ranges from a very few, as in tuna purse seine, to relatively unlimited, as in the surfclam/ocean quahog fishery.

The community development quota program

Introduction.

27. The community development quota program was initiated by the North Pacific Fishery Management Council in 1991 and formalized as part of an amendment to the MSFCMA in 1996. The statutory language ensures that a portion of the total allowable catch will be set aside for qualifying coastal communities in the most remote reaches of western Alaska.

Exclusivity:

28. The CDQP is highly exclusive with regard to access. Eligibility requirements are highly specific and restrictive with regard to community location and qualifying criteria. For example, the statute requires, among other things, that the community be a certified Native village located within a specific range of the Bering Sea and conduct over 50% of its fishing activity in the Bering Sea. The CDQP enjoys only a minority share of the pollock resource.

Duration:

29. Unlike the IQs considered in this report, the community development quota program is authorized by the US Congress through legislation, and so enjoys an expectation of greater duration. An act of the Congress, as opposed to the Council or regulatory action, would be required to withdraw the program.

Quality of the title:

30. As noted before, the MSFCMA does not contemplate shares as property and does not impart the trappings of ownership upon shareholders. Due to the specific authorization of this program by legislation and due to the specificity of language describing eligible participants, the quality of title may be considered stronger than under the IQ programs. On the other hand, reallocation of shares among the non-profit managing organizations representing the member communities occurs every three years, which adds some uncertainty and may undermine the quality of the title.

Transferability:

31. Community shares (annual allocations) are fully transferable between the non-profit managing organizations representing the member communities. Leasing of shares to external parties to conduct the fishing is easy and commonly done.

Divisibility:

32. For CDQPs, divisibility is not restricted among the managing organizations participating in the program. Leases can be granted for any amount with a portion being preserved for community-based fisheries, if so desired. The administering agency also has the authority to reallocate any or all of a CDQP quota allocation each year. This high degree of divisibility at both management levels creates a strong ranking for this characteristic.

Flexibility:

33. CDQPs are highly flexible with leasing arrangements relatively unrestricted, except that the fishing must occur in the Bering Sea and Aleutian Islands area. Program regulations currently require that proceeds generated under the CDQP be invested into programs and infrastructure intended to start or support commercial fisheries business related activity. Communities have requested clarification and reconsideration of this requirement. Review of this provision by federal regulators is underway.

Synthesis:

34. The CDQ program seems successful in meeting its objective of securing a portion of this fishery for remote communities. While somewhat restrictive in its ability to fully approximate a property right for the in situ resource, its stated goal of providing fishermen who reside in these remote fishing dependent communities an opportunity to participate in the Bering Sea and Aleutian Islands fisheries is well achieved.

Cooperative programs

Introduction.

35. Cooperatives are the most difficult fishery management instruments to discuss collectively and across the six criteria. While cooperatives may or may not be supported by specific regulatory actions, the rules within the cooperative are subject to private agreement and contracts to which the government may not be privy. The extent to which a cooperative's constituent shares are exclusive, enduring, transferable, divisible, and flexible cannot be fully known and herein precisely reported.

36. In the early 1990s the Pacific Fishery Management Council established a strict limited access program in the whiting fishery. Newcomers were allowed to enter the fishery only by procurement of existing permits from permit holders. Consolidation of permits and associated fishing capacity (as a function of vessel length) and histories was allowed, thereby allowing large catcher/processors to join the fishery and to garner a share of the TAC. In 1997, the four catcher/processor companies working in Pacific whiting fishery formed a cooperative. By coordination of their efforts and communications between vessels, the companies have been able to reduce bycatch of salmon and over-fished species, target high-grade portions of the fish stock, and increase both fishing efficiency and product recovery rates.

37. The cooperative program for Alaskan pollock was initiated under the American Fisheries Act in 1998, which resolved contention between inshore and offshore sectors of the Pollock processing industry. The statutory language ensures that a portion of the total allowable catch will be set aside for qualifying fishermen in the Alaskan pollock fishery.

