

# Community inshore company development as a means of support for fishing community governance

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## 1. INTRODUCTION

The use of quasi-property rights (QPR) in the form of individual quotas began in the Canadian East Coast fisheries in 1977 when Canada extended its Exclusive Economic Zone to 200 nm. The reduction of foreign fishing activity was heralded as providing a new frontier in prosperity for Canadian fish harvesting and processing. Even though several traditional stocks such as herring and groundfish were depressed due to high levels of exploitation, the “new era” anticipated growth in stocks of fish as well as all other venues of the fishing industry. Therefore, with the announcement of the extended jurisdiction euphoria abounded in Canada as fishers, both traditional and new to the game, planned how to divide up the expected spoils of this good fortune.

The policy and decision-making processes of the day resulted in numerous and often conflicting principles of conservation, economic viability and more social objectives related to community support. By the late 1980s the real phenomenon of too many fishers and too few fish suggested that the vision of the government in its 1976 policy was wrong or that both industry and government were unable to make it work.

It was in this light, during the 1980s that government in concert with the industry began to seriously look at property right schemes as possible solutions for some of the problems. QPRs were seen as providing feasible solutions to some of the major problems in exploding fisheries in that they tend to make people accountable for their actions and can be successful, when used in a transferable format, at controlling capacity growth. In consort with stringent conservation controls for rebuilding resources, QPRs can become formidable tools for adjustment in a way that industry supports.

Kirby (1982) recommended the allocation of non-transferable quotas to large fish companies, which he termed Enterprise Allocations or EAs, as a means to encourage companies to live within their quotas. Since that time Individual Quota (IQs) and Individual Transferable Quota (ITQs) have been introduced for various fisheries from groundfish and herring to shrimp and snow crab. Within the Scotia-Fundy region more than 50 percent of the landed value is now covered by these management approaches. In almost all cases those programmes introduced prior to 1996 have had as a major objective balancing capacity of the fleet with the resource, which coincidentally were in a state of decline at the point of introduction. Since their introduction, two salient points have become apparent among all QPRs, namely that fleet rationalization has occurred and stocks have stabilized or expanded since the time of introduction.

The issue of rationalization is really a translation of economic self-sustainability or economic efficiency while conservation, leading to stock stabilization/growth, comes from the need by stakeholders to invest in the stocks for the future.

Two decades ago, the 200-mile limit promised a new dawn of prosperity largely to be based on groundfish. But the 1990s brought a codfish collapse and one of the largest employment losses and aid programmes in Canadian history. More recently, unprecedented growth in invertebrate resources has resulted in shellfish becoming the largest source of revenue in the fishery. Several factors can be identified as pertinent in developing a mechanism that could deal effectively with the cyclic nature of the East Coast Fisheries. These included ecological changes as well as economic and social considerations. An obvious question that arose related to the impact of resource fluctuations on management thinking.

Currently there is no established policy framework or regulatory mechanism to determine when and how wealth created in a given fishery might become subject to redistribution. A clear policy framework needed to be developed, however in the end a 'one-size-fits-all policy' may not be acceptable. When no clear policy exists, Integrated Fishery Management Plans (IFMPs) do provide a process that allows industry to decide these issues with a minimum of political interference.

The goal within a QPR system could be to attempt to allow market forces to function while at the same time ensuring that at some point of constraining market forces a level of protection is provided at predefined thresholds. These thresholds, when defined, could include such things as super-profit limits and increases in resource abundance. Without a framework, every improvement is subject to political lobbying by various interest groups.

Thresholds are seen as one way of triggering a wider distribution of the resource in a way that is not as subject to political interference in the methods of reallocation while satisfying the needs or demands of others. Several issues have contributed to development of the threshold mechanism in QPR fisheries.

