

SUBMISSION TO THE
NUNAVUT WILDLIFE MANAGEMENT BOARD
December 2014

FOR

Information: X

Decision:

Issue: Offshore commercial marine fisheries update

At its September meeting, members of the Nunavut Wildlife Management Board (NWMB) requested that DFO prepare some information on the offshore commercial Turbot and Shrimp fisheries in fishing areas adjacent to Nunavut.

Further information on these fisheries can be found in the Greenland Halibut Integrated Fishery Management Plan, available online in Inuktitut, English and French:

<http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/index-eng.htm>

And in the Northern Shrimp Integrated Fishery Management Plan, available online in English and French:

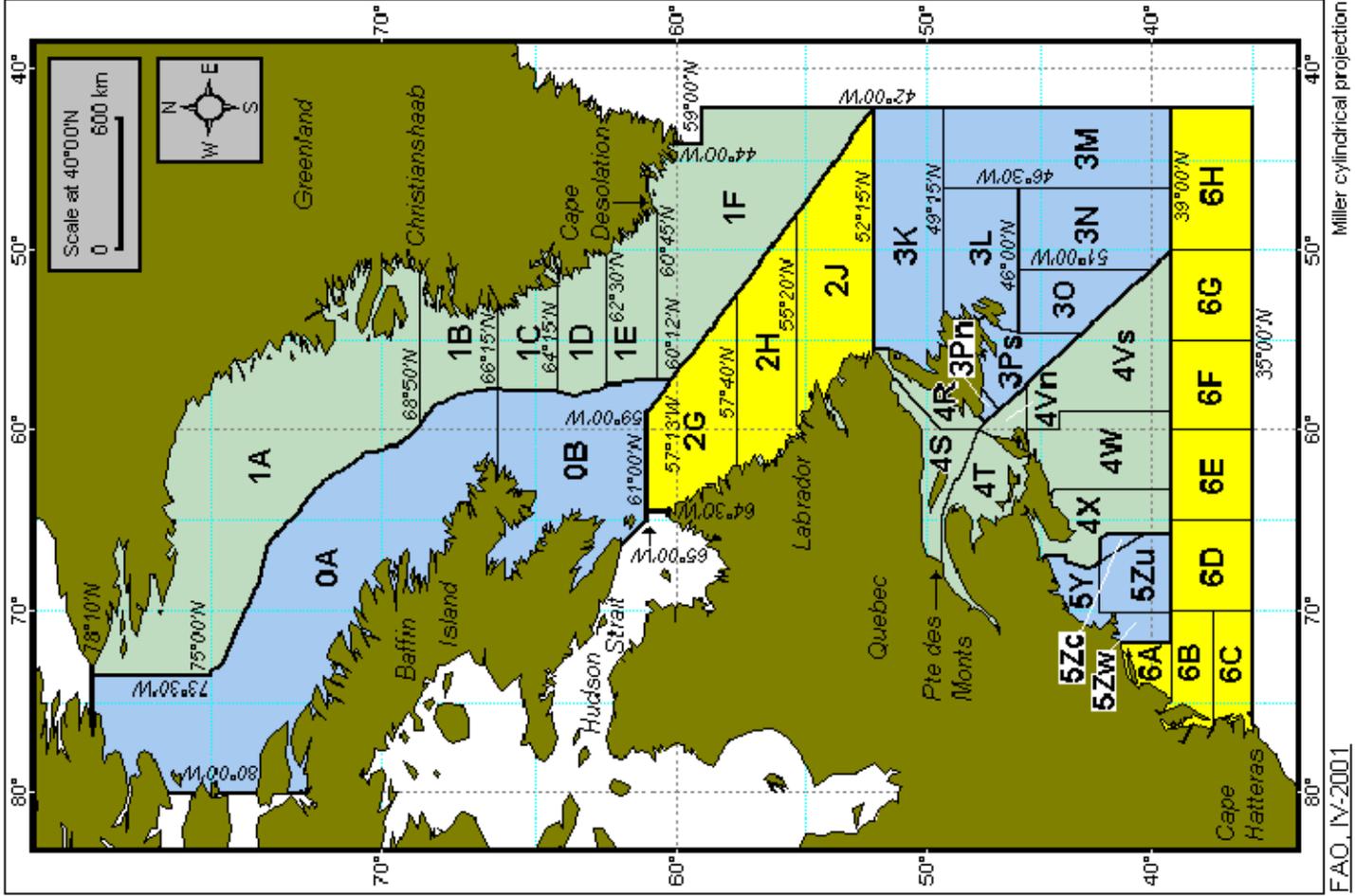
<http://www.dfo-mpo.gc.ca/fm-gp/peches-fisheries/ifmp-gmp/shrimp-crevette/shrimp-crevette-2007-eng.htm>

