THE NORTHERN SHRIMP FISHERY: THE SOCIO-ECONOMIC IMPORTANCE OF MAINTAINING ADJACENCY IN ALLOCATION DECISIONS

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Executive Summary

The inshore northern shrimp fishery is an economic pillar of communities, municipalities and regions throughout Newfoundland and Labrador. This economic pillar was built on the principle of adjacency. The principle of adjacency means that those who live closest to a resource benefit from the harvesting of that resource. For centuries, the principle of adjacency supported hundreds of coastal communities, whereby local harvesters fished the adjacent waters and landed their catch onshore to be processed by local processors employing local workers.

Adjacency is crucial to the development and growth of the northern shrimp fishery. In 1997 when the inshore fleet entered the shrimp fishery, adjacency was stated as a leading principle in deciding future allocations of northern shrimp. At its peak in 2007 and 2008, the shrimp fishery annually created tens of millions of dollars in local wealth and supported 1300 shrimp harvesters and 13 processing plants that employed more than 2000 shrimp processing workers. Most of this work and economic benefit was in rural Newfoundland and Labrador, creating viable local economies that helped support local and regional businesses.

Inshore shrimp harvesters make significant contributions to these economies by landing a valuable resource and utilizing local businesses and government facilities. In the fall of 2014, the FFAW completed a stratified random phone survey to better understand the connection between landings from specific shrimp fishing areas and onshore communities. Data from the survey were used to quantify economic links between the northern shrimp inshore fleet and onshore communities.

Fish harvesters landed northern shrimp at 25 ports, corresponding to 1383 landing events in 2014. Over 90% of landing events by the northern shrimp inshore fleet were landing shrimp from Shrimp Fishing Area (SFA) 6. When fish harvesters land their catch they pay fees which support harbour authorities. Inshore fish harvesters buy groceries, refuel and pay for routine maintenance each time they land shrimp. These three expenditures alone amount to over $11 million dollars injected into local economies in 2014.

In addition to trip level expenses, annual expenditures, such as maintenance done at shipyards in Glovertown, Harbour Grace, Triton, Fermeuse, and Port Saunders, support local and regional economies.

Northern shrimp license holders participate in other fisheries and income derived from northern shrimp contributes to the overall financial viability of the fishing enterprise. Participation in other fisheries and their economic importance differs among fleets. On average, the proportion of fishing enterprise revenues derived from northern shrimp ranged from 26% in the southern fleet to over 60% among the northern fleets. As such, northern shrimp allocation cuts may well undermine the financial viability of related fisheries and the supporting onshore businesses and communities, particularly along the Northeast Coast, Northern Peninsula and southern Labrador.

Over the past five years, the inshore fleet has landed over 450 million pounds of raw shrimp to be processed in local plants. Employing thousands of individuals, plants provide steady, well-paying employment to local workers.
The presence of a shrimp plant within its boundaries enhances the economic foundation and regional importance of a municipality. A municipality with a shrimp plant attracts workers and often also attracts other commercial enterprise to support the plant workers. Thus towns with shrimp plants also often have banks, grocery stores, gas stations, and so on. In general, a municipality with a shrimp plant is more reliant on commercial taxes than any other population category of municipality, including urban municipalities (more than 4000 residents).

After more than a decade of allocation increases being guided largely by the principle of adjacency, allocation decreases and quota cuts are now guided by a different approach called Last-In-First-Out (LIFO). LIFO is an accounting term that helps allocate the shrimp quota. By using this approach, DFO does not factor in the economic and social impacts of each allocation - how many jobs an allocation creates, the level of economic and infrastructure investment made to support the shrimp fishery, and local demographics. The offshore fleet has limited economic and social benefits for onshore communities. Several vessels in the fleet are not based in NL, not all vessel crew members reside in NL and the shrimp landed by the offshore fleet is not subject to minimum processing requirements and thus does not support the onshore processing sector.

The impacts of the adjacency-blind LIFO policy are already being felt by the inshore shrimp fishery and processing sector. Since 2009, the overall inshore allocation has been reduced by 56%. The rate of decrease has also been increasing, with the 2014 inshore allocation 27% less than the 2013 allocation. The offshore allocation has been reduced, though the cuts have not been as drastic. In 2014, the offshore allocation was just 3% less than the 2013 level and since 2009 the allocation has been cut by 31%.

There have been local impacts due to the inshore allocation cut. Three shrimp plants have closed in recent years, leaving hundreds of plant workers without a job and eliminating tens of thousands of dollars in local tax payments to municipalities. If DFO continues to apply LIFO, the circumstances for shrimp harvesters and processing workers will continue to decline.

Inshore shrimp harvesters are invested heavily in licenses, vessels, and gear. The average inshore shrimp harvesters is over $300,000 in debt, a financial condition enabled by DFO policies that allowed license combining and the use of fishing licenses as collateral. Shrimp harvesters did not make these investments knowing that their allocation would be dramatically cut. Thus far, harvesters have been fortunate that shrimp prices have remained high, which offsets part of the impact of the allocation cut. A drop in shrimp prices, however, combined with the allocation cuts, could be devastating for the inshore shrimp fleet.

The economic future of shrimp processing plant workers is tied directly to the quantity of shrimp that is available to be processed. Provincial government guidelines mandate that each shrimp plant should have access to at least 8000 tons of the resource before a new plant license is granted. This guideline creates a difficult hurdle to overcome for a closed plant that has its license revoked. To maintain its license to process shrimp, a plant cannot have two consecutive years where it fails to process at least 500 tons. If LIFO managed cuts result in the closure of shrimp plants for more than two years, it will be very difficult for the plants to ever reopen. Plants would require significant rebounds to both the quota and allocation.
The demographics of the towns that could be affected if a shrimp plant closes further compounds the difficulties of a closure. The populations of the towns with shrimp plants tend to be older and many older workers are employed by the plant. As has been documented on the final report of the MOU Steering Committee, current supports for former plant workers do not seem to meet the needs of older plant workers. This will cause difficulties if LIFO is continued to be applied.

The impacts of a shrimp plant’s closure on a municipality can have profound impacts on residents. Municipalities with shrimp plants collect significant local revenue from the plant, which helps provide services to residents and helps pay for the local water system that was likely built to meet the needs of the plant. When a shrimp plant closes, the municipal revenue from the plant declines. With less revenue, the municipality can perform fewer services for residents or maintain key infrastructure. This was the unfortunate fate of Jackson’s Arm, which went from having two fish plants to having to install a centralized water system that requires residents to bring containers to a central building to collect drinking water. The residents of Jackson’s Arm are mostly seniors.

When the inshore entered the northern shrimp fishery in 1997, DFO made two commitments: to guarantee an allocation threshold to the offshore fleet and to apply adjacency in the allocation of the northern shrimp fishery. In recent years, DFO allocation policies suggest that these two commitments cannot coexist in the face of a declining shrimp resource. By applying LIFO to allocation decisions, DFO has reinforced this perspective. LIFO has been interpreted by the inshore as a tool used by DFO to protect the offshore.

In truth, the offshore allocation commitment and the inshore adjacency commitment can coexist; it is LIFO that is not needed and which has poisoned the environment around northern shrimp allocations. SFA 6 is directly adjacent to Newfoundland and southern Labrador. It is the primary fishing area for the inshore northern shrimp fleet, accounting for the vast majority of the inshore allocation. It is also the traditional fishing grounds that were used to fish cod, turbot, and other groundfish.

SFA6 should be granted to the inshore as its exclusive shrimp fishing grounds based on the principle of adjacency. With respect to the special allocation license holders that are adjacent to SFA 6, the inshore fleet should be granted the right to negotiate catching special allocations on behalf of the allocation holder.

As for the offshore, it should be granted the right to fish in SFAs 0 to 5 where it should be able to catch its allocation guarantee (and more if the quotas permit). These were the areas first fished by the offshore in the first 15 years of the fishery. Given the capacity of offshore vessels, the commercial viability of the fleet will not be jeopardized.

In the end, this is a decision that has to be made by DFO – it can continue to use LIFO or it can find another way that doesn’t prioritize one fleet over another. The allocation of northern shrimp is contentious and must be conducted with sensitivity. DFO cannot continue with an allocation policy that could result in massive job losses and regional economic collapses.
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1. BACKGROUND

1.1 THE INSHORE AND OFFSHORE FLEETS OF THE NORTHERN SHRIMP FISHERY

There are two distinct northern shrimp fleets: the inshore and the offshore. There are crucial differences between the fleets that go beyond simply the size of the vessels involved.

The inshore fishery refers to those vessels that are less than 65 feet in length. Although some vessels between 65 and 100 feet, known as the mid-shore, also participate in the inshore fishery and are bound by its rules. The inshore fleet is operated on an owner-operator basis, meaning that the owner of the fishing license is a participant in the harvesting of the fish. There are approximately 260 active shrimp enterprises in Newfoundland and Labrador (NL) employing approximately 1300 crew members. The inshore northern shrimp fishery is considered to be “competitive”, meaning that, in theory, each inshore license holder is not guaranteed a specific percentage of the shrimp allocation; in practice, the inshore northern shrimp fishery operates within self-imposed guidelines. The inshore northern shrimp fishery opens in early spring and continues until its allocation is harvested.

The offshore northern shrimp fisheries currently consists of ten large factory-freezer vessels that harvest shrimp for seventeen license holders. The shrimp allocation for the offshore is divided equally amongst the seventeen license holders and they can lease their individual shares amongst each other on an annual basis. The offshore fleet employs approximately 625 crew members and operates year round.

There are three primary differences in the economic model of the inshore and offshore northern shrimp fisheries. The first involves access to the fishing grounds. The northern shrimp fishery is harvested from eight shrimp fishing areas, known as SFA0 to SFA7 (Figure 1). Until the recent temporary closure of SFA7, the offshore fleet harvested northern shrimp from every SFA, some of which are located in the far north (off the coast of Baffin Island) and are outside the reach of inshore vessels. The shrimp fishing areas most accessible to the inshore fleet are SFA6 to SFA7, which are located along the coast of NL. Throughout its history, the inshore northern shrimp allocation has been primarily located in SFA6, with smaller allocations in SFA4, SFA5 and SFA7.

Figure 1. Shrimp Fishing Areas (SFAs).

2 Ibid.
3 Ibid.
4 Ibid.
Thus, the fishing grounds available to the inshore are much more limited than those available to the offshore.