- i. Much of Canada's commercial fishery is based in areas where there are few non-fishery employment opportunities and the commercial fishery has to reconcile the realities of a modern fishing industry in a global market environment with other public concerns including the maintaining of coastal communities.
- ii. The fisheries have achieved a high degree of efficiency, which manifests itself in several forms namely, (a) excess profits per individual and/or company and (b), concentration of activities among a few vessels and/or companies thereby affecting the coastal community network.
- iii. In light of the groundfish collapse, rapidly-growing resources have demanded a rethinking of old solutions as disputes among existing users and those wishing to gain access to these lucrative resources intensified and both government and industry looked for ways to avoid the mistakes of the past and come up with innovative solutions that satisfy all concerned.

Central to this, and in the context of community infrastructure and support, are the small, inshore vessels which generally have not subscribed to such programmes in the past. This is changing as these fleets experience resource declines, reduced revenues and often community dislocations. The price paid by these groups is considered to be significant and something that political groups at all levels try to address. The issue of coastal community infrastructure is gaining popularity in many venues worldwide as the social values switch from those related solely to economic development to those encompassing both economic and social concerns with life style and location being vitally important. The cry of "community death" and "save the community" is now common in Canada and in many nations worldwide. It is in this scenario that coastal community networks, marine protected areas (MPAs), coastal infrastructure support etc., have their followers and supporters, which include many pre-eminent groups worldwide.

Within the threshold concept, questions will naturally arise including the following.

- i. What is an excessive share of wealth under a QPR privilege?
- ii. Who should decide when there is a resource surplus?
- iii. What criteria should be used to trigger the use of thresholds in a particular fishery?
- iv. What would be the future status of participants entering the fishery?
- v. If abundance is increasing should the licence pool be extended and if so should the number of participants bear any relation to the long-term stability of the resource?
- vi. Does the Department of Fisheries and Oceans have a mandate to meet social objectives or is this better left to industry or other government departments to address?

Thresholds can best be described as mechanisms by which QPR participants can define when, for how long, and what resources will need to be compromised within the QPR format, to ensure devolution of activity to new participants. This approach has the advantage of defining the long-term objectives of management plans as well as allowing the permanent stakeholders the opportunity to define its parameters. For coastal communities and fishers it provides a counter to the fear of consolidation/concentration and allows for income opportunities to a wider number of people who often live close to the resource under consideration. By introducing the threshold approach the number of fishers would vary depending on abundance and would avert a repeat of the late 1980s situation where too many fishers had been introduced to be viable during periods of low abundance.

## 2. THE INTRODUCTION OF A NEW ACCESS POLICY

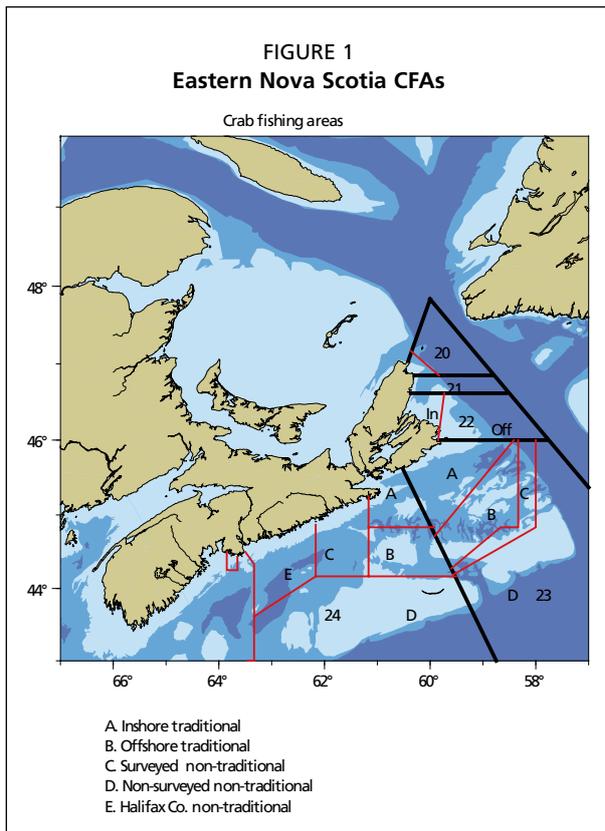
### 2.1 Policy background

The current snow crab (*Chionoecetes opilio*) (Photo 1) fishery consists of small vessels (under 19.8 m length) based in five crab fishing areas (CFAs) in the eastern part of Nova Scotia (Figure 1). It operates from several local ports, which have a mix of fishers, with and without crab licences. The gear used by these fishing vessels are a number of traps (Photo 2).