Percent and amount of Turbot and Shrimp allocated to Nunavut in fishing areas adjacent to Nunavut

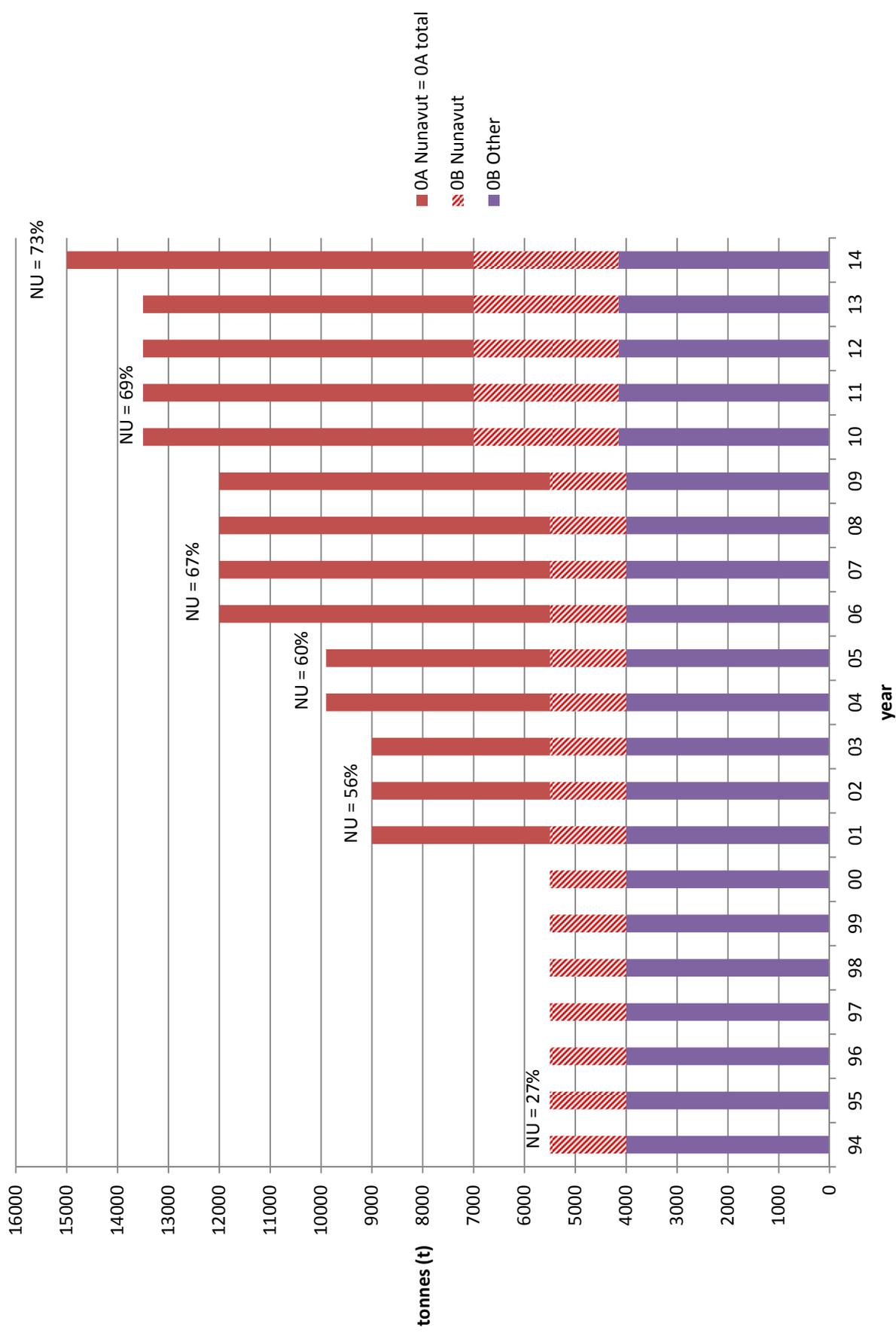
Greenland Halibut (Turbot) fishery

- In 2014, Nunavut will have 73% of the adjacent Greenland Halibut quota. There are effectively 3 Greenland halibut management areas adjacent to Nunavut – Division 0A, Division 0B and Cumberland Sound Turbot Management Area.
- In 0A, a Total Allowable Catch (TAC) was established in 2001 at 3500 tonnes (t) and increased in 2004 to 4400t then to 6500t in 2006. For 2014 the 0A TAC has been set at 8000t (a 1500t increase). 100% of this is allocated to Nunavut interests.
- In 0B, the TAC was 5,500t from 1994 to 2009. Nunavut's share of the TAC was 1500t (27%). The TAC was increased to 7000t in 2010 and Nunavut's share of the TAC rose to 2850t or 41%, a 1350t increase. There have been no TAC or allocation changes in 0B since 2010. Note that 900 tonnes of the 0B TAC of 7000 tonnes is a fixed-gear competitive fishery and that number is not factored into Nunavut's share, even though they can catch it.
- In the Cumberland Sound Turbot Management Area, a Total Allowable Harvest of 500t has been established by the NWMB and Minister which is accessible exclusively to Nunavut Inuit. It was established in 2005 and has always been 500t.

Map of NAFO Convention Area, showing Divisions 0A and 0B



Nunavut's share of Subarea 0 (0A + 0B) TAC



Historical development of the fishery

Division 0B (Davis Strait)

Mid 1960s – Fishing by foreign fleets began in what is now called 0B

1981 – The Canadian Greenland Halibut fishery began in Division 0B. At this time most of the Canadian quota was allocated to foreign countries.

1988 – The Inuit of what is now Nunavut received an inshore allocation of 100t

1992 – Foreign allocations, which had been steadily reduced, were eliminated

1994 – Based on the first detailed assessment of the Greenland Halibut stock shared between Canada and Greenland, the Northwest Atlantic Fisheries Organization (NAFO) Scientific Council recommended the Total Allowable Catch (TAC) be 11,000t. Canada's TAC for Division 0B was 5,500t – half of the 11,000t, because the stock is shared with Greenland.