The second primary difference is how harvested northern shrimp is processed and landed. Northern shrimp that is harvested by the inshore sector is landed in NL and sold to a local shrimp processor. According to section 4(2) of the Fish Inspection Act the Minister of Fisheries and Aquaculture may make regulations “prescribing minimum processing requirements.”\(^5\) NL regulations require a processor buying raw shrimp landed in the province to first cook and peel that shrimp in a plant located inside the province before sending it out of NL to other markets.\(^6\) Therefore, all northern shrimp allocated to the inshore fishery is processed in a shrimp plant located in the province, which supports approximately 2200 onshore processing jobs (includes some multi-species licensed plants).\(^7\)

The offshore factory-freezer trawlers have onboard processing facilities. As such, the shrimp is processed while the vessel is at sea.\(^8\) Offshore shrimp that is landed in NL is not sold to a processor and therefore is not subject to minimum processing requirements. The offshore shrimp that is landed is usually held for a short period of time before being shipped out of the province. Almost no offshore northern shrimp is processed in NL.

The third difference in the economic model of the inshore and offshore fishery is the access to Royalty Charters. Over the course of the northern shrimp fishery, various entities have been allotted a special allocation of northern shrimp. These entities then contract offshore enterprises to catch their special allocation.\(^9\) Only offshore vessels are allowed to enter into a Royalty Charter agreement; the inshore fleet are forbidden to do so. In an ironic twist, three community-based organizations in NL with special allocations – St. Anthony Basin Resource Inc., the Labrador Fishermen’s Union Shrimp Company, and the Fogo Island Cooperative Society – have used the bulk of the revenue from their Royalty Charter agreements to finance inshore harvesting and processing capacity.\(^10\)

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\(^5\) *Fish Inspection Act*, RSNL 1990, c F-12.
\(^6\) *Fish Inspection Operations Regulation (Amendment)*, s. 9 Schedule: Minimum Processing Requirements.
\(^7\) “Request for Proposals: Professional Services to Assess the Socio-Economic Impacts of Shrimp Quota Reductions in Newfoundland and Labrador,” Department of Fisheries and Aquaculture, August 27, 2014, p. 1.
\(^8\) “Northern Shrimp Integrated Fisheries Management Plan, 2007” Department of Fisheries and Oceans.
1.2 THE PRINCIPLE OF ADJACENCY

In the Canadian fisheries, the principle of adjacency means that the people who live closest to the resource should be the main beneficiaries of the development of that resource. Adjacency is a longstanding policy that Canada pursued starting in the late 1970s after the 200 mile limit was established. In 1984, adjacency was enshrined in the Atlantic Groundfish Management Plan established by the Fisheries and Oceans Canada (DFO). The plan stated:

Allocation of fishery resources will be on the basis of equity taking into account adjacency to the resource, the relative dependency of coastal communities and the various fleet sectors upon a given resource, and economic efficiency and fleet mobility.\textsuperscript{11}

In 1997, the Minister of Fisheries and Oceans, Fred Mifflin announced that adjacency would be a primary consideration in the expansion of the inshore northern shrimp fishery.\textsuperscript{12} The 2003 northern shrimp integrated fish management plan defined adjacency as meaning “that those who live near the resource will have priority in fishing it.”\textsuperscript{13} In the current DFO shrimp management plan adjacency and economic dependency are listed as key criteria when deciding on northern shrimp allocations.\textsuperscript{14}

Adjacency is essentially an economic policy with the primary goal of creating local employment, increasing local revenue, and supporting a higher local standard of living. The minimum processing requirements imposed by the province for the processing of various fish species is a regulation to promote adjacency. This regulation supports 2200 shrimp processing jobs;\textsuperscript{15} the offshore fishery, which falls outside of the processing requirements, supports no onshore processing jobs.

Adjacency is perhaps the most important economic policy pursued by the provincial government. The Atlantic Accord, the principal agreement between Canada and NL with respect to offshore oil, has an explicit purpose “to recognize the right of NL to be the principal beneficiary of the oil and gas resources off its shores, consistent with the requirement for a strong and united Canada.”\textsuperscript{16} The Accord further requires anyone with an intention to develop the offshore oil and gas resource to submit a plan setting out how the proposed development will use the provincial labour force and provincial contractors, consultants, manufacturers, and service companies.\textsuperscript{17} The Atlantic Accord is a clear example of the principle of adjacency and its economic benefits.

The development of the nickel resource in Voisey’s Bay demonstrates benefits from the adjacency principle. In 2003, the Government of NL enshrined adjacency into the Voisey’s Bay agreement,

\textsuperscript{14} “Northern Shrimp Integrated Fisheries Management Plan, 2007” Department of Fisheries and Oceans.
\textsuperscript{15} “Request for Proposals,” p. 1.
\textsuperscript{16} The Atlantic Accord: Memorandum of Agreement Between the government of Canada and the Government of Newfoundland and Labrador on Offshore Oil and Gas Resource Management and Revenue Sharing, s. 2(c), http://www.servicenl.gov.nl.ca/printer/publications/aa_mou.pdf
\textsuperscript{17} \textit{Ibid.}, s. 51.
requiring that the company use local labour.\textsuperscript{18} The Voisey’s Bay Development Agreement and its subsequent amendments set thresholds for how much work in the construction of the smelter in Long Harbour must be performed within the province. According to section 15.2.1 of the 2009 amendment agreement, 77\% of all construction and engineering work done on the smelter must be done within the province.\textsuperscript{19}

Adjacency has been incredibly important for economic growth in the province, particularly on the Avalon Peninsula which has benefitted most from the oil and gas and mining sector developments. This benefit is interpreted by the province as a natural extension of developing resources – the people of the province should benefit from the resource located on its land or in the adjacent waters.

The importance of adjacency to the fisheries appears to have been superseded by the benefits adjacency provides in the oil and gas and mineral sectors. The NL economy is thought to now be driven more by mega projects like Voisey’s Bay and Hebron than by shrimp plants on the Northern Peninsula. While the validity and scope of that perception can be debated, one fact remains clear: the fishery, shrimp or otherwise, is the most important and longest lasting mega project for dozens of municipalities in coastal NL.

A mega project is defined as being “a very large, expensive, or ambitious project.”\textsuperscript{20} This report will show that a fish plant, particularly a shrimp plant, in a rural municipality meets this definition. These plants contain or produce most of the private and public wealth in their community. The plants support harvesting operations, and vice-versa. And this all happens because of adjacency; if the town is no longer able to benefit from adjacency, then the entire mega project, and the towns and workers attached to it, collapses. The fishery is the economic pillar of rural NL and adjacency is the principle that guided how the pillar was built.

### 1.3 ALLOCATION OF NORTHERN SHRIMP QUOTAS

Fisheries and Oceans Canada (DFO) sets the northern shrimp quota based on its assessment of stock status and trends. Stock status is inferred during the scientific assessment process based on indicators such as survey and commercial catch rates.\textsuperscript{21} Resource allocation decisions, when DFO allocates the quota among the inshore and offshore sectors and to those groups with special allocations, are a separate process.

Because estimated fishable biomass increased for several years, so too did quota allocations for northern shrimp. From 1997 to 2008, both the inshore and offshore northern shrimp allocation increased significantly. In 2008, the inshore received a northern shrimp allocation of 76,375 t, the

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\textsuperscript{19} First Amendment to Voisey’s Bay industrial and Employment Benefits Agreement, February 28, 2009, s. 15.2.1, http://www.nr.gov.nl.ca/nr/royalties/amendment_1.pdf
\textsuperscript{20} http://www.collinsdictionary.com/dictionary/english/megaproject
largest ever allotted to that fleet. That same year, the offshore also received its largest allocation of 89,154 t. The offshore also fished the 11,837 t in Royalty Charter agreements.22

As stock status declined, DFO adopted an accounting practice it had failed to use in the past with snow crab known as Last In-First Out (LIFO)23. The term LIFO was first used in the 2003 shrimp management plan (IFMP) and referred to temporary participants being removed in reverse order of gaining access. It should be noted that inshore fleet licenses were made permanent in 200724. Initially, LIFO was discussed in relation to access to the resource and not allocation. Fundamental changes were made to the wording of the 2007 IFMP that linked LIFO to allocation. However, these changes were never debated at any advisory meeting and there was no transparency as to how this interpretation of LIFO was included in the 2007 northern shrimp IFMP.

Applying accounting practices to social policy allows for the “adoption of a particular ‘financial’ lens for ‘seeing’ or ‘understanding’” outcomes. Accounting practices can offer “a basis for governing people, processes, organizations, and societies.”25 Essentially, applying accounting practices to social policies can provide a shield to policy developers that deflects attention to numbers and efficiencies that the policy developers have no control over—the numbers are placed into the accounting practice and that practice produces the result. LIFO has provided a policy shield for DFO.

Using accounting practices as a mechanism for shaping social policy provides a ‘technique’, or a “way of interfering, a device acting upon activities, individuals, and objects.” Accounting practices offer a way to “make things ‘real’, constructing seemingly objective and neutral records for abstract and complex phenomena”26. LIFO has taken the contentious decision of how to best allocate a declining resource and has turned it into an objective and neutral format by simply focusing on the quota numbers. This “objective” policy ignores the very complex issues of adjacency, local economic development, community and regional dependency on the fisheries, rural sustainability, and so on. By using LIFO, DFO does not consider those issues and, in doing so, erases them from the debate.

In the most recent northern shrimp management plan, the benefits to stakeholders section contains two contradictory statements. On the one hand the management plan aims to provide fair access to and equitable sharing of the northern shrimp resource. The preceding statement undermines this commitment by stating that the management plan aims to promote the commercial viability of the northern shrimp fishery, particularly with respect to traditional license holders.27 To DFO, a traditional license holder is the offshore, even though describing them as such strains the definition of tradition.28

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23 Andrews v. Canada (Attorney General) 2009, NLCA 70. An appeal by crab fisherman to oppose changes to the allocation system was dismissed because, per Justice Welsh, “Such an action would amount to an indirect fetter on ministerial discretion which judicial authority precludes.”
26 Ibid., p. 268.
27 “Northern Shrimp Integrated Fisheries Management Plan, 2007” Department of Fisheries and Oceans.
28 Tradition, as defined by the Merriam-Webster dictionary, refers to an inherited, established, or customary pattern of thought, action, or behavior. Every definition of tradition or traditional implies the passage of a significant amount of time, often inter-generational.
The “traditional” offshore license holders received shrimp fishing licenses in 1978. Moreover, the inshore shrimp fleets are comprised of enterprises that traditionally depended upon the same adjacent fishing grounds to harvest turbot, cod and other groundfish decades before the offshore northern shrimp fishery began.

In the current northern shrimp management plan, “traditional” is a euphemism for the offshore fishery. When explained in the context of the management plan, LIFO becomes the defender of tradition, a triggering mechanism to boot out the new entrants into the northern shrimp fishery that are impacting the sustainability of a tradition. LIFO – as it is being applied – has and will do more than just protect the “traditional” offshore; it is wiping out the inshore and all the associated economic benefits to Newfoundland and Labrador.