Through the 1970s the number of licence holders increased, with landings and licences keeping pace with one another. However, by 1982 quotas were not being reached and in 1984 quotas were removed as a management tool due to lack of scientific ability to predict stock biomass. Throughout the late 1980s increased abundance resulted in a resurgence of effort. The number of licences distributed remained stable until 1995 and resource biomass continued to increase. Although initially a nearshore fishery, with the increased abundance and access in the southern areas of eastern Nova Scotia (ENS), the fishery expanded outside of the traditionally fished areas and now extends 120 miles from shore where the fishable seabed is not as evenly distributed and snow crab are found in gullies.



PHOTO 1  
An adult snow crab



While enjoying the benefits of QPRs, the snow crab fishery remained a common-property resource. Declines of both groundfish and lobster resource levels in the early 1990s caused increased hardships for many fishers and created a need for fishing alternatives. Increased market prices following these declines for snow crab, due to the collapse in the Alaskan crab fishery in the mid 1990s, resulted in demands by many inshore non-licensed commercial fishers for social benefits to flow from this unexpected growth situation.

Basic arguments for increased sharing focused on quota concentration, perceived excess profits by the existing licence holders, intra-port jealousies and the adjacency issue. All arguments played a part in demands for more access not only through the advisory committee system, but directly to officials' and the Minister's office. This in turn created suspicions of undue influence and politicization of the fishery's management.

Under the snow crab management plan (DFO 1998) permitted also was a "broader

distribution of wealth from this fishery to other members of the CORE fishery when resource and market conditions are favorable, in a manner that will not threaten the viability of the fishery for the regular licence holders". But the vagueness of this wording allowed industry members to argue that any of the options should prevail.

The rivalries between existing users and others demanding a place in the snow crab fishery intensified in the late 1990s as resource biomass increased. Although the management plan identified that new entrants should be allowed in it did not address issues such as,

- (a) should communities be allocated shares or
- (b) should we allow fleet-efficiency to continue to increase at the possible expense of coastal communities' welfare?

The co-management approach identified through the IFMP encouraged industry to reduce the political volatility by bringing the decision-making process closer to the local level. Rather than accepting an external process that is subject to rigid rules or political pressures, industry defined its own mechanisms to avoid this as stock biomass



PHOTO 2  
Retrieving a snow crab trap

increases or declines. Through a cooperative process involving science, management and industry the basic rules for management and allocation were established.

Through this process management responsibilities for administering their share of the total allowable catch (TAC), including biomass thresholds for management action, as well as other aspects of the fishery, were designed. These co-management arrangements provide industry with better security of access, clearer roles for government and industry, and more opportunity for industry to put its expertise to use in managing the fishery. This process allowed the next logical step to occur i.e. the introduction of thresholds in 2000 as adopted for use under a new snow crab management plan (DFO, 2000).

## 2.2 The temporary solution

Licence holders recognized that their fishery could tolerate additional effort on a temporary basis. The emphasis must be placed on the temporary aspect of this type of solution for wealth distribution. The introduction of temporary access attempted to balance the needs of viability for the existing licence holders with the desire to help economically affected communities.

Therefore, TAC thresholds were established that when exceeded allow more fishermen to share resource surpluses. The long-term objectives for this fishery included (a), the continued biological and economic viability of the stocks and (b), the broader distribution of temporary access within the fishery to other core licence holders when both market and resource conditions were favorable, and in a manner that did not threaten the viability of the regular licence holders.

The threshold plan for each CFA was different but the principles were generally the same. These objectives were achieved through the following tactics.