2010 – The TAC increased to 7000t based on results of scientific surveys. Of the 1500t increase, 1350t was allocated to Nunavut and 150t was allocated to Nunavik Inuit. This increased the Nunavut share of the TAC from 1500t (27%) to 2850t (41%)

Division 0B Fixed Gear Competitive fishery

2009 – Nunavut interests acquired 5 validations to fish with vessels less than 89 feet in the 900t Division 0B fixed gear competitive fishery

2010 – Nunavut interests acquired a licence to fish with vessel 65-100 feet

2011 – Nunavut interests acquired 3 additional validations to fish with vessels less than 89 feet

2012 to present – DFO and stakeholders are discussing how to move the fishery from a competitive regime to one in which each licence holder has a fixed share of the 900t.

Division 0A (Baffin Bay)

Before 1996 – There was no Greenland Halibut commercial fishery in Division 0A.

1996 to 2000 – An effort based exploratory fishery was granted to Nunavut interests in Division 0A.

2000 to 2001 – The NAFO Scientific Council recommended an additional TAC for the northern area of the Greenland Halibut stock shared between Canada and Greenland and, as a result, Canada established an exploratory fishery quota of 3500t in Division 0A.

2001 to 2004 – The use of foreign vessels by Nunavut fishing interests was approved to assist in the development of the Division 0A fishery. By 2004, foreign vessels were no longer in use.

2004 – The TAC increased to 4400t.

2006 – A TAC increase of 2500t was established for Division 0A and reserved entirely for Nunavut interests. The NWMB recommended 100t of the Division 0A quota increase be designated for fisheries development within the NSA. The quota for inside the NSA has remained at 100t.

2007 – The exploratory fishery of Division 0A was converted to commercial status with the exception of the portion of Division 0A which falls within the NSA.

2014 – The TAC increased to 8000t (a 1500t increase). 100% of this is allocated to Nunavut interests.