The proportion of shrimp quota allocations for the inshore fleet has declined in recent years. The current trends for total allowable catch for northern shrimp and shrimp quota allocations to the inshore, offshore, and the royalty charters from 1996 to 2014 demonstrate two key points (Figure 2). First, the overall TAC has declined steadily since 2009 reflecting declines in northern shrimp stock status. Secondly, the inshore sector has absorbed the worst of the quota cuts while the offshore allocation receives priority treatment. In 2014, the inshore allocation was barely above its 1998 level; the offshore allocation was almost at its 2003 level. The quantity difference between the inshore and offshore allocations in 2014 was the largest since the inshore entered the northern shrimp fishery in 1997. Since 2009, the inshore allocation has declined by 56%; the offshore allocation, when royalty charters are factored in, has declined by 31%.

Figure 2. Total Allowable Catch and Allocations of Northern Shrimp, 1996-2014

The difference in the allocation cuts are not the fault of LIFO; LIFO is a mechanism employed by the federal government to favour the offshore sector. Unfortunately, the primary purpose behind using LIFO – to grant priority treatment to the offshore – has not been stated clearly on enough occasions by the inshore sector and the debate instead focuses on the validity of LIFO. Shrimp harvesters profess to not
“understand why the inshore shrimp fleet should take the overwhelming hit with regards to the cut due to the LIFO regulations.” The answer to this concern is that DFO is choosing to protect the offshore fleet and LIFO is a mechanism to do so.

If DFO continues to apply LIFO in 2015, the results for the inshore shrimp fleet and the NL processing sector could be devastating. In 2014, stock status in SFA6 and SFA7 was poor. If the 2015 stock assessment indicates that stock status remains poor or declining – and if LIFO is applied – DFO could cut the northern shrimp inshore allocation by a further 50% of the 2014 levels. This would place the inshore northern shrimp allocation at a level that could support no more than four or five processing plants operating at a reasonable capacity. Poor stock status will have less of an effect on the offshore fleet if LIFO is applied, as per the intentions of DFO. In 2014 the offshore quota was cut by just 3% while the inshore allocation was cut by 27%. If DFO continues to use LIFO, the offshore sector can expect a similar modest reduction in 2015.

These quota reductions will not only negatively impact the inshore northern shrimp fleet but also onshore businesses, communities, municipalities and regions that are linked to the fleet through economic and social ties. In order to detail these linkages we focus first on the fisheries and their economic contributions. Next, we detail economic contributions to onshore communities, municipalities and regions, which are clearly demonstrated in an examination of municipal taxes.
2.0 THE INSHORE FLEET: HARVESTERS, PROCESSING WORKERS AND THE LOCAL ECONOMY

The impact of DFO allocation cuts to the inshore will impact shrimp harvesters and plant workers in different ways. The inshore shrimp fishery is managed by the shrimp fleets, which make an effort to equitably share the inshore allocation, spreading the difficulties of an allocation reduction across the entire fleet. This sharing primarily takes the form of “seasonal cap limits”, which sets out how much of the shrimp allocation can be caught by each license holder. Harvesters that violate the cap are assessed a financial penalty and do not benefit from their transgression.

Shrimp processing workers do not benefit from the cooperative spirit of the inshore shrimp fleet. Processers compete with each other for raw shrimp, creating a system where some processors will win and some will not. If the inshore allocation is significantly cut by DFO, some processing plants will likely not survive and the plant’s workers will be without a job.

The impact of allocation cuts on harvesters also differs from plant workers because harvesters are compensated based on market price. The 2014 inshore shrimp allocation was lower than at any point since 1998, but the financial impact of this decrease to harvesters was offset by high raw material prices. One shrimp harvester noted, “The only reason enterprises are able to stay above the red line is because there’s more money being gotten at the plant... So if we ever go back [to] anything near the prices in 2008 [and] 2010 then crew member’s shares will drop dramatically, as will the enterprises bottom line.”

Continued high market prices for shrimp may offset some of the anticipated allocation decreases in 2015, however continued reliance on high market prices is not a sustainable long term strategy. Factors affecting shrimp price (e.g. availability of cold water shrimp and farmed shrimp on international markets), are well beyond the control of Canadian shrimp harvesters. As the MOU Steering Committee Report notes, “the industry may not be strong enough financially to withstand two successively poor fishing seasons.”

Shrimp harvesters, particularly those who own a license and own and operate a vessel, face significant costs to participate in the shrimp fishery, such as vessel maintenance, fuel, equipment, and the cost involved with purchasing a shrimp license. In 2011, the MOU Report noted that the average debt load for nearshore enterprises, which would encompass the shrimp fishery, is $310,000. Owner/operator shrimp harvesters are highly leveraged and require a certain income to meet debt obligations. For example, another shrimp harvester reported that he purchased a second shrimp license in 2013 at the cost of a bank-financed loan of $200,000 and that he now catches the same amount of shrimp with two licenses as he did with one back in 2008. This harvester noted that “the bank still expects me to pay off that loan regardless of my quota.”

In 2007, when northern shrimp inshore licenses were made permanent, then Fisheries Minister Loyola Hearn made a major policy announcement that allowed license combining. That same year, measures to strengthen Owner Operator and Fleet Separation policies were introduced. These policy changes encouraged self-rationalization of fleets. Moreover, the policy announcement not only allowed the

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29 Inshore shrimp harvesters were surveyed in 2014. Identifying information was removed from survey responses and each survey was assigned a unique identifier. The excerpted quote is from interview 1014.
30 MOU Report of the Independent Chair, p. i.
32 Quote from interview 1141.
combining of licenses but also the ability for fishers “to access financing through traditional lenders, such as banks, by facilitating the use of licences as collateral”\(^{33}\). Thus the financial commitments – debt levels – of inshore shrimp license holders are directly linked to the DFO policies announced when these licenses were made permanent.

2.1 ECONOMIC CONTRIBUTIONS FROM THE INSHORE FLEET TO ONSHORE COMMUNITIES

Shrimp harvesters make significant contributions to the economic and social health of communities and regions throughout Newfoundland and Labrador by locally landing a valuable resource and utilizing local businesses and government facilities. Detailed information linking landings from specific shrimp fishing areas to onshore communities, however, are lacking. To address this gap, the FFAW designed a stratified random phone survey of license holders\(^{34}\).

Because the shrimp fleet manages the allocation among inshore harvesters, the FFAW compiles data on northern shrimp landings including the number of landing events and the total shrimp landed from the different shrimp management areas (e.g., SFA6 and SFA7). Landings data for the 2007-2014 seasons were aggregated by landing port and fishing season. Together survey and landings data could be used to estimate economic contributions from the inshore northern shrimp fleet to fishing ports, communities and regions.

The inshore northern shrimp fleet operates according to NAFO divisions (Figure 3), though quota is based on shrimp fishing areas\(^{35}\). For the inshore fleet, SFA6 is the most important shrimp fishing area. All northern shrimp fished by the 4R fleet comes from SFA6 as does 95% of the shrimp landings from the 2J fleet. The 3K fleets, both north and south, predominantly fish SFA 6. In 3L, the proportion of landings from the different fishing areas has shifted in recent years with 80% of the fleet’s total landings in 2014 coming from SFA 6. Shrimp from SFA 7 was only landed in ports in eastern Newfoundland and on the Avalon Peninsula (Figure 4).

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\(^{34}\) The survey was designed to have equal representation from all fleet sectors (2J, 3K north and south, 3L and 4R). Participation in the survey was voluntary. Because the survey included detailed questions on enterprise revenues and expenditures, a copy of the survey was sent to all license holders. Individual license holders were randomly selected from each fleet for telephone interviews. The target response rate was at least 20% of listed license holders for each fleet.

\(^{35}\) The North Atlantic Fisheries Organization (NAFO) management areas are used in groundfish management (with maps available. The division between NAFO divisions 3K and 3L corresponds with the division between SFA6 and SFA7.

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Figure 3. NAFO Divisions
Figure 4. Shrimp landings from the northern shrimp inshore fleet during 2014 were distributed throughout the northeast coast of Newfoundland and southern Labrador, with landings from SFA7 concentrated in eastern Newfoundland and along the Avalon Peninsula.
The FFAW survey was completed by fifty-six inshore shrimp harvesters, which accounts for one-quarter of the 248 listed license holders. Survey response rates were similar for the different fleets, ranging from 20% of 3L license holders surveyed to 35% of the 2J fleet. Most respondents were long-time fish harvesters with an average of 30 years commercial fishing experience. Most (>75%) vessels had a 5 or 6 crew including the captain. Based on survey responses, all crew in the inshore northern shrimp fleet are residents of NL.

Inshore shrimp harvesters landed their catch at 25 ports in 2014, with almost all (90%) of landings concentrated at 14 ports (Table 1).

Table 1. Total Northern Shrimp Landings in pounds from SFA 6 and SFA 7 by the Inshore Fleet (2010-2014).

<table>
<thead>
<tr>
<th>Port</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twillingate</td>
<td>10,207,249</td>
<td>8,363,890</td>
<td>9,303,712</td>
<td>11,444,990</td>
<td>7,624,321</td>
</tr>
<tr>
<td>Charlottetown</td>
<td>7,539,588</td>
<td>7,160,988</td>
<td>7,547,357</td>
<td>7,796,339</td>
<td>6,149,641</td>
</tr>
<tr>
<td>Bay de Verde</td>
<td>7,604,682</td>
<td>6,035,489</td>
<td>8,115,109</td>
<td>5,413,161</td>
<td>3,014,184</td>
</tr>
<tr>
<td>Seldom</td>
<td>8,440,072</td>
<td>6,145,204</td>
<td>7,523,724</td>
<td>7,354,721</td>
<td>5,657,296</td>
</tr>
<tr>
<td>St. Lunaire</td>
<td>7,470,553</td>
<td>7,519,846</td>
<td>6,130,029</td>
<td>4,986,002</td>
<td>4,238,524</td>
</tr>
<tr>
<td>Old Perlican</td>
<td>7,185,809</td>
<td>5,422,091</td>
<td>6,043,117</td>
<td>5,826,265</td>
<td>3,301,232</td>
</tr>
<tr>
<td>LaScie</td>
<td>4,218,869</td>
<td>4,117,987</td>
<td>6,338,924</td>
<td>5,567,648</td>
<td>5,667,618</td>
</tr>
<tr>
<td>Catalina</td>
<td>2,711,081</td>
<td>2,677,945</td>
<td>3,460,090</td>
<td>3,398,916</td>
<td>1,644,086</td>
</tr>
<tr>
<td>Port de Grave</td>
<td>3,891,622</td>
<td>3,274,637</td>
<td>3,448,961</td>
<td>3,459,078</td>
<td>2,249,637</td>
</tr>
<tr>
<td>Carmanville</td>
<td>3,099,700</td>
<td>4,427,359</td>
<td>4,205,279</td>
<td>4,117,879</td>
<td>3,663,565</td>
</tr>
<tr>
<td>Port Union</td>
<td>2,671,599</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cook's Harbour</td>
<td>3,433,332</td>
<td>2,850,015</td>
<td>2,953,363</td>
<td>2,539,296</td>
<td>2,272,330</td>
</tr>
<tr>
<td>St. John's</td>
<td>3,337,132</td>
<td>4,079,880</td>
<td>2,593,494</td>
<td>1,439,327</td>
<td>676,696</td>
</tr>
<tr>
<td>Other Ports (39)</td>
<td>7,560,415</td>
<td>8,046,802</td>
<td>9,062,720</td>
<td>8,956,744</td>
<td>6,871,076</td>
</tr>
<tr>
<td><strong>Total Landings</strong></td>
<td><strong>103,532,602</strong></td>
<td><strong>91,077,514</strong></td>
<td><strong>99,843,368</strong></td>
<td><strong>94,409,198</strong></td>
<td><strong>71,422,502</strong></td>
</tr>
</tbody>
</table>