- i. The identification of exploited areas (traditionally fished) and lightly exploited areas (non-traditionally fished areas where most of the new access would be provided).
- ii. Threshold amounts (tonnage or tonnage and value).
- iii. A mechanism for sharing growth beyond a threshold. That is, sharing of access to temporary rights holders, which may involve reciprocal zone-sharing, straight access-sharing or sharing of fishing zones.
- iv. A complex tiered approach was developed, which if TACs continued to increase, would result in the temporary fleet receiving the majority of excess above the threshold and with equal access to the entire zone.
- v. Plans for crab are normally for a period of five years at which time issuance of thresholds based rights revert to a ground zero situation and negotiation recommence.
- vi. Provide special consideration to Aboriginal peoples for commercial access.

All fishers eligible for temporary access were represented by associations that were charged with maximizing returns and for distributing wealth to members. Temporary licences were provided through the associations to individual fishers who fished for all eligible fishers in the association. Limitations were placed on the number of licensed participants to reduce effort and maximize revenue generation. In addition, temporary licences were restricted to non-traditional fishing areas and temporary access was to be provided only during the period of surplus abundance.

In total, over 700 inshore commercial fishers and Aboriginal Bands, who were non-licence holders, participated in the fishery by being provided one of 4 levels of quota allocation. The amount of quota allocation was based on a priority assigned to the fishers.

- i. Aboriginal Bands were provided an amount based on the size of the band.
- ii. Fishers who lived adjacent to the resource were provided the largest individual amount.

- iii. Fishers who were deemed to have been affected by the downturn in the cod fishery were provided an intermediate individual amount.
- iv. Any other fishers identified as not living adjacent to the resource were provided the lowest individual allocation.

### 2.3 The permanent solution

The introduction of this social accommodation into the snow crab fishery created the need to look at innovative approaches to share benefits from a fishery among coastal community populations while at the same time maintaining the integrity of the IQ approach among all licence holders.

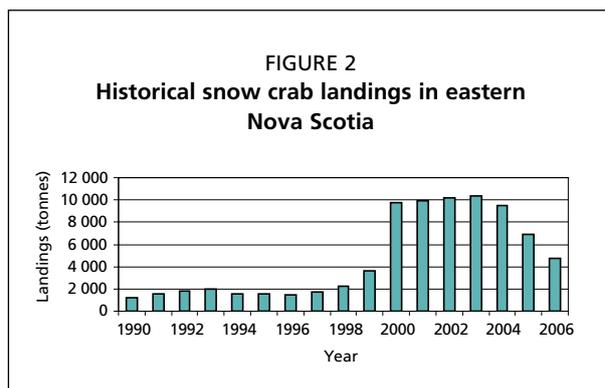
Under temporary access no governance structure was introduced as community groups managed a harvest and dollar distribution but not the harvesters or community members. Elements essential for a community management application to succeed are:

- broad based community support
- essential community infrastructure for long term viability
- a CORE group of fishers and enterprises – CORE is a designation that identifies license holders in the inshore who earn the bulk of income from one or several fisheries.
- a willingness to support a cooperative or collegial approach to fish management
- a solid business plan that does not require government support or intervention
- legal basis for operation with accountability process and public reporting and
- structural support via a rights-based allocation system.

The lack of cohesion with no long-term management structure put in place by community groups or commitment by non-license holders to any kind of long term community infrastructure lead to numerous situations of disagreement. The temporary solution distributed wealth but in the absence of a logical management structure social-demand weaknesses became paramount in this temporary process making it largely problematic to the orderly management of the fishery at conclusion.

The threshold approach had originally been thought to be for a three-year period due to anticipated stock declines. However, because of a build up in resource biomass, TACs were not changed during that period and by 2004 (four-years after the introduction of thresholds) it became apparent that abundance would remain high compared to pre-2000 levels and while abundance fluctuations were expected in the future, the fishery was not expected to return to the low levels of 1990 when fishing effort was restricted to a small portion of the CFAs. In addition, by the end of 2004 the maintenance of high levels of temporary access and the application of the structural design of the threshold approach for five years allowed fishers to become dependent on this temporary allocation and increased demand for distribution changes occurred (see Figure 2).