Northern Shrimp fishery

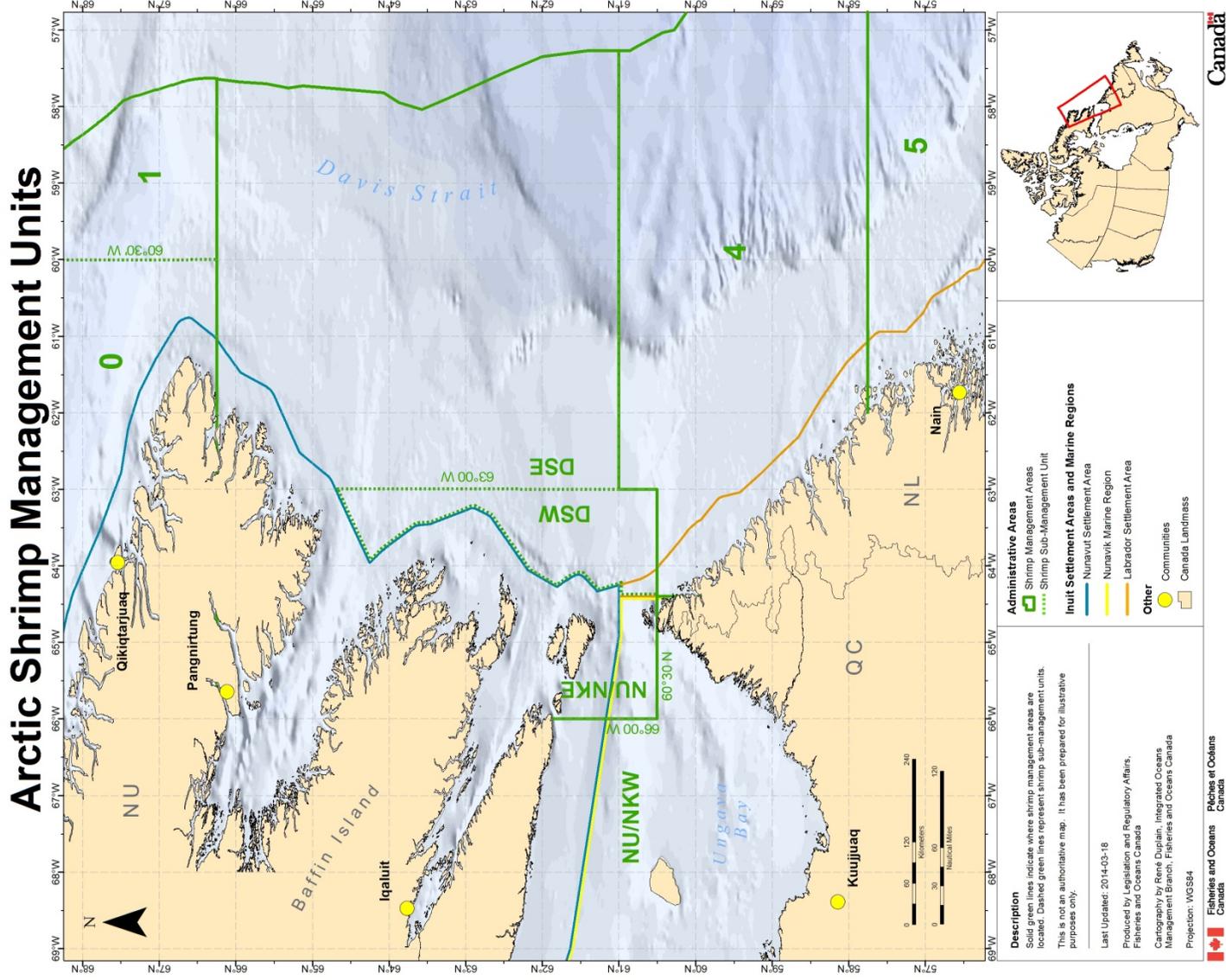
Pandalus borealis

- The Total Allowable Catch in Shrimp Fishing Area (SFA) 1 is 11,333t however individual allocations have been frozen at 2008 levels when the TAC was at 18,417t with the caveat that once the TAC is reached the fishery would be closed. The TAC has never been fully exploited in SFA 1.
- In the Eastern Assessment Zone (Davis Strait and Nunavut/Nunavik East) the TAC is 8250t and in the Western Assessment Zone the TAC is 2080t.
- Of the 21,663t TAC for *P. borealis* (in SFAs 1, Davis Strait, Nunavut and Nunavik), Nunavut is allocated 6549t or 30% of the TAC. Nunavut interests also hold 1.5 offshore shrimp licences which provide access to 1/17th of the offshore fleet's share of the shrimp resources in SFAs 1-7.

Pandalus montagui

- The Total Allowable Catch in the Eastern Assessment Zone was set at 2250t in 2013 and reduced to 840t for 2014. In the Western Assessment Zone the TAC is 5860t. Of the 6700t TAC for *P. montagui*, Nunavut interests have 3231t or 48% of the TAC.

Map of Arctic Shrimp Management Units



Description
 Solid green lines indicate where shrimp management areas are located. Dashed green lines represent shrimp sub-management units. This is not an authoritative map. It has been prepared for illustrative purposes only.