Shrimp harvesters were asked as part of the survey to detail their trip expenses and annual expenses associated with the northern shrimp fishery. Responses to this question assisted in the collection of information on the economic spin-offs of the inshore shrimp fishery and are associated with each port visit. The most common trip and annual expenses were the local purchasing of fuel, groceries and routine maintenance required for the next trip. Inshore license holders spend, on average, $800 on groceries and $500 on routine maintenance each time they offload shrimp, resulting in close to $1.8 million spent annually in coastal communities on just these two expenditures (Table 2). According to the survey results, shrimp vessels averaged 6,500 litres of fuel for each trip (range 4,500 to 10,000 litres). Based on the number of trips and an average fuel price of $0.95 per liter, the inshore northern shrimp fleet spent over $9 million on fuel at ports throughout NL (Table 2). Over 90% of trips that landed shrimp fished in SFA6 – 1268 trips landed at all 25 ports listed. Ninety-six trips that landed shrimp fished in SFA7 and 19 trips that landed shrimp harvested from SFA5.
Table 2. Estimated Expenditures of the Inshore Northern Shrimp Fleet for Groceries, Routine Maintenance and Fuel in 2014

<table>
<thead>
<tr>
<th>Port</th>
<th>Landings (#)</th>
<th>Groceries</th>
<th>Maintenance</th>
<th>Fuel</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Anthony</td>
<td>330</td>
<td>$264,000</td>
<td>$165,000</td>
<td>$2,037,750</td>
<td>$2,466,750</td>
</tr>
<tr>
<td>Charlottetown</td>
<td>155</td>
<td>$124,000</td>
<td>$77,500</td>
<td>$957,125</td>
<td>$1,158,625</td>
</tr>
<tr>
<td>Twillingate</td>
<td>147</td>
<td>$117,600</td>
<td>$73,500</td>
<td>$907,725</td>
<td>$1,098,825</td>
</tr>
<tr>
<td>Seldom</td>
<td>108</td>
<td>$86,400</td>
<td>$54,000</td>
<td>$666,900</td>
<td>$807,300</td>
</tr>
<tr>
<td>LaScie</td>
<td>102</td>
<td>$81,600</td>
<td>$51,000</td>
<td>$629,850</td>
<td>$762,450</td>
</tr>
<tr>
<td>St. Lunaire</td>
<td>75</td>
<td>$60,000</td>
<td>$37,500</td>
<td>$463,125</td>
<td>$560,625</td>
</tr>
<tr>
<td>Old Perlican</td>
<td>69</td>
<td>$55,200</td>
<td>$34,500</td>
<td>$426,075</td>
<td>$515,775</td>
</tr>
<tr>
<td>Carmanville</td>
<td>59</td>
<td>$47,200</td>
<td>$29,500</td>
<td>$364,325</td>
<td>$441,025</td>
</tr>
<tr>
<td>Bay de Verde</td>
<td>56</td>
<td>$44,800</td>
<td>$28,000</td>
<td>$345,800</td>
<td>$418,600</td>
</tr>
<tr>
<td>Valleyfield</td>
<td>51</td>
<td>$40,800</td>
<td>$25,500</td>
<td>$314,925</td>
<td>$366,275</td>
</tr>
<tr>
<td>Port de Grave</td>
<td>49</td>
<td>$39,200</td>
<td>$24,500</td>
<td>$302,575</td>
<td>$366,275</td>
</tr>
<tr>
<td>Cook's Harbour</td>
<td>42</td>
<td>$33,600</td>
<td>$21,000</td>
<td>$259,350</td>
<td>$313,950</td>
</tr>
<tr>
<td>Catalina</td>
<td>36</td>
<td>$28,800</td>
<td>$18,000</td>
<td>$222,300</td>
<td>$269,100</td>
</tr>
<tr>
<td>Musgrave Harbour</td>
<td>24</td>
<td>$19,200</td>
<td>$12,000</td>
<td>$148,200</td>
<td>$179,400</td>
</tr>
<tr>
<td>Lumsden</td>
<td>23</td>
<td>$18,400</td>
<td>$11,500</td>
<td>$142,025</td>
<td>$171,925</td>
</tr>
<tr>
<td>St. John's</td>
<td>16</td>
<td>$12,800</td>
<td>$8,000</td>
<td>$98,800</td>
<td>$119,600</td>
</tr>
<tr>
<td>Bridgeport</td>
<td>12</td>
<td>$9,600</td>
<td>$6,000</td>
<td>$74,100</td>
<td>$89,700</td>
</tr>
<tr>
<td>Bonavista</td>
<td>8</td>
<td>$6,400</td>
<td>$4,000</td>
<td>$49,400</td>
<td>$59,800</td>
</tr>
<tr>
<td>Joe Batt's Arm</td>
<td>6</td>
<td>$4,800</td>
<td>$3,000</td>
<td>$37,050</td>
<td>$44,850</td>
</tr>
<tr>
<td>Black Duck Cove</td>
<td>4</td>
<td>$3,200</td>
<td>$2,000</td>
<td>$24,700</td>
<td>$29,900</td>
</tr>
<tr>
<td>Hant's Hr</td>
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<td>$2,400</td>
<td>$1,500</td>
<td>$18,525</td>
<td>$22,425</td>
</tr>
<tr>
<td>Port Saunders</td>
<td>3</td>
<td>$2,400</td>
<td>$1,500</td>
<td>$18,525</td>
<td>$22,425</td>
</tr>
<tr>
<td>Fogo</td>
<td>2</td>
<td>$1,600</td>
<td>$1,000</td>
<td>$12,350</td>
<td>$14,950</td>
</tr>
<tr>
<td>Port au Choix</td>
<td>2</td>
<td>$1,600</td>
<td>$1,000</td>
<td>$12,350</td>
<td>$14,950</td>
</tr>
<tr>
<td>Harbour Grace</td>
<td>1</td>
<td>$800</td>
<td>$500</td>
<td>$6,175</td>
<td>$7,475</td>
</tr>
</tbody>
</table>

| Total Expenditures | $1,106,400 | $691,500 | $9,231,525 | $11,029,425 |

In addition to fishing trip expenses, annual expenditures from the inshore shrimp fleet, such as boat maintenance and repair, contribute to the economies of rural NL. Annual maintenance for the inshore shrimp fleet is done at shipyards throughout the province, though primarily in Glovertown, Harbour Grace, Triton, Fermeuse, and Port Saunders. Estimates of annual shipyard expenses varied by inshore shrimp vessel owner, with most reporting $10,000 or less in shipyard expenses in 2014. However, a few respondents reported spending over $100,000 in 2014 in shipyard expenses. If each inshore shrimp license holder annually spent the median value ($10,000) at shipyards, the inshore fleet for Northern Shrimp would account for $2.5 million spent in the province’s shipyards. Over half of the estimated annual shipyard expenses reported by survey respondents were spent in Glovertown ($520,000), Harbour Grace ($120,000), and Triton ($60,000).

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36 This is likely an underestimate as survey respondents, which were approximately one-quarter of the license holders in total, estimated they spent close to $1 million ($940,000) at shipyards in 2014.
Shipyards are important to the local economies of the municipalities and regions in which they are located. The Glovertown Shipyards Limited employs 30 people while paying more than $8000 in commercial and business tax to the municipality. In Port Saunders, the Northern Boat Repair Limited employs at least 20 employees and has annual revenue estimated at nearly $2 million. The ship repair company pays an estimated $9000 a year in commercial and business tax to the Town of Port Saunders.

2.2 DIVERSIFIED FISHERIES AND ENTERPRISE VIABILITY

Northern shrimp license holders participate in other fisheries and income derived from northern shrimp contributes to the overall financial viability of the fishing enterprise. Participation in other fisheries, and their economic importance, differs among fleets. All survey responses from the 3L fleet also fish snow crab. Northern shrimp contributed, on average, 26% of total enterprise revenues for the 3L fleet in 2014 (range 8-60%). When asked if their enterprises would continue to be viable with ongoing cuts to the inshore shrimp quota, only a quarter of the responses from this fleet reported a likelihood of continued viability. Those who were optimistic attributed continued viability to their involvement in the 3L crab fishery, noting for example, that “only because I have a large snow crab quota” or that “Crab is 85% of [the fishing enterprise’s] revenue.”

Most inshore shrimp harvesters in the 3L fleet reported that ongoing quota cuts would threaten the viability of their enterprises. A variation of the following was repeated throughout the 3L fleet, “With further cuts, it will be impossible to continue fishing shrimp. Thereby leaving me with no other options but to sell my enterprise which would put 6 people on my boat out of a job, including myself.”

All license holders surveyed in the 3K fleet, including those who have licenses in 3K north and/or 3K south, reported fishing snow crab. However, snow crab in 3K does not provide the same financial buffer as in 3L due to 3K snow crab quota cuts. Fish harvesters in 3K note that with shrimp and crab cuts, “there won’t be enough revenue.” 3K Snow Crab quotas have been cut over the past 5 years; the 2014 quota was 7980 t, which was 55% of the 2010 3K snow crab quota. All 3K harvesters reported that their enterprises would not be viable with continued quota cuts to northern shrimp. In 3K, northern shrimp accounted for 35-80% of total revenue for harvesters, with the average being 60%. Fish

41 Quote from interview 1195.
42 Quote from interview 1163.
43 Quote from interview 1049.
44 Data available from DFO annual species quota reports, see http://www.nfl.dfo-mpo.gc.ca/publications/reports_rapports/ Crab_Crabe_2014_eng.htm.
harvesters were unequivocal, “Without shrimp, we will be bankrupt. We have very little crab left in 3K.”