The dependence of such a large number of fishers did not allow for “planned for attrition” or drop off when the biomass decreased and infighting between groups resulted in a lack of consensus on co-management decisions. With no attachment



to the fishery through a licensed rights-based approach, fishers attempted to force management from a biological, stock-based approach to a political approach based on individual demands. In order to stabilize access and allocations as well as address the long-term requirements for this fishery a more structured solution for a permanent rights based system was required.

In general, this permanent system would continue to apply the principles of conservation and sustainable use with the

fishery. However, the success of the system would be measured by the manner of the introduction of additional licences while continuing to adhere to the principle of social balance. Safeguards must be present in the ecological processes and ensure genetic diversity for present and future generations and that as a common property resource it be managed for the benefit of all Canadians.

More specifically, the system would build on the principles used in the introduction of temporary access. The proposed approach contained initiatives to stabilize communities and fisheries access by maintaining the priorities of conservation, the constitutional protection afforded Aboriginal and treaty rights, and the viability of commercial licence holders. The system, to be functional, had to establish new levels of limited entry consistent with viability of all participants and convert temporary communities to licensed groups. The approach allowed communities to self-adjust through allocation transferability and to ensure coastal community stability and community infrastructure/membership control/governance exists through use of legally based "CORE companies", which support coastal community interests.

The new long-term access and allocation arrangement was introduced in 2005. To provide a more fair and equitable approach to access, the varying allocation amounts provided to temporary fishers were equalized within a CFA and converted to permanent access as individualized quota shares. Although these quota shares had no intrinsic value within the fishery and could not be fished, fishers holding these new quota shares were then provided the opportunity to consolidate, based on accumulated allocations to pre-determined minimum levels, to form CORE Companies with up to one-third the quota holdings of an existing permanent licence. Once formed the CORE Companies were provided a permanent licence with access to the entire CFA and a percentage share of resource depending on the consolidation level.

The establishment of the CORE companies allowed for every CORE fisher in eastern Nova Scotia to be accommodated within the snow crab fishery without increasing the effort on the stock above a level which would diminish the biological or economic viability of the fishery. The CORE companies also alleviated concerns within communities that processing firms and other non-licence holders would control the fishery. Members of the CORE companies determine how their individual quotas are fished and profits distributed.

In total, 72 new licences were created via this conversion process. These changes resulted in 193 permanent licences in eastern Nova Scotia with over 800 individual participants and eight Aboriginal Bands involved as licence holder or shareholder in one of the new CORE companies (Table 1).

## 2.4 Establishing policy

During the implementation/transition year of 2005, the policy was applied to the formation of CORE companies by eligible snow crab quota holders in each of three CFAs (20, 23 and 24). The establishment of CORE companies was for the purpose of participating in the snow crab fishery only and no CORE companies formed under the policy were eligible to hold a licence for any other species.

The policy used in the establishment of the CORE companies and applied after formation, followed as closely as possible departmental policy for regular licences. Normally snow crab licences may be issued to a qualified new entrant (full time) or to another CORE entrant registered with DFO in the Scotia-Fundy Sector of the

TABLE 1  
Access in the eastern Nova Scotia snow crab fishery

	1994	2000	2006
<b>Permanent access</b>			
Total number of licences	119	121	193
Number of aboriginal licences	0	3	33
Number of fishers	119	118	843
<b>Temporary access</b>			
Total number of licences	0	130	0
Number of aboriginal licences	0	26	0
Number of temporary fishers	0	725	0

Maritimes Region subject to regular Change of Licence Holder policies as outlined in the Commercial Fisheries Licensing Policy for Eastern Canada, 1996 and/or any additional requirements outlined in the snow crab IFMP for Eastern Nova Scotia.

However, a licence issued to a Company cannot be reissued to an individual fisher. Therefore, a policy was required to address the issue of owner operators and to include provisions for the transfer of quota, licence transfers, vessel replacement and operator designation.