Last Updated: 2014-03-16
 Produced by Legislation and Regulatory Affairs, Fisheries and Oceans Canada
 Cartography by Renee Durland, Integrated Oceans Management Branch, Fisheries and Oceans Canada
 Projection: WGS84

Administrative Areas

- Shrimp Management Areas
- Shrimp Sub-Management Unit

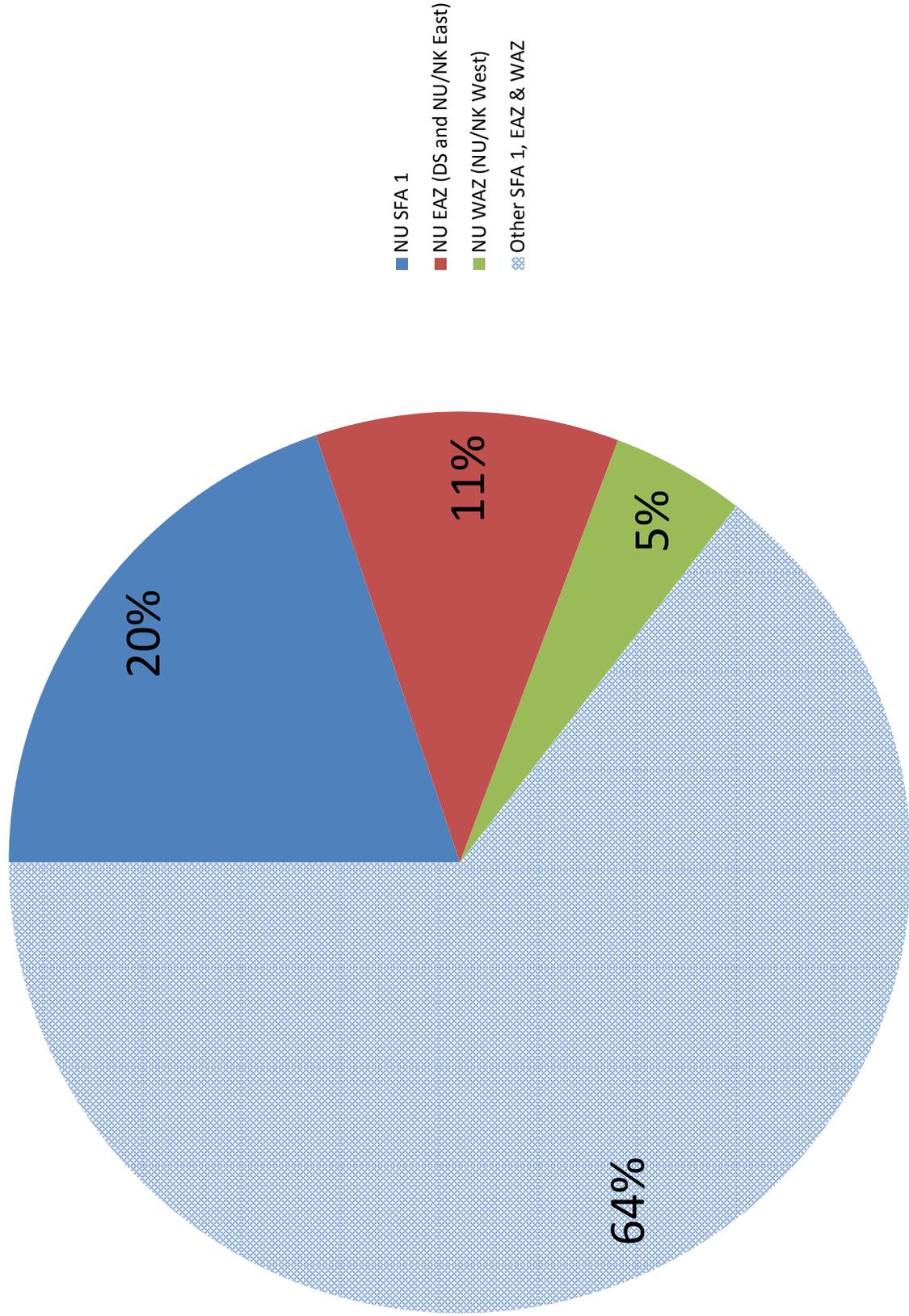
Inuit Settlement Areas and Marine Regions