Many 3K license holders also reported fishing for groundfish (turbot and Atlantic cod), with almost half of respondents fishing turbot as well as shrimp and crab. One quarter of survey respondents also fished cod. These groundfish fisheries may become increasingly important to the region as trends indicate a shift from a shellfish dominated fish community to one dominated by groundfish.

All respondents from the 2J fleet fish crab in addition to shrimp. No respondent from this fleet listed any other fisheries in their survey responses. Northern Shrimp accounted for between 50 and 75% of enterprise revenues for this fleet in 2014. As in 3K, none of the 2J fleet reported that their enterprises would continue to be viable should northern shrimp allocation cuts continued.

The 4R shrimp fleet has an allocation for both northern shrimp, which is fished in SFA6, and Gulf shrimp, which is fished in the northern Gulf of St. Lawrence (SFA8). This fleet is almost entirely dependent on shrimp, with just one respondent also fishing crab and another fishing herring and mackerel. In 2014, shrimp accounted for 90-100% of fishing enterprise revenue in this fleet. None of the 4R inshore shrimp harvesters said their fishing enterprise would be viable with continued shrimp quota cuts. In 2014, the 4R shrimp fleet landed approximately 14,850,000 lbs northern shrimp and 12,150,000 lbs Gulf shrimp. Previously northern shrimp accounted for a higher proportion of landings by the fleet, accounting for 70% of 4R fleet landings in 2008.

The distribution of 4R landings differs for the two quotas, with over 95% of Gulf shrimp (2007-2014 seasons) landed in Port Saunders and Port au Choix. Although northern shrimp contribute <1% total shrimp landings in Port Saunders and Port au Choix, this does not translate to decreased importance of northern shrimp to the municipality of Port au Choix. As detailed later in the report, the key link between fisheries and municipalities are the onshore processing plants. Currently 60-65% of the shrimp processed in the Port au Choix shrimp plant is northern shrimp.

Shrimp quota cuts will negatively impact the viability of fishing enterprises not only because of the decline in revenues but also because of their decreased ability to retain “valuable and well-seasoned crew members.” License holders reported that it is – and will become – increasingly difficult to retain good crew because of both reduced revenues and the shortened fishing season. The impact of a shortened fishing season was reported by one fisher:

After the fishing season ends, fishermen move on to finish the working year with other jobs. Then in the spring they are not available to return to fishing. Further quota cuts to shrimp will mean a shorter fishing season, and the job becomes less appealing to a person in search of employment.”

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45 Quote from interview 1057.
47 Personal communication with Jason Spingle (January 27, 2015), the FFAW staff representative for the region which includes the unionized Port au Choix plant.
48 Quote from interview 1014.
49 Ibid.
Some inshore shrimp harvesters have already “reduced crew to keep a higher wage share” in order to retain experienced crew. Another reported, “My business has already lost two crew members because I had to increase crew share to retain those I have today.” While license holders acknowledge that crew “will leave the fishery to find other high-paying jobs,” one survey response commented favourably on the economic viability of remaining a crew member, suggesting that the crew could continue to fish because they had not made the same financial commitment to the fishery as the license holders:

My crew member left my boat to go on offshore shrimp boat. He had no investment in the shrimp fishery. My investment was $350,000. He can stay in the shrimp fishery with no investment, with a $350,000 I will have to leave.

In summary, existing and ongoing northern shrimp quota cuts will threaten the financial viability of fishing enterprises particularly in regions such as 3K where the stocks that support other commercial fisheries are in decline. Even if shrimp prices remain anomalously high, as was the case in 2014, reduced northern shrimp allocations to the inshore fleet will jeopardize their ability to retain experienced crew. These negative impacts will affect onshore workers, communities and their social and economic infrastructure because of the strong ties between the inshore fleet and onshore communities.

2.3 INSHORE NORTHERN SHRIMP LANDINGS AND ONSHORE BENEFITS

While the amount of northern shrimp landed in a port does not directly translate into shrimp processed in that municipality’s plant, northern shrimp landings do directly translate into economic benefits from the fleet to the local port authorities. Active fishing fleets contribute to the costs of maintaining port infrastructure through berthing and offloading fees. These two revenue streams can account for 85% of the annual revenue of harbour port authorities. Annual berthing fees reported by the survey participants totaled $75,000 with an average berthing expenditure of $1,700; some license holders reported berthing fees for multiple ports. Declines in northern shrimp landings will reduce landing fees paid to port authorities. For example, 692,960 lbs of northern shrimp from SFA 7 and 2,608,270 lbs from SFA 6 were landed in Old Perlican in 2014. Given the harbour authority landing fee is ¾ cent per pound, total landing fees from the inshore northern shrimp fleet in 2014 were $24,760. As SFA7 is closed for 2015, landing fees for the Old Perlican harbour authourity will be at least $5000 less.

The other primary onshore benefit of the northern shrimp fisheries is the presence of local shrimp processing plants. It is difficult to overstate the importance of a shrimp plant to a local economy. For a municipality such as Anchor Point, with a total population of 330 and a working age population of approximately 200, the local shrimp plant employs between fifty and sixty residents, or twenty to twenty-five percent of the working population. Similarly, for a municipality such as Old Perlican, with a

50 Quote from interview 1076.
51 Quote from interview 1083.
52 Quote from interview 1126.
53 Quote from interview 1083.
54 Personal communication with the Old Perlican Port Authority (January 26, 2015).
55 Estimate provided by the Town of Anchor Point.
total population of 685 and a working age population of 455, approximately twenty percent of the total working age population is employed by the local fish plants.\textsuperscript{56}

For bigger municipalities with shrimp plants, the percent of the working age population working in the processing sector is lower, though that does not diminish the importance of the plant. A shrimp plant that employs a few hundred workers can turn a municipality into a regional hub. Port au Choix, with a population of just 880, can support more than 60 commercial enterprises. While Port au Choix has a successful tourist industry, that tourist sector cannot provide year round support for the local Bank of Montreal branch, the multipurpose recreation complex, the Sears Canada outlet, the tanning salon, the garage, and so on. The sustainability of these businesses requires the continued presence of the shrimp plant and its average wage of $16.00 an hour.\textsuperscript{57} The rest of the businesses in the in the municipality are dependent on those earnings.

The presence of the shrimp plant in Port au Choix also impacts the continued viability of public services. Port au Choix is home to a family medical clinic, which may be harder to justify keeping open if the population decreases as economic opportunities are lost. A similar fate could befall the school in neighboring Port Saunders if the plant closes and younger workers with families are forced to relocate outside the region for work. Services such as health care and education are crucial to the economic resiliency of a town and region; a threat to the viability of these services is a threat to the viability of the region.

Unfortunately, the above concerns are not hyperbole. The Port au Choix region, like many discussed in this report, is first and foremost a fishing region. In its 2010 collaborative integrated community sustainability plan (ICSP), the region, consisting of Port au Choix, Hawke’s Bay, Port Saunders, and River of Ponds, lists refocusing on the fishery as a main priority. There is agreement throughout the ICSP that the fisheries remains the most important industry in the region and the plan states that “one fact still remains: the fishery has the potential to be a sustainable renewable resource and a viable industry.”\textsuperscript{58} There is an understanding by the developers of the ICSP that the fisheries is the best economic opportunity for the region.

The future of the Port au Choix region is murky without a shrimp plant. This region was already devastated by the cod moratorium, losing 29\% of its population after 1991, the bulk of which was

\textsuperscript{56} Community Accounts provides a 2006 breakdown of those employed in the harvesting and processing sector. The Community Accounts information was used when compared with the data used in the MOU Steering Committee Report of 2011. The MOU report cited more than 21,000 people involved in the harvesting and processing sectors. Community Accounts, which does not have information on St. Anthony and Twillingate—a two important fishing municipalities, cites a total 20,635 individual involved in the processing and harvesting sectors. Data available from http://nl.communityaccounts.ca.

\textsuperscript{57} While the MOU Report of the Independent Chair listed an average wage of $11.70, these data are outdated. At the Port au Choix plant, base rates for most workers are $14.60 and $14.71 but many others (such as maintenance) exceed $20. On average, the salary is $16 (J. Spingle FFAW Staff representative for the Northern Peninsula. Feb 1, 2015).

\textsuperscript{58} “Collaborative Integrated Community Sustainability Plan – Port au Choix, Port Saunders, Hawke’s Bay, River of Ponds,” Tract Consulting and BAE Newplan Group, 2010, p. 78.
between the ages of 15 and 50.\textsuperscript{59} In 2010, the average unemployment rate of the four towns was 34%.\textsuperscript{60} Given these difficult circumstances, another major blow to the fishing economy could be devastating.

The centrality of the shrimp industry, and fishing in general, is also found amongst the towns of Notre Dame Bay. In its 2010 ICSP, the Town of Twillingate noted that:

Twillingate has a stable economic base consisting of business and consumer services, restaurants, and limited retail shopping. The existence and availability of these amenities are feasible due to the stability of fish harvesting and processing [emphasis added], health care and school facilities in the community, which services not only Twillingate but adjacent areas as well.\textsuperscript{61}

It is important to note that fish harvesting and processing were the first reasons listed for Twillingate’s service centre position. Services such as schools and health care follow the success of the fisheries; not vice-versa. The Town of Old Perlican also attaches its regional importance to its shrimp and crab processing facilities. A municipality with fewer than 700 residents welcomes 500 workers from across the Trinity Bay North region to work in its two plants. To Old Perlican, the “major economy is the fishery” and the town was fortunate to not have been devastated by the moratorium.\textsuperscript{62} The town’s position as an employment centre in the region doubtlessly helps explain why Old Perlican has emerged as an important service centre, with a hospital, gas station, drug store, retirement home, and high school.

Aside from their impact on creating other employment opportunities, the shrimp and crab plants (there is no data to differentiate between the two) employ a large number of Old Perlican residents. According to 2006 employment and working condition information, both plants combine to employ 100 of the 455 working age residents, or 22%.\textsuperscript{63} Old Perlican’s neighbour, Bay de Verde, also has a shrimp plant that is also the main economic driver of that municipality. In 2005, 75 out of 335 working age residents of Bay de Verde were in the fish processing sector, or 21%.\textsuperscript{64} Prior to losing its plant from damage caused by Hurricane Igor in 2010, the shrimp plant was an important employer for Trinity Bay North, where 40, or 4% of the working age population, were employed in processing.\textsuperscript{65} Unfortunately there is no publicly available information on processing workers for St. Anthony and Twillingate.