The following definitions were applied to the terminology used in the establishment of the policy.

- i. *CORE* – a designation that identifies license holders in the inshore who earn the bulk of income from one or several fisheries.
- ii. *Permanent Licence Holder* – a fisher who held a permanent snow crab licence that was valid in 2004 within eastern Nova Scotia.
- iii. *Quota holder* – a fisher, who by meeting the 2005 access criteria, was allowed to amalgamate to form a new CORE company.
- iv. *CORE company* – the legal company formed by the amalgamation of a group of quota holders to which a new snow crab licence may be issued.
- v. *Owner operator* – a requirement whereby the licence holder must operate the vessel during any fishing activity.

To reduce the potential for overcapacity, quota holders were not authorized to harvest their individual snow crab allocations. The establishment of the CORE company reduced the number of active participants but allowed the listed share holders in the company direct control of the licence that was issued to a CORE company and operation of the licence using a specified vessel on behalf of all share holders.

Eligibility criteria were announced to provide access to fishers who held an enterprise that was eligible for temporary access in 2004. Only those identified fishers were authorized to be a share holder in a CORE company. Fisheries and Oceans Canada was responsible for establishing an official list of these quota holders. To further support a community approach quota holders were only eligible to be shareholders in a snow crab CORE company holding a licence for the nearest CFA. In addition, to ensure that quota holders do not acquire control of excessive amounts of quota, individual allocations cannot be split among more than one CORE company.

Under the new access arrangement, 5 percent of the licences in CFA 20 and 40 percent of licences in CFA 23 and CFA 24 would be held in the name of CORE companies. Based on this breakdown and the number of eligible quota holders, the approximate consolidation ratios established for a new licence to be equal to a Permanent Licence Holder's quota were:

CFA 20	–	10:1,
CFA 23	–	16:1 and
CFA 24	–	20:1.

When consolidation to these levels, or higher, was achieved the CORE company was issued their harvesting licence. To ensure full community distribution, a CORE company was also limited to a maximum consolidation not exceeding 133 percent of the minimum requirements.

Quota holders who could not meet the above ratios were required to wait to be issued a licence as a CORE company until most consolidations were completed to ensure that the maximum number of new licences would be maintained. Once the appropriate number of licences had been approved remaining quota holders were required to become a share holder in a CORE company meeting the requirements.

Once formed each CORE company had to register with the Registry of Joint Stocks and provide a certified list (verified by a solicitor) of each of the share holders in the CORE company. Only quota holders could be listed as share holders; no other parties are authorized to hold any shares in the CORE company.

Each CORE company also identified those officers of the CORE company that would be authorized to conduct business on behalf of that CORE company. These officers could be share holders, but could also be a non-share holder (Director of an Association for example). The DFO only takes direction from a designated officer of the CORE company for any transactions requested of the department (quota transfer, vessel identification, etc.).

After the first year, when the initial minimum requirements were met and a CORE company was issued a licence, share holders could leave or be added to the list of share holders subject to the Articles of Incorporation of the CORE company. It is the responsibility of the Company to notify and provide a revised certified list of share holders to a DFO Licensing Authority within 15 days, whenever a Core shareholder is added, replaced or removed as a shareholder in that Company.

Shareholders within the CORE companies must be the head of a CORE enterprise and shares in the CORE companies are transferable to any eligible fisher within the Maritimes region. Eligible fishers are those meeting the criteria under the Commercial Fisheries Licensing Policy for Eastern Canada, 1996 for change of Licence Holder.

A change in membership of CORE companies could be the result of a quota holder moving between companies or the purchase of shares by other eligible fishers including other quota holders. After initial formation, any CORE company issued a licence must maintain at least one remaining CORE licence holder to continue to be eligible for a licence.

There is no upper limit on the number of CORE shareholders a Company can have, however, the amount of quota issued with the licence will not change except through regular permanent and/or temporary quota transfers that are subject to transfer limits established for the fishery.