- Nunavut Settlement Area
- Nunavut Marine Region
- Labrador Settlement Area

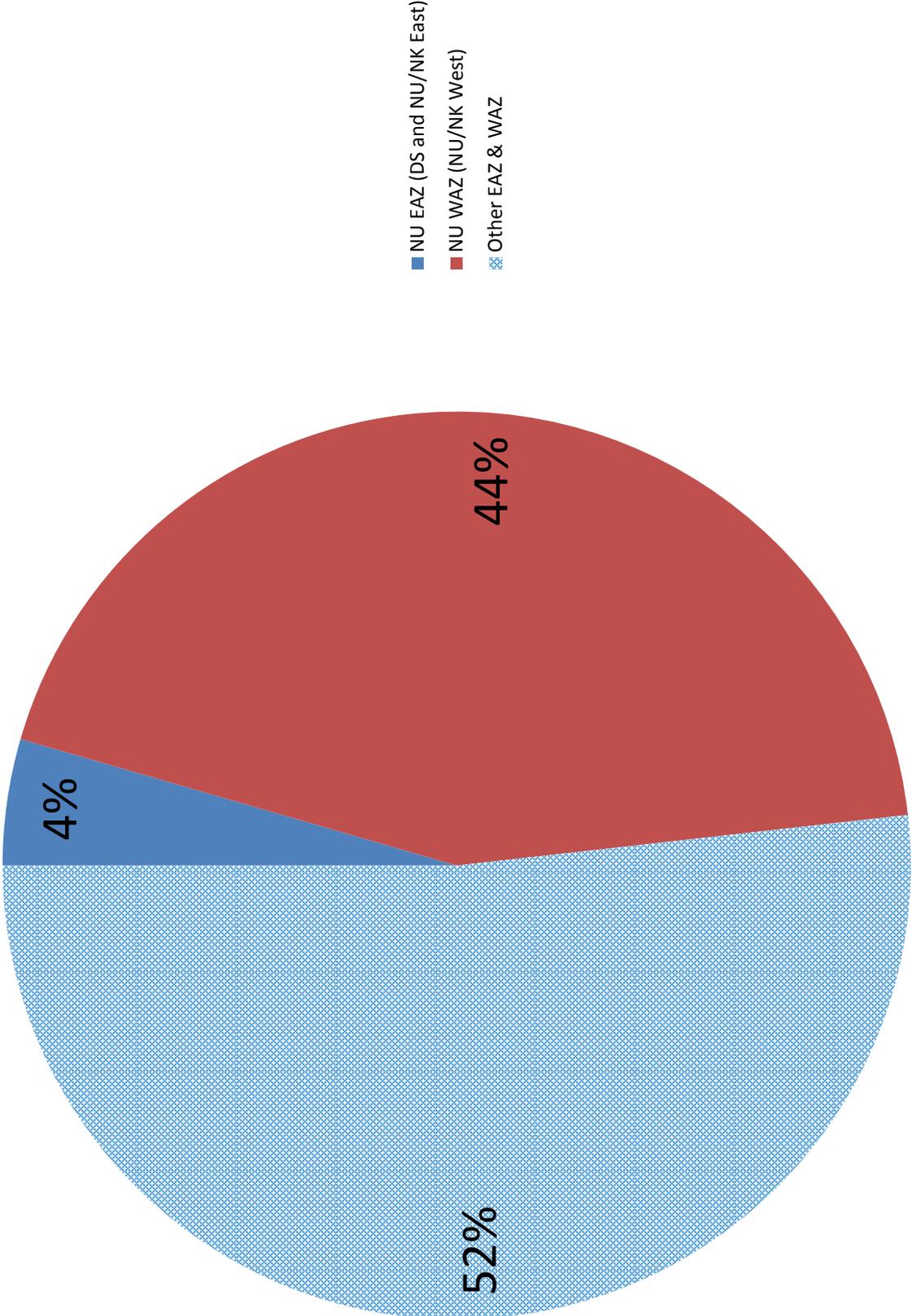
Other

- Communities
- Canada Landmass

Nunavut's share of *P. borealis* TACs in SFA 1, Eastern Assessment Zone and Western Assessment Zone



Nunavut's share of *P. montagui* TACs in Eastern Assessment Zone and Western Assessment Zone



Historical development of the fishery

Early 1970s – An exploratory fishing program confirmed the presence of shrimp stocks in the waters stretching southward from Baffin Island to the northeast coast of Newfoundland

1978 – 11 licences were issued to develop the fishery

1979 – A licence was issued to Makivik

1987 – 4 additional licences were issued to Northern interests (2 Labrador; 0.5 Quebec; 1.5 Nunavut)

1978 to 1991 – 17 offshore licences were introduced and quotas established using an Enterprise Allocation regime.

- 1978 – 11 licences were issued to develop the fishery
- 1979 – A licence was issued to Makivik
- 1987 – 4 additional licences were issued to Northern interests (2 Labrador; 0.5 Quebec; 1.5 Nunavut)
- 1991 – The last offshore licence was issued bringing the total to 17

1990s – As the shrimp stocks grew in abundance and the cod moratorium came into effect, temporary inshore licences were introduced throughout Atlantic Canada

1999 – Creation of a new exploratory fishery in SFA 2. The exploratory quota of 3500t was allocated 1750t (50%) to Nunavut interests and 1750t (50%) to offshore licence holders.

