

Appendix G3

Report: 2012 Hamlet of Baker Lake Harvest Study – Creel Results

MEMORANDUM

TO: Ryan Vanengen – Agnico-Eagle
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DATE: 4 March 2013

FROM: Martin Gebauer

Subject: 2012 Hamlet of Baker Lake Harvest Study – Creel Results

Nunavut Environmental Consulting Ltd. is pleased to provide Agnico-Eagle Mines Ltd. (Agnico-Eagle) with this brief memorandum summarizing the 2012 creel results from the annual hunter harvest study conducted in the Hamlet of Baker Lake.

Background

In March 2007, a harvest study was initiated by Agnico-Eagle in association with the Baker Lake Hunters and Trappers Organization (HTO) in order to monitor and document the spatial distribution, seasonal patterns and harvest rates of hunter kills before and after construction of the Meadowbank All-Weather Access Road (AWAR). The harvest study is conducted annually and is open to both Inuit and non-Inuit residents of Baker Lake who are at least 16 years of age. The harvest study focuses primarily on terrestrial wildlife harvests; however, creel results are also recorded by the harvest study administrator in support of on-going creel surveys. In previous years, the creel results were included in the annual Meadowbank Wildlife Monitoring Summary Report; however, since 2009, results have been provided in a standalone memorandum.

In late 2009, AREVA Resources Canada Inc. (AREVA) entered into a data and cost-sharing agreement with Agnico-Eagle; however, the implementation of the harvest study has remained the same. Both Agnico-Eagle and AREVA recognize that communication with participants is of utmost importance to ensure study success through adequate participation rates and accurate reporting.

Fish Species

The four species included in the harvest study are Arctic Char (*Salvelinus alpinus*), Arctic Grayling (*Thymallus arcticus*), Lake Trout (*Salvelinus namaycush*) and Lake Whitefish (*Coregonus clupeaformis*).

2012 Results

Participation

The number of participants in the hunter harvest study has increased steadily since inception. Each year, new participants sign up for the study as a result of word-of-mouth, ongoing marketing, radio-addresses and prize draws. The rate of increase in study participation is off-set slightly by the attrition of a small number of participants each year.

Fish Counts

2012 creel results are summarized in **Table 1**. Results from previous years are also provided for comparative purposes.

Table 1: 2012 Creel Results and Historical Results to Date.

Fish Species	Counts					
	2012	2011	2010	2009	2008	2007
Arctic Char	24	113	103	117	24	3
Arctic Grayling	1	1	3	1	-	-
Lake Trout	1,014	1,710	860	525	825	210
Lake Whitefish	471	460	326*	52	192	-
TOTALS	1,510	2,284	1,292	694	1,041	213

* Single report of 300 Lake Whitefish captured via nets south of Baker Lake.

Discussion

As in previous years, creel data suggest that fish catch remains high in the spring and summer (especially in May and June) (**Figure 1**). A second peak for fish catch totals was observed in November 2012 (similarly, fish catch totals were highest in November 2011, during a year when winter fish harvest monthly totals exceeded spring and summer totals). Total fish catch was high in 2012 compared to all other years except for 2011 (**Table 1**). Data were standardized through the simple division of fish harvested by the number of participants (**Figure 2**). Standardized results indicate that the highest number of catches per participant occurred in November and December, when fewer participants were fishing but catches were higher, likely due to the use of set nets. The majority of fishing (i.e., most number of participants) occurs between May and August. Similar trends have been seen in past years; however, winter fishing in 2011 and 2012 involved more participants than in previous years. Seven (7) participants recorded fish catch in November 2012 and nine (9) in November 2011, compared to three (3) participants reporting in November 2010.

Figure 1: Fish Harvests per Month (2008 – 2012)

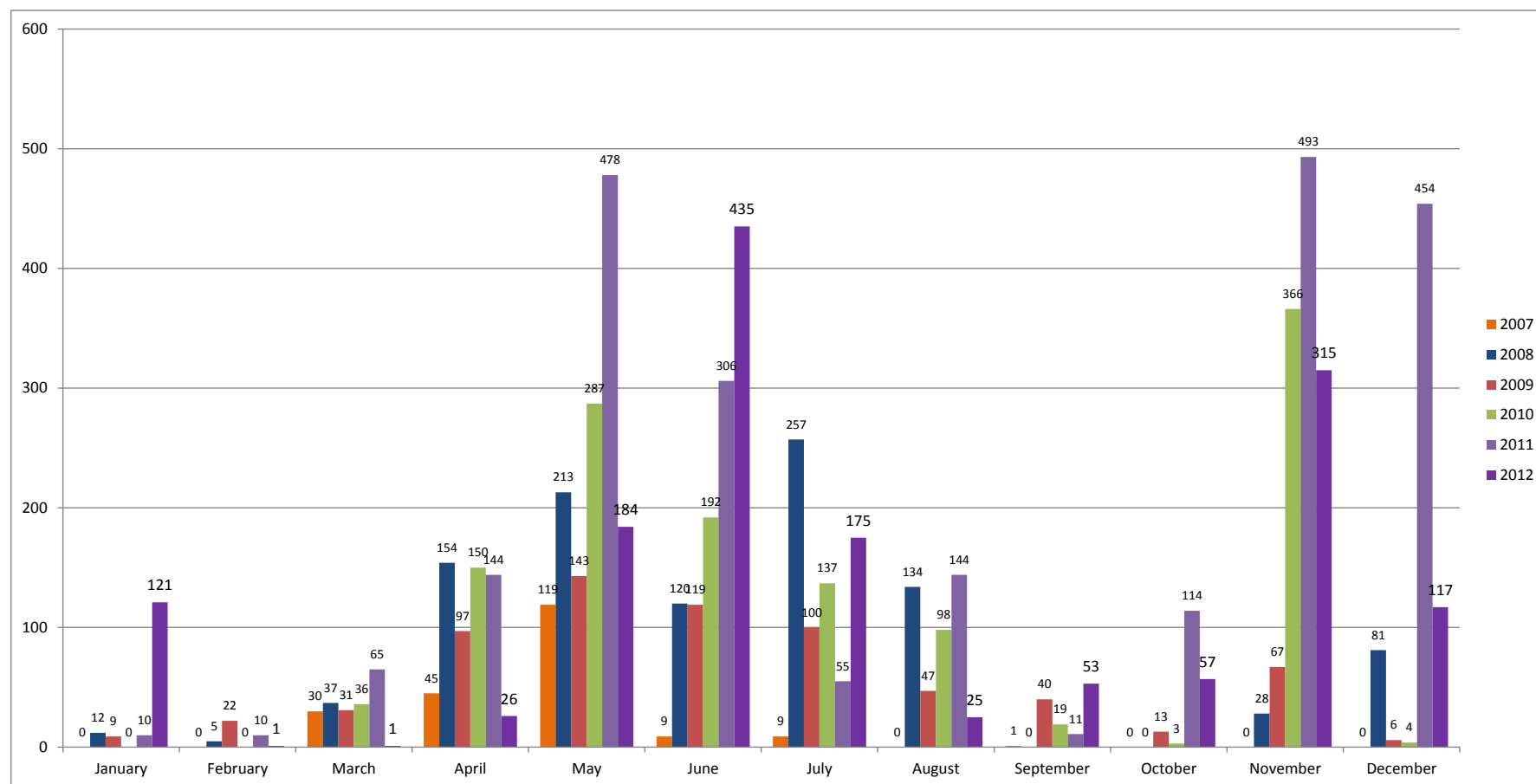