## 2.5 Quota transfer

Departmental policy allows for quota transfers, both permanent and temporary, within established transfer limits, between all licence holders within a CFA. Quota transfers may also be subject to the Articles of Incorporation of the CORE company. When quota is transferred on a temporary basis the quota is reallocated to the original licence holder at the start of the following season. Therefore any licence holder would remain eligible for the snow crab fishery.

However, in the case that all quota held by the CORE company be permanently transferred departmental policy had to be clarified. The CORE company was only eligible to hold a snow crab licence therefore a minimum amount of quota is required to maintain the eligibility of the CORE company to continue to hold a licence. Without maintaining the minimum quota required the licence would be permanently removed.

## 2.6 Vessel designation

All snow crab licences are restricted to the use of a vessel(s) less than 19.8 meters (65') length overall. (see, e.g. Photo 3) In some of the CORE companies more than one of the share holders wished to actively fish. With the normal restriction that only one vessel could be assigned to a licence for any 30 day period this restricted the activity of the CORE companies. Since a vessel allocation could be fished in less than 30 days the CORE company would not be able to maximize effort during the season and catch rates would decrease late in the season further affecting the economic return to the company.

To address this each CORE company is eligible to identify up to a maximum of three vessels they intend to use on their licence prior to the licence being issued. These vessels are named in a schedule attached to the licence and are authorized to fish on that licence only during the period of time the vessel is registered with DFO in the name of that CORE company. Subject to their licence conditions only one vessel may fish at any one time but up to three vessels may now be active within the 30-day period. The CORE



PHOTO 3  
Example of a vessel licensed  
to fish snow crab

company must notify DFO and request an amended schedule for their licence each time a vessel completes fishing and will no longer be authorized to fish on their licence.

In accordance with regular departmental policy any vessel placed on a CORE company licence will be required to be registered with DFO in the name of the CORE company as the licence holder. The CORE company does not have to own the vessel it registers and only Canadian vessels are eligible to be placed on a licence. In addition, anyone who is using their vessel on a CORE company licence must meet department policy; i.e. any individual (personal) licences issued in respect to that vessel must be removed (banked) for the period of time the vessel is registered to the CORE company.

Vessels being removed from a CORE company licence may be replaced on any previously “banked” licence(s) from that vessel before the 30 days has expired. However, the 30 day requirement must be met before further changes to the vessel may occur. After 30 days, an additional vessel(s) may be registered in the name of the CORE company, provided no more than three vessels are registered to that CORE company at any one time.

## 2.7 Licence fees

In all fisheries, fishermen must be licensed annually (Can\$50/yr) as must be fishing vessels (Can\$50/yr). In addition a fee is assessed based on the individual quota available to the fishermen. The base fee for snow crab is (Can\$123/t) and a fee reduction of 40 percent up to a maximum of Can\$1 000 is then applied. Note that Competitive and IQ snow crab fisheries differ in their fee structure, but there are no competitive snow crab fisheries in the area covered by this study.

## 2.8 Operator designation

The owner operator policy applies to the snow crab fishery where the licence holder must be the operator of the vessel licenced to fish. Since the CORE company is named as the licence holder the owner operator policy needed to be modified. The CORE company must name an operator for the licence.

Departmental policy requires that any registered fisher (full-time or part-time) may be named as an operator of a vessel. Some CORE companies require through their Articles of Incorporation that the operator must be a shareholder in the company. The CORE company must notify the DFO and request an amended licence condition if another operator is to be named in their licence, prior to any fishing by the new operator. A CORE company will not be authorized to use more than one operator at any one time. Licence conditions must identify the operator and can be amended at a DFO Licensing Centre.

## 2.9 Industry response

Initial industry response to the decision to convert temporary access to permanent status was negative. The snow crab fishery is cyclic in nature and existing permanent

licence holders took the position that the downturn in abundance was going to continue and felt that the introduction of additional permanent effort would have a negative impact both on the stock and the economic viability of all licence holders. They were also concerned that the effort distribution limiting the temporary licence holders to the non-traditional fishing areas would be removed producing additional effort on the nearer shore areas thereby increasing exploitation on that portion of the stock.