2002 – A 2000t SFA 2 and 500t SFA 3 exploratory quota for *P. montagui* inside the NSA was allocated to Nunavut interests.

2003 – A SFA 1 TAC increase of 2127t was allocated 1000t (47%) to Nunavut interests, 187t (9%) to Makivik and 940t (44%) to offshore licence holders.

2004 – Another SFA 1 TAC increase of 4250t was allocated 2833t (67%) to Nunavut interests, 374t (9%) to Makivik and 1043t (25%) to offshore licence holders.

2006 to 2007 – DFO announced that additional access to the shrimp fishery would be frozen to encourage stability in the short term; temporary licences were converted to regular licences in an effort to further promote stability in the inshore fleet.

2012 to 2013 – DFO, the NWMB and the Nunavik Marine Region Wildlife Board approved changes to shrimp management in the north, including boundary changes of existing management units and creation of SFA Davis Strait, SFA Nunavut (NU) and SFA Nunavik. Existing quotas inside the NSA were replaced with new quotas in management units NU east of 66°W (Resolution Island Area) and NU west of 66°W (Hudson Strait). These changes were implemented for the 2013 fishing season and beyond.

Percent and amount of Turbot and Shrimp offloaded in Greenland, Newfoundland, Pangnirtung, Other

Greenland Halibut (Turbot) Landings by vessels fishing Nunavut quota				
	Number of landings		% of landings	
Port	2013	2014	2013	2014
Greenland	31	23	78%	88%
Newfoundland	9	3	23%	12%
Total	40	26		

The 2014 fishing season is not over yet; there will still be more landings.

Northern Shrimp Landings by vessels fishing Nunavut quota				
	Number of landings		% of landings	
Port	2013	2014	2013	2014
Newfoundland	11	3	65%	43%
Nova Scotia	3	1	18%	14%
Greenlandic	3	3	18%	43%
Total	17	7		

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Numbers include landings from Qikiqtaaluk Corporation's offshore shrimp licence, as well as landings from Nunavut shrimp allocations.

Total value of these fisheries to Nunavut

Note: Landed value in Division 0A until 2010 is the summation of landings offloaded at Pangnirtung plant (10%) with average landed price CAD2,000/tonne stated in 2006 Harvesting Summary and Historical Analysis, Baffin Fisheries Coalition, and the remaining landings offloaded elsewhere with export price for Greenland Halibut from DFO. Landed value in Division 0A for 2011 and landed value in Division 0B for Central & Arctic Region (C&A) is calculated using export price for Greenland Halibut from DFO. The landed values for Newfoundland & Labrador Region (N&L) and Maritimes Region were provided by respective regional offices.

During 2008 – 2012, average shrimp landings were 7,596t generating an average landed value of \$21 million. Of the average landings of 7,596t, Nunavut accounted for 29%, Newfoundland for 56% and Maritimes for 15%.

In SFA1, average shrimp landings were 1,411t generating an average landed value of \$3.6 million during 2008 – 2012. In SFA2, average shrimp landings were 5,711t generating an average landed value of \$15 million during 2008 – 2012. In SFA3, average shrimp landings were 474t generating an average landed value of \$1.5 million during 2008 – 2012.

Shrimp landings were retrieved from the Fisheries Management and Harvest Information System for Nunavut. Landings caught in Nunavut waters by vessels from Newfoundland and Labrador, and Maritimes were collected from National Headquarters, Department of Fisheries and Oceans. Shrimp landings include both directed and by-catches in the areas as well as landings from the Nunavut Settlement Area. Landed values are based on \$3,200/ton for Nunavut based on price information received from Resource Management. Landed values data for Newfoundland and Labrador, and Maritimes were collected from National Headquarters, Department of Fisheries and Oceans. The market price information is not available and so the value added by the fish processing industry is not captured in the values.