In NL, towns are often described as “fishing communities” with no consideration as to what that means, only that the fishing industry has touched that town in some way. With respect to the shrimp fisheries there are fishing communities – communities where the shrimp fishery is central to the economy, as it is the economic foundation upon which everything else is built.

\begin{itemize}
  \item\textsuperscript{59} Community Accounts – community census profile 1991 and 2012.
  \item\textsuperscript{60} Collaborative Integrated Community Sustainability Plan, p. 12, 27, 42, 56.
  \item\textsuperscript{62} “Charting the Course: Old Perlican ICSP,” 2010, p. 2.
  \item\textsuperscript{63} Community Accounts, Harvesting and Processing Data, www.communityaccounts.ca
  \item\textsuperscript{64} Ibid.
  \item\textsuperscript{65} Ibid.
\end{itemize}
3.0 MUNICIPAL GOVERNMENT AND FINANCE IN NEWFOUNDLAND AND LABRADOR

There are currently 276 incorporated municipalities in NL, more than the other three Atlantic Provinces combined. Most of these municipalities are small – more than 200 of them have less than a thousand people – and a significant majority are located on the coasts of the province. The vast majority of coastal municipalities were settled because of the fishery – the residents of future municipalities harvested and processed the fish resources adjacent to their coast. The author Wayne Johnston has wittily described settlement in NL as “virtually the whole population liv[ing] on the coast, as if ready to abandon ship at a moment’s notice.”

Municipal government has evolved since Confederation to cover most of the important services that a resident uses on a daily basis. A municipality builds and manages the local water and sewer system, it operates a fire service, it conducts garbage collection and waste management, it manages and repairs local roads, it operates recreation facilities and public parks, it conducts economic development and land use planning, and it manages storm water infrastructure and conducts snow clearing. These services are all important and some are very expensive to supply.

The strength of a municipality’s finances is guided primarily by the value of the property within its boundaries. Municipalities raise most of their revenue from property tax, which is either residential or commercial and business. Municipal governments adopt a mil rate, which is then applied to the value of the property. An easy example of how this works is that if there is a property worth $100,000 and the town has a mil rate of ten, then the property owner would pay $1000 a year in property taxes.

There are important differences between residential and commercial property taxes that make municipalities prefer commercial taxes. A property tax is a regressive tax, meaning that the tax is applied without any consideration of the tax payer’s ability to pay. Municipalities also have very little flexibility with residential property tax and the same rate must be applied to all homeowners, regardless of personal income. Over the past ten years property values have increased significantly in NL, far outpacing the growth in wages. If municipalities did not adjust their mil rate, many people would be stuck with a property tax bill that they could not afford (this would not happen with income tax, which is progressive and taxed on personal earnings). The regressive nature of residential property tax causes many municipalities to be cautious and cut mil rates when property values go up. Often this will still result in an increase in revenue to the municipality, though it is usually insufficient to cover the inflation costs of delivering municipal services.

Municipalities have more flexibility in how they tax commercial entities, as there are two taxes that can be applied – a commercial and business tax. The commercial tax is very similar to a residential tax – it is applied to the value of the property and it must be uniform across the municipality. However, municipalities have more flexibility with the business tax, which allows them to set different mil rates based on the type of business that is operating. For example, on Fogo Island, the commercial rate is 8.25

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68 For more information on municipal mil rates, please visit the Municipal Assessment Agency webpage: [http://www.maa.ca/](http://www.maa.ca/)
mils while the business rate for fish processors is 11.25 mils. In this case, fish processing plants would pay a commercial tax of 8.25 mils and a business tax of 11.25 mils, both based on the value of the building, though the business tax can be adjusted if the processing plant does not occupy the entire building.

Applying a varying business tax based on the type of business is common practice for municipalities. In St. Anthony, fishery and cold storage facilities are taxed at 12 mils while oil companies are taxed at 60 mils and banks at 80 mils. It is easier, given the profitability and size of particular industries, for a town to tax certain businesses at a higher level and collect a disproportionate amount of revenue from them.

There is one important caveat with respect to taxing non-residential entities. Only private enterprise can be fully taxed by municipalities. Government offices, schools, hospitals, etc. cannot be taxed unless they occupy a privately owned building, in which case the owner of the building will pay the commercial tax. Governments cannot tax each other and municipalities see little direct taxation benefit from government services.

3.1 FISH PLANTS LINKING FISHERIES AND MUNICIPALITIES

The deep connection between municipalities and the fisheries is evident from the simultaneous decline of both in the 1990s. The Newfoundland and Labrador fisheries and onshore fish processing expanded through 1970s and 1980s. The number of fish harvesters increased from 15,802 in 1975 to 35,271 in 1980 and, more importantly for municipalities, the number of fish plants grew from 110 in 1975 to 175 in 1980. This increase in plants led to a doubling of the number of plant workers, which grew from 10,283 in 1975 to 21,064 in 1980. When fish plants closed in the 1980s and 1990s – and dozens did – commercial tax payments to the municipality either stopped or were greatly reduced. There were no industries to move in and fill the void of the fisheries, so thousands of people left their towns and moved elsewhere. Since municipal revenue is linked to the value of property within the municipality, shrinking populations depressed property prices, which contributed to a stagnate or declining tax base.

The Town of Trepassey is a dramatic example of a municipality's financial and social connection to a fish plant. Trepassey in the 1970s and 80s was a significant regional centre that offered year round employment at a Fisheries Product International (FPI) plant that processed the groundfish harvested by the offshore fleet. People moved to the town from all over the province. To many in the town “FPI was our community development.” In 1991 the plant employed 726 people from the region on a fulltime

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72 Royal Commission on Employment and Unemployment, Building on Our Strengths, (St. John’s: Office of the Queen’s Printer, 1986), p. 50.

73 “A Trepassey Story: Reflections on our Community Developments, the Impact of the 1991 Fish Plant Closure, and on Some Pathways Travelled In Search of Community Survival,” by Wif Sutton, 2003, p. 3.
basis and an additional 200 people part-time. The plant also paid over $86,000 a year in municipal taxes, making it easily the largest single tax payer in the town.\textsuperscript{74}

In 1991, the FPI plant closed forever. Various income stabilization programs were applied to substitute for the plant’s wages and to maintain hope but none were very successful. The plant was sold to the town in 1992 for $1.00.\textsuperscript{75} It was then subsequently sold to another company for $450,000 in 1995 – the equivalent of five years of commercial taxes from FPI – but this enterprise employed far fewer people and did not remain in the town for long.\textsuperscript{76} Since its closure in 1991, nothing has effectively taken the place of the FPI plant. The population of the community has decreased by more than 60% since 1991, declining from 1375 residents to 545.\textsuperscript{77} In 2013, Trepassey’s commercial tax revenue was just over $126,000,\textsuperscript{78} just forty thousand dollars more than the total tax bill paid by the FPI plant 22 years earlier.

While Trepassey demonstrates the difficult consequences of a fish plant’s closure, fish plants remain important taxation and employment anchors for municipalities. At least three dozen municipalities in Newfoundland and Labrador, most of which would be considered small and rural towns (fewer than 4000 residents, as established by Municipalities Newfoundland and Labrador), have processing plants. In general, small rural towns with a processing plant derive a higher than average percentage of their local taxes from commercial taxation.

The following figure shows the percent of local tax revenue collected from commercial taxes for municipalities in three different population categories – Very Small (fewer than 500 residents); Small (between 500 and 1000 residents); and Medium (between 1000 and 4000 residents)\textsuperscript{79}. Each population category is divided in two: those municipalities with processing plants and all of the municipalities within the population category (Figure 5).

\begin{itemize}
\item \textsuperscript{74} Ibid., p. 13 & 16.
\item \textsuperscript{75} Ibid., p. 19.
\item \textsuperscript{76} Ibid., p. 23.
\item \textsuperscript{77} Economics and Statistics Branch, Department of Finance and the Rural Secretariat, Executive Council, in cooperation with Memorial University, \textit{Regional Demographic Profiles Newfoundland and Labrador} (St. John’s, Government of Newfoundland and Labrador, 2007), p. 39 and Community Accounts, see \url{www.communityaccounts.ca}.
\item \textsuperscript{78} Trepassey, 2013 Municipal Budget Submission Form, Section 1.1.2 and Line 1.3.2.
\item \textsuperscript{79} Municipalities with processing plants used in the figure are: Charlottetown, Mary’s Harbour, L’Anse au Loup, St. Lunaire-Griquet, St. Anthony, Conche, Anchor Point, Port au Choix, Cow Head, Rocky Harbour, Woody Point, Cox’s Cove, Burgeo, Harbour Breton, St. Alban’s, Grand Bank, Fortune, St. Lawrence, Arnold’s Cove, St. Mary’s, Cape Broyle, Bay de Verde, Old Perlican, Bonavista, Glovertown, New Wes Valley, Carmanville, Fogo Island, Twillingate, Cottlesville, Triton, LaScie. This is not an exhaustive list of municipalities with a fish processing plant. The above list was taken from the map listed on page 50 of the 2013-2014 Department of Fisheries and Oceans Annual Report.
\end{itemize}
Figure 5. Percent of local tax revenue collected from commercial taxes for three different size categories of municipalities for the 2013 fiscal year.

As Figure 5 shows, municipalities with processing plants outperform their overall population category with respect to generating commercial tax revenue. Clearly fish processing plants have a big role in local economies, either as the major employer for the region or as the economic anchor around which the remainder of the commercial tax base is built.

It should be no surprise that rural municipalities with processing plants have a heavier reliance on commercial tax. The fisheries remains the economic driver of most rural towns and a processing plant gives a municipality a regional importance and a strong employment base. While relying on a fish processing plant for municipal revenue can appear to be a gamble for a municipality, it is a risk based on reasonable logic. Owning and operating a processing plant is not a make-work project on the part of private industry; it is a major financial undertaking. As such, towns find it acceptable to attach part of their financial sustainability to the calculated risk of a processing plant.
3.2 SHRIMP PLANTS: LINKING THE INSHORE FISHERY WITH MUNICIPALITIES

Since the late 1990s, the shrimp fishery has emerged as an important economic pillar for several municipalities and regions. The inshore fishery for shrimp started in 1997 and soon supported more than three hundred owner-operator enterprises and thirteen shrimp processing plants, all but one of which was located within a municipality. The shrimp harvesting enterprises supported close to 1300 shrimp harvesters, while the processing plants employed over 2000 individuals.

For the most part, the shrimp fishery supports rural municipalities. Five shrimp plants were established in municipalities of fewer than 500 residents (Jackson’s Arm, St. Joseph’s, Anchor Point, Bay de Verde, Charlottetown), two in municipalities between 500 and 1000 residents (Old Perlican, Port au Choix) and four in municipalities with populations between 1000 and 4000 (Trinity Bay North, St. Anthony, Fogo Island, Twillingate). Shrimp plants are also located in an urban municipality (Clarenville) and in a local service district (Black Duck Brook).