However, the available information at the time suggested that the abundance levels would not decrease as low as predicted by the permanent fleet. By 2006, the expected increase in recruitment was beginning to enter the fishery thereby reducing concerns of the impact on the stock. Shifts in fishing effort have occurred such that previously temporary fishers have moved from the furthest offshore areas but have not concentrated in localized areas sufficiently to cause localized over exploitation.

The temporary licence holders desired permanent access but with larger individual allocations. Within the temporary group some fishers felt that rather than the equalized allocations provided, unequal allocations should have been provided based on varying levels of priority. They were also concerned that the number of quota holders required to consolidate to form a CORE company was too large. This requirement was expected to make agreement on consolidation more difficult and lower employment by reducing the number of active vessels.

Initial requests for allocations from the temporary groups all centred on obtaining the maximum amount of quota possible. However the approved policy provided an equitable distribution, which fishers have accepted as the most reasonable and fairest approach. In addition, it was much easier to consolidate and form the CORE companies than they had expected.

The general lack of co-operation in the management of the resource seen during the period of temporary access was initially increased by the decision to increase permanent access. However, once the fears expressed by the two fleets were allayed fishers have accepted the new approach and have moved forward to work more cooperatively within it.

### 3. CONCLUSIONS

After two fishing seasons the impact of this policy can be assessed. Discussions on the management of the fishery have become more unified as organization within the industry increased. This organization has been partially possible due to the reduction in the numbers of groups with varying interests. The previous social/political considerations that directed discussions in the past has been reduced now that concerns over security of access, individual allocations and regional imbalances have been removed. And, fishers have a more directed interest in the sustainability of the resource.

Fishers within the existing fleet may now adapt to biomass changes without fear of additional access being provided during periods of abundance or reduced shares during periods of low abundance. This has allowed participants to make long-term operational decisions that were not possible with temporary access. In the last two years fishers were required to make adjustments according to circumstances of both reduced abundance and lower market value. Current recruitment projections indicate that they will need to make future adjustments according to an increasing abundance and higher market value. This ability to adjust guarantees the long-term viability of the fleet.

The formation of the CORE companies has provided previously non-licensed holders with access to a property rights fishery. Policy modifications such as the multiple vessel provision have provided economic support to all interested share holders. The ability for quota transfers and the sale of shares in the CORE companies have provided the flexibility to allow for the consolidation of access to fishers interested in the development of the fishery.

Many of the fishers see access as a share holder in the CORE company as equivalent to a guaranteed income upon which long-term plans may be based. The introduction of this policy may even have an impact on the effort capacity in other fisheries. Since the number of CORE enterprises in the region is constant and share holders in CORE companies must be CORE fishers, any inactive fisher who chooses to remain a company share holder will have to continue to hold appropriate licences to maintain their CORE status. This may produce the long-term affect of reducing activity in those other fisheries.

With all harvesters regulated as equals, the policy has normalized the activities of all participants. Community support has increased with the establishment of the CORE companies as companies and licence holders within the community are working together. In three separate areas of eastern Nova Scotia (Cape Smokey area (CFA 21), Port Morien (CFA 23) and Richmond County (CFA 24)) several CORE companies have Terms of Agreement such that if a share holder wished to sell their share the companies would have the right of first refusal. In addition subject to price considerations these companies would sell the crab to local buyers.

By creating an infusion of product and thus money into the eastern Nova Scotian coastal communities, local fishers influence the financial and employment benefits that flow to their communities. Since the harvesting and processing sectors are also affected by the marketing decisions made by community members this guarantees that the entire community will obtain maximum benefit from the fishery.

The introduction of this innovative policy addressed the need to provide a large number of participants with a reasonable and sustainable access to a fishery that had gone through a period of increased abundance. Currently all participants have a rights-based stake in the fishery that promotes a common goal for the long-term management of the resource and fosters greater economic viability of the fishery sector as a whole.

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