Landings and Landed Values for Greenland Halibut in Divisions 0A and 0B

Variables	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
	Division 0A									
Landings (t)	4,125	6,634	6,173	4,964	6,496	6,394	6,262	6,394	6,402	6,486
Landed Values (\$000)	\$20,010	\$28,859	\$26,369	\$20,467	\$24,343	\$26,663	\$31,586	\$31,387	\$33,490	\$33,930
	Division 0B									
Landings (t)	5,856	5,522	5,331	5,424	5,547	6,989	6,985			
C&A	1,230	1,208	1,227	1,930	2,178	3,107	3,097	3,327	3,254	2,463
N&L	4,028	4,061	3,751	3,368	3,369	3,882	3,888			
Maritimes	598	253	353	126	0	0	0			
Landed Values (\$000)	\$21,259	\$19,794	\$17,718	\$15,869	\$24,541	\$36,691	\$41,146			
C&A	\$6,356	\$5,570	\$5,551	\$8,413	\$8,585	\$13,706	\$15,622	\$16,332	\$17,022	\$12,885
N&L	\$12,769	\$13,381	\$11,408	\$7,272	\$15,956	\$22,986	\$25,524			
Maritimes	\$2,134	\$842	\$759	\$184						
	Divisions 0A + 0B									
Landings (t)	9,981	12,156	11,504	10,388	12,043	13,383	13,247			
Landed Values (\$000)	\$41,269	\$48,653	\$44,087	\$36,337	\$48,884	\$63,355	\$72,732			

*The 2014 fishing season is not over yet; there will still be more landings.

Source: Landings from Canadian Atlantic Quota Report and Landed Values from DFO staff calculations and data from DFO regional offices.

Landings and Landed Values for Shrimp in Shrimp Fishing Areas 1, 2 and 3

Area	Landings (t)										Landed Values (\$000)						
	2007	2008	2009	2010	2011	2012	2013	2014*	2007	2008	2009	2010	2011	2012	2013	2014*	
Shrimp	6829	3997	4346	12260	10889	6489			\$18,524	\$11,121	\$9,494	\$29,328	\$31,631	\$20,788			
NU	1355	866	260	2854	3547	1741			\$4337	\$2771	\$832	\$9131	\$11352	\$5571			
SFA 1	1934	-	220	5558	1274	4			\$4,062	\$0	\$466	\$13,636	\$3,792	\$13			
NU	48	-	-	1912	130	4	0	0	\$155	\$0	\$0	\$6,117	\$416	\$13	\$0	\$0	
NL	1885	-	220	2528	1138	0.2			\$3,907	\$0	\$466	\$5,516	\$3,362	\$1			
Mar.	-	-	-	1118	5	-			\$0	\$0	\$0	\$2,003	\$14	\$0			
SFA 2 /DS	4846	3997	4126	6316	8771	5347			\$14,304	\$11,121	\$9,028	\$14,454	\$25,138	\$17,131			
NU	1258	866	260	555	2573	606	473	0.4	\$4,024	\$2,771	\$832	\$1,776	\$8,234	\$1,938	\$1,514	\$1	
NL	3588	3131	3866	3276	4061	3611			\$10,280	\$8,350	\$8,196	\$7,147	\$11,998	\$12,274			
Mar.	-	-	-	2485	2137	1131			\$0	\$0	\$0	\$5,532	\$4,906	\$2,919			
SFA 3 /NU	49	-	-	387	844	1138			\$158	\$0	\$0	\$1,238	\$2,702	\$3,644			
NU	49	-	-	387	844	1131	4065	3247	\$158	\$0	\$0	\$1,238	\$2,702	\$3,620	\$13,008	10,390	
NL	-	-	-	-	-	7			\$0	\$0	\$0	\$0	\$0	\$24			
Mar.	-	-	-	-	-	-			\$0	\$0	\$0	\$0	\$0	\$0			

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Nunavut harvest info for 2014 (to date) and last 4 years

Greenland Halibut

Year	Division 0A		Division 0B	
	Quota (t)	Catch (t)	Quota (t)	Catch (t)
2014*	8000	6486	2850	2463
2013	6500	6402	2850	3254
2012	6500	6394	2850	3327
2011	6500	6262	2850	3097
2010	6500	6394	2850	3107

*The 2014 fishing season is not over yet; there will still be more landings.

Pandalus borealis

Year	2010		2011		2012		2013		2014*	
	Quota (t)	Catch (t)								
SFA 1	4560	1912	4560	130	4560	4	4560	0	4560	0
SFA 2	2162	726	2162	2328	2162	1492				
SFA Davis Strait							2162	473	1981	0.4
SFA Nunavut east of 66°W							200	199	183	43
SFA Nunavut west of 66°W							750	635	1040	370

The 2014 fishing season is not over yet; there will still be more landings.

Pandalus montagui

Year	2010		2011		2012		2013		2014*	
	Quota (t)	Catch (t)								
SFA 2 inside the NSA	2000	23	2000	23	2000	26				
SFA 3 inside the NSA	1000	310	1000	836	1000	981				
SFA Nunavut east of 66°W							805	802	301	87
SFA Nunavut west of 66°W							2500	2428	2930	2746

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