In most of the above noted municipalities, the local shrimp plant is or was the largest employer and the largest local tax payer. Because of its central importance to residents and other businesses in a municipality, a shrimp plant often has the municipal water infrastructure fitted to its needs by the municipality. A shrimp plant uses a significant amount of water and needs a consistent flow to operate.

The capital costs of building a water system to accommodate the needs of the shrimp plant is taken on by the municipality and provincial government. This work is always expensive and usually requires the municipality to go into debt. To most municipalities with a fish processing plant, this is an acceptable risk that will be managed over time through steady commercial tax revenue from the plant.

Shrimp plants, and fish plants in general, usually pay the highest water taxes in a municipality. These high taxes reflect a higher usage of water, while also helping to offset the increased capital and maintenance costs of a water system built to meet the needs of the plant.

Shrimp plants are usually a good source of commercial taxation for municipalities. Some municipalities assess shrimp plants in a standard fashion – applying a commercial and business mil rate – while other municipalities, particularly smaller ones, enter into tax agreements with the plants, whereby a plant pays a lump sum that is not related to the mil rate (a tax agreement sometimes covers the water tax, as well). Tax agreements can help municipalities deal with unforeseen circumstances, such as in Trinity Bay.

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80 Foley et al. note in ”Fisheries allocation policies,” that “There can be little doubt that the remarkable growth in Newfoundland and Labrador’s shrimp industry has played a crucial role in alleviating the impact of the 1992 and other groundfish moratoria for some companies, harvesters, processing workers and communities.” p. 11.
81 The “Report of the Independent Chair: MOU Steering Committee” notes there are 2089 shrimp processing workers, p. 41. The Request for Proposals issued by the provincial Department of Fisheries and Aquaculture cites 1200 harvesters on p. 1.
82 According to Vodden and Minnes, the Department of Municipal and Intergovernmental Affairs provided $234,983,015 in water infrastructure funding from 2008 to 2014. “Exploring Solutions for Rural Drinking Water Systems: Sustainable Drinking Water Report Summary,” 2014, p. 13. The municipal contribution to this amount is not specified, though each municipality that received water system funding would have had to contribute 10% to 30% towards the overall cost.
North where the plant’s tax agreement ensured that the town continued to receive tax payments until 2014 despite the fact that the plant was no longer operating.83

In general, a shrimp plant does help provide municipalities with higher than average revenues from commercial taxes. A municipality with a shrimp plant has a higher reliance on commercial taxes than all other population classes of municipalities, including urban municipalities (Figure 6).

![Commercial Taxes as a Percent of Total Revenue, 2009-2013](chart)

**Figure 6.** Municipalities with shrimp processing plants collect a higher proportion of tax revenue from commercial sources than municipalities without shrimp plants, irrespective of municipality size.

The municipalities that have shrimp processing plants are a cross section of Very Small, Small, and Medium municipalities. Although Clarenville has a shrimp plant it was not included because the focus of the report is smaller municipalities. In 2013, Clarenville collected 35% of its total revenue from commercial taxes, which is higher than the average municipality with a shrimp processing plant. It should also be noted that Figure 6 accounts for all municipal revenue, including revenue received selling goods and services and transfers from the provincial and federal governments. As such, Figure 6 provides a wide lens for examining dependence on commercial taxes.

Some of the municipalities with shrimp processing plants are amongst the most reliant on commercial taxes in the entire province. Charlottetown, for example, relies on commercial taxation for more than 48% of its total revenue, which is a level reached by only a handful of other municipalities. It is also a level of reliance that is almost four times greater than the average municipality in Charlottetown’s population bracket.

There are also municipal budgetary requirements that inadvertently conceal the importance of commercial taxes for some municipalities with shrimp plants. A municipal budget must include the amount paid by the province in support of a municipal capital works projects. The municipality does not

83 Personal Communication with Town of Trinity Bay North,
see this money and has no control over how and when it is paid. In 2013, both Old Perlican and Bay de Verde undertook provincially supported capital works programs that skewed their budget figures. In 2013, Bay de Verde is listed as receiving over $480,000 in provincial transfers, though the bulk of this amount was the provincial contribution to a capital project and the municipality never collected this revenue. When this accounting requirement is considered, commercial taxes accounted for 44.5% of all revenue that Bay de Verde collected and spent. If the same accounting requirements are excluded for Old Perlican, commercial taxes in 2013 accounted for 39.8% of all revenue that the town collected and spent.

The importance of shrimp plants to municipal revenues can also be understood by putting into perspective the dollar value of the taxes paid by the shrimp plant. In Anchor Point, the tax agreements with the shrimp plant and another shrimp plant related enterprise accounts for 89% of all commercial revenue.84 The municipal taxes paid by the shrimp plant and its related enterprise are almost double what the municipality receives in municipal operating grant payments (MOG) and is slightly more than the town’s federal gas tax transfer. In 2013, Anchor Point had a debt servicing ratio of 16% and the taxes from the shrimp plant could cover two-thirds of its annual debt payment; alternatively, the shrimp-related commercial tax revenue could pay for two-thirds of the cost of snow removal and street lighting in the town.

In Port au Choix, the shrimp plant constitutes just 1.5% of the total number of businesses in the town but the plant’s 2013 tax payment constituted 23% of all commercial tax revenue.85 Like Anchor Point, Port au Choix’s shrimp plant pays more in local taxes than the town received in MOG and federal gas tax in 2013. The 2013 tax paid by the shrimp plant could cover the cost of snow clearing and street lighting in the town; or it could cover the salary costs of municipal staff; or it could cover two-thirds of the cost of operating the town’s water supply, which, aside from debt servicing, was the biggest single expense for Port au Choix in 2013.

Port au Choix is also the site of perhaps the most important demonstration of how important a shrimp plant is to the local economy. The town has both a world class shrimp processing plant and an important tourism industry based around a local archeological site and Parks Canada interpretation centre. During the summer of 2009, with the shrimp plant operating at full capacity and the tourist season at its high point, the town experienced critically low water supplies. The town was left with a choice – shut down the interpretation centre and use its water supply or shut down the shrimp plant and ration water with the town’s residents. The town chose to keep the plant open and close the interpretation centre.86 The plant is the biggest local tax payer and the economic backbone of the municipality and region.

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84 Town of Anchor Point 2013 Municipal Budget Submission Form.
85 Town of Port au Choix 2013 Municipal Budget Submission Form.
86 “Case Studies,” 7 Steps to Assess Climate Vulnerability in Your Community, Department of Environment and Conservation, 2013, p. 35.
Due to the service and infrastructure responsibilities of municipalities, commercial tax revenue is crucial for municipalities. Municipal governments are the largest owners of infrastructure in Canada (Figure 7)\(^{87}\). For example, Old Perlican operates a town office, a library, a fire department, a recreation facility, a residential and commercial water supply, and a snow clearing and road maintenance service. The infrastructure owned by Old Perlican that betters the lives of residents and businesses is valued in the millions of dollars and requires regular investment to maintain. The infrastructure and service responsibilities of Old Perlican are similar to many other municipalities with shrimp plants. The towns of St. Anthony, Port au Choix, Twilingate, and Fogo Island also operate recreation centres and all 8 rural municipalities with shrimp plants have significant water and sewer systems and local road networks to maintain.

If shrimp plants close as a result of DFO’s allocation cuts, it will be difficult for the affected municipalities to make up for the lost revenue. Given the constraints of the property tax system, when a municipality loses revenue it usually cuts back on its maintenance of certain services. Thus, problems with the water and sewer system go unresolved or half-fixed, and recreation centres fall into disrepair, and potholes and cracks in the road go unserviced.

### 3.3 THE SOCIO-ECONOMIC IMPACTS OF PLANT CLOSURES

A reduction by DFO of the inshore northern shrimp allocation will not leave everyone involved in the shrimp fishery unemployed. However, a reduction in the shrimp allocation would likely result in plant closures and a decline in the number of shrimp harvesters. A plant closure in Anchor Point, or Bay de Verde, or Fogo Island, or any rural municipality will have a negative local and regional effect.

A shrimp plant is a regional employer, and, in some instances, a provincial employer. The shrimp plant in Port au Choix employs residents from twenty different municipalities and communities. While 83 residents of Port au Choix were employed at the shrimp in 2014, an additional 107 employees travelled to work in the plant from the region and province. More than a dozen residents of Port Saunders and Hawkes Bay work in the shrimp plant, and one resident of Dildo and another from Channel-Port aux

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Basques travelled hundreds of kilometres to work in the plant\textsuperscript{88}. Clearly the economic importance of a shrimp plant reaches far beyond the town in which it is located.

The proportion of working age people involved in the fisheries in towns located in a region with a shrimp plant ranges from 10 to 50\% (Figure 8). These are the direct connections to workers.\textsuperscript{89} If the indirect connections are factored in, it would likely show that few areas of the local economy are untouched by the fishery.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Percent of municipalities' working age population directly involved in the fisheries.}
\end{figure}

What are the likely impacts to municipalities should shrimp plant close as a result of northern shrimp allocation decisions? One way to judge likely impacts is to the results of previous plant closures. The example of Trepassey, as discussed earlier, demonstrates the depth of the connection between a town and the fisheries. However, those events occurred twenty years ago under different circumstances and with different supports.

Now when a fish plant closes, plant workers are able to enter the Fish Plant Worker Employment Support Program (FPWESP) that is administered by the Department of Municipal and Intergovernmental Affairs (MIGA). The FPWESP is “focused on creating short-term employment for workers from fish plants designated by the provincial government as permanently closed.”\textsuperscript{90} The key component of the FPWESP is that it creates “short-term” employment.

\textsuperscript{88} Data requested from the NL Department of Fisheries and Aquaculture.
\textsuperscript{89} This is not an exhaustive list, as no information is available for St. Anthony. Twillingate, Plum Point, or St. Lunaire-Griquet. It is also important to note that many individuals in local service districts and unincorporated areas are engaged in the shrimp fishery, though the Community Accounts database has little information on these areas. Also keep in mind that the information on the chart covers all fishers, some of whom may not be involved in the shrimp fishery.
\textsuperscript{90} “Fish Plant Worker Employment Support Program,” http://www.miga.gov.nl.ca/emp_support/fpwesp.html
To complement the FPWESP and to provide more lasting support to the now jobless plant workers, the provincial government in 2006 established transition support services through the Department of Human Resources, Labour, and Employment (now the Department of Advanced Education and Skills [AES]). The transition support service helps former fish plant workers “develop an individualized transition plan to include access to labour market information, retraining options, counselling on relevant provincial and federal programs concerning employment opportunities, resume writing, job search, training, wage subsidies, and self-employment supports.”91 The province has also established a regional economic diversification program, part of which includes a wage subsidy to new entrepreneurs and small expanding businesses to employ individuals who worked in a closed fish plant.92

The “Report of the Independent Chair: MOU Steering Committee” examined these provincial government supports as they were applied to the closure of the fish plant in Fortune. The plant in Fortune closed in August 2005 and its workers were eligible to benefit from the FPWESP. Due to a lack of alternate employment in the area, 94% of unemployed plant workers could not find work immediately after the plant closed. More than a year later – October 2006 – 49% of the former plant workers had taken advantage of the temporary employment services offered by the FPWESP.93 Because the program focuses on short-term employment, these jobs would not be available the following year.

By October 2006, only 38% of the affected plant workers had participated in counselling services and just 11% had used the skills development program. In July 2010, almost five years after the closure of the plant, individuals were still using transition services. This speaks to the difficulties faced by individuals transitioning away from the fish processing industry in rural NL and the limits of government support. Fortune is a fishing town and that is a difficult economic identity to replace once it goes away.

The MOU report does not provide any measures of success for the government transition programs and there is no data on how many individuals found meaningful alternative employment through the programs. According to MIGA and AES, they do not “have sufficiently detailed data to make an informed opinion on the dynamics associated with individual worker adjustment behaviour.”94 However, both departments acknowledge that more time was needed than originally anticipated to make the transition programs effective in affected communities.

While government transition services and programs are important and essential, problems do remain with respect to the capacity of the program; how the program is triggered into action; and whether the program accurately addresses the demographics of the communities it needs to serve.

Between 2006 and 2010, the provincial government transition services served 578 affected workers across the province, while 800 workers participated in the FPWESP. As the MOU report notes, these transition programs have only had to deal with one or two plant closures a year.95 If northern shrimp assessments continue to indicate declining stock status and if DFO allocates quota cuts to the inshore, there will likely be a rapid decrease in the number of shrimp processing plants with as many as six or seven closing in a two-year period. A large number of plant closures will strain the government

92 Ibid. p. 43.
93 Ibid., p. 43-44.
94 Ibid.
95 Ibid., p. 44.
transition services. Given the local economies of where many shrimp plants are located, government support is going to be needed in a quick and effective manner.

The relatively low participation rates in counselling services and skill development programs amongst those affected by the Fortune fish plant shutdown was partially attributed by AES to the age of the workers involved. Approximately 49% of the plant’s workers were aged 50 or older and it was thought that “some individuals may have decided they were too old to begin a retraining program.” The validity of this perspective among older workers is not relevant; the important consideration is that this perspective exists and will affect how older workers interpret and react to transition services.

With respect to potential shrimp plant closures, the municipalities that are threatened have significant working age populations of 50 and above and doubtlessly some of these residents work directly at the shrimp plant. Below is the percent of working age individuals over the age of 50 in municipalities that will be effected by DFO’s shrimp allocation cuts:

- Anchor Point – 41%
- Bay de Verde – 39%
- Charlottetown – 32%
- Hawke’s Bay – 45%
- Old Perlican – 40%
- Port au Choix – 44%
- Port Saunders – 39%
- St. Anthony – 38%
- Twillingate – 47%

If DFO maintains its current shrimp allocation policy for the inshore, is the province able to tailor its support to the large number of older workers that may require different supports than younger workers?

For the provincial government to offer support, a fish processing plant must first be declared permanently closed. Permanently closing a plant is a definitive step that often sets into motion the process of extinguishing the plant’s license to process (a shrimp plant must process at least 500 t once every two years to maintain its license. This is difficult to do when the plant is closed). When a license is revoked, it must be reissused before the plant can be reopened. New licenses are issued according to resource threshold rules, meaning that, on average, each plant must have access to a specific amount of the resource before a new plant license can be issued. For shrimp, the resource threshold is 8000 t, therefore under current conditions a new shrimp plant license could not be issued unless there was a minimum of 88,000 t available for processing ([10 current plants x 8000 t] + [1 new plant x 8000 t]).

Given the minimum threshold requirements, when a plant closes and loses its processing license due to reduced quota or allocation levels, it is highly unlikely that the plant will ever reopen. Reopening a plant

96 Ibid., p. 43.
would require both a rebound in the quota/allocation and the good fortune of the province granting a new license for a company to operate the plant. However, according to province’s Fish Processing Licensing Policy Manual, “No consideration to the history of a plant’s operation will be given with respect to any application for a new license to reopen a plant for which the licenses were previously permanently cancelled due to inactivity.”

The barriers to reopening a plant once declared closed attaches great significance to the decision to declare a plant closed. Closing a plant starts a process that could result in the permanent removal of that economic pillar from the town and its residents. This is a significant economic and psychological blow to the former workers of that plant, to the community, and to the region. The magnitude of the decision means that the plant should not be declared closed in haste and without careful consideration.

From a provincial perspective, there is logic in requiring a plant be formally closed before offering specific supports. The province cannot indirectly subsidize a fish plant company by providing wage replacement services to the workers the company would normally employ and intends to employ again in the near future. With that said, such logic does nothing to assist the affected workers.

If DFO cuts the inshore northern shrimp allocation and shrimp plants close, will the affected workers and towns benefit from asking for a quick declaration from the province that the plant has closed? Is it worth quickly abandoning the shrimp fishery as an economic pillar for 14 weeks of guaranteed employment for the now-jobless shrimp plant workers?

For Jackson’s Arm, life without the shrimp plant (and crab plant which subsequently closed) has been difficult. In its integrated community sustainability plan, Jackson’s Arm noted it had 65 residents working as fish processors out of a working age population of 215. All of those 65 residents were out of jobs once both the shrimp and crab plants closed. The municipality’s commercial tax revenue has plummeted by 39%, decreasing from $94,185 in 2009 to $57,174 in 2013.

When Jackson’s Arm installed its municipal water system in the 1990s, it did so to accommodate the local fish plants. With reduced revenue and a water system designed to support a shrimp and crab plant, the town has struggled to maintain its drinking water service and was frequently under boil water advisories. Acknowledging the financial position of the town and its current capacity, Jackson’s Arm has decided to forego providing clean drinking water from the tap (an expensive task for municipalities) and has opted instead to erect a centralized drinking water system, which consists of a small building somewhere in the town with a tap that provides clean drinking water. Under municipal infrastructure programs, the system will only cost the town approximately $35,000. A town that once provided jobs to those in the region and that had one of the strongest commercial tax bases for a town of fewer than 400 will now require all residents, the vast majority of which are seniors, to go out on a daily basis into the sun, rain, fog, ice, snow, and cold to fill up jugs of drinking water for that day.

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100 Ibid., p. 27.
4.0 SHRIMP ALLOCATIONS BASED ON THE PRINCIPLE OF ADJACENCY

The inshore northern shrimp fishery is an economic pillar of communities, municipalities and regions throughout Newfoundland and Labrador and adjacency is the mortar that binds the bricks of this pillar together. For centuries, the residents of rural NL benefitted from harvesting and processing the resource located in the adjacent ocean - local harvesters fished the adjacent waters and landed their catch onshore to be processed by local processors employing local workers.

The inshore northern shrimp fishery, like all inshore fisheries, was built on the principle of adjacency. In 1997 when then Fisheries and Oceans Minister, Fred Mifflin, announced that inshore vessels would be granted shrimp licenses, adjacency was declared as a primary consideration in the expansion of shrimp allocations. As a result, hundreds of harvesters and dozens of businesses and municipalities invested millions of dollars to capitalize upon the value of the shrimp fishery.

In 2007, without consultation and explanation, DFO adopted a new approach for the allocation of northern shrimp. Known as Last In-First Out (LIFO), this allocation method does not consider the importance of the shrimp fishery to local economies and livelihoods; instead LIFO acts as a gradual reset button with the ability to set the allocation of northern shrimp back to a time when the inshore was not permitted. LIFO views the inshore fishery as ahistorical – an interlude and not an evolution in the commercial shrimp fishery.

Our goal – highlighting the contributions of the inshore northern shrimp fishery to individuals, businesses, municipalities, regions, and the province – is to show the magnitude of possible impacts should DFO continue with its current shrimp allocation decisions. The implications for the continued application of LIFO are grave: further quota allocation cuts will undermine the viability of many inshore fishing enterprises and processing plants, thus further undermining the economic and social viability of rural Newfoundland and Labrador. The loss of a fisheries leads to the departure of businesses and people and the gradual erosion of local government. NL has unfortunately experienced this sad transition before.

Fortunately, there are better ways to allocate the northern shrimp quota that can meet the needs of the inshore and offshore fleets and other stakeholders.

The FFAW is proposing that the entire quota for SFA6 be allocated to the inshore and to special allocation owners that are located adjacent to SFA6. With respect to the special allocations, the inshore fleet should be granted the right to negotiate catching it on behalf the quota holder, as the inshore successfully did with the SABRI allocation in 2011. SFA6 is the primary fishing area for the inshore northern shrimp fleet, accounting for the vast majority of the inshore allocation. It is also the traditional fishing grounds that were used to fish cod, turbot, and other groundfish.

The allocation of SFA6 to the inshore will also serve to recognize the importance of planning in the fisheries, in general. The fisheries are interconnected and the management of the commercial fisheries for one species should not divorced from other connected species. The late 1990s to the mid-2000s were a shellfish dominant period. Recent concurrent increases in finfish species’ biomass and declines in shellfish biomass, in addition to an overall warming trend, suggest the NL marine ecosystem is returning to a groundfish-dominated fish community.
The ebb of flow of the growth and decline of various fish species makes it essential that the decline in the fishery of one species should be managed in conjunction with possible increases in the fishery of other species. Conservation is important in managing a commercial fisheries but so is easing the transitions for those who depend upon the fisheries for their livelihood. Forcing the shutdown of several shrimp plants will not help NL transition to a possible groundfish dominant fishery. Allocating all of SFA6 to the inshore, however, will help with that transition by providing a viable shrimp fishery for harvesters and plant workers until groundfish becomes more dominant. Unfortunately, DFO’s current method for allocating quota cuts will not allow for these responses to a changing resource base.

SFA6 is the shrimp fishing area directly adjacent to the province and encompasses almost all of the inshore shrimp fishery. By allocating all of SFA6, except the special allocation, to the inshore, DFO will be preserving hundreds of harvesting and processing jobs and hundreds of other important spin off jobs.

As was stated in the report, the offshore fleet has access to SFAs 0 to 6, with 7 under temporary closure. The offshore fleet should be able to catch its allocation guarantee (and more if the quotas permit) in SFAs 0 to 5. These were the areas first fished by the offshore in the first 15 years of the fishery. Moreover, the offshore operate large vessels that were constructed to navigate and fish Canada’s north. The offshore has the capacity to operate within the confines of the more northern SFAs.

The allocation of northern shrimp is contentious and must be conducted with sensitivity. DFO cannot continue with an allocation policy that could result in massive job losses and regional economic collapses.