38. In 2004, an amendment to the New England multispecies fishery management plan (FMP) provided for the establishment of sector allocations. The FMP had historically used input controls (*e.g.* days at sea limitations) to achieve management goals. The sector allocation allows members to operate instead within a fixed quota, thus ending overfishing in the sector, while relaxing certain technical measures, thus providing for more efficient operations. The first such allocation under the multispecies

FMP was established in 2004 for the Georges Bank cod hook fishery. Though technically not considered to be a harvest cooperative, sector members coordinate their efforts to harvest Georges Bank cod efficiently while working within an allocation based on the members' collective fishing history.

Exclusivity:

39. All three cooperating sectors are components of strict limited entry fisheries. As new permits are not being issued, potential entrants are obligated to procure existing vessels and/or permits with their concomitant histories and capacity limitations. When a vessel joins the cooperating sector its history contributes to the calculation of the sector allocation.

Duration:

40. The sector plans have no sunset provision or other mechanism triggering their withdrawal. Participation within the cooperating portion of the sector is subject to private contract. For example, regulations for participation in the Georges Bank hook sector require that the permit holders remain in the sector for a full year. Participation in the cooperative portion of the sector requires a three year commitment by private contract with the collective.

41. The Alaskan pollock cooperative is supported by specific legislative statute and enjoys some expectation of permanence.

Quality of the title:

42. Under the MSFCMA, sector allocations upon which the cooperatives rely are not endowed with the trappings of property nor are sector participant given rights or expectations of ownership. In practice, the fishing history associated with sector participants is a principal factor in determining the allocation of quota to the sector. As the history of the permit and its capacity limitations are considered to be appurtenances of the vessel, there is value associated by the industry with those properties. The quality of fishing privilege may be considered by industry members to be as strong as the quality of one's title to the fishing vessel itself.

Transferability:

43. Within the Alaskan pollock fishery, several cooperatives exist. Transfer of vessels from one cooperative to another is possible, but a disincentive – having to operate for a year in the "open access" fishery outside of any cooperative – makes transfers rather uncommon. When this occurs, the allocation to the losing and gaining cooperatives is adjusted commensurate with the history of the transferring vessel.

44. Within a cooperative, the implicit transferability is very high allowing for the most efficient set of vessels to harvest the entire cooperative share of the TAC. Members of the Georges Bank cod hook sector may transfer and lease days at sea between sector members to take advantage of collective efficiencies.

Divisibility:

45. Sector allocation is divisible only amongst members of the sector who have a qualifying history to participate therein. Further divisibility cannot occur.

Flexibility:

46. Cooperatives have varying capability to restructure their member's operations to meet sector goals (*i.e.*, maximize efficiency and profits, reduce bycatch) from the harvest of their suballocations of TAC. Whiting and Pollock cooperatives enjoy significant freedom from technical measures that might impair flexibility.

47. The Georges Bank cod hook sector grew from a tradition of input controls without hard TACs. With the establishment of the sector allocation, sector organizers submit annual proposals to federal regulators for relief from certain technical controls. For example, cod possession limits might be waived to allow sector members greater flexibility working within the sector quota. Participants in this sector remain subject to days at sea (DAS) limitations, though DAS are transferable and lease-able within the sector.

Synthesis:

48. Cooperatives provide an opportunity to restructure the fleet to maximize profits and create an incentive for fishers to conserve the in situ resource. Cooperatives also possess the potential to preserve fishing dependent communities if located in key ports.

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49. DAPPs will almost certainly grow in number in the US in the next decade as a means of addressing overfishing, rationalizing capacity, and providing greater industry self-management; but their overall share of US commercial fisheries will probably increase only modestly. The federal government recently announced its intent to double the number of DAPPs by 2010, and, if the most likely candidates are added, such as Gulf of Alaska groundfish, Gulf of Mexico red snapper and Mid-Atlantic tilefish, the DAP share may increase but just moderately. Since most of the fisheries that will probably adopt some form of a DAPP target relatively low volume and high value species, it is roughly projected that DAPPs will account for somewhere between 40 and 50% by volume and 25% by value of the national totals by 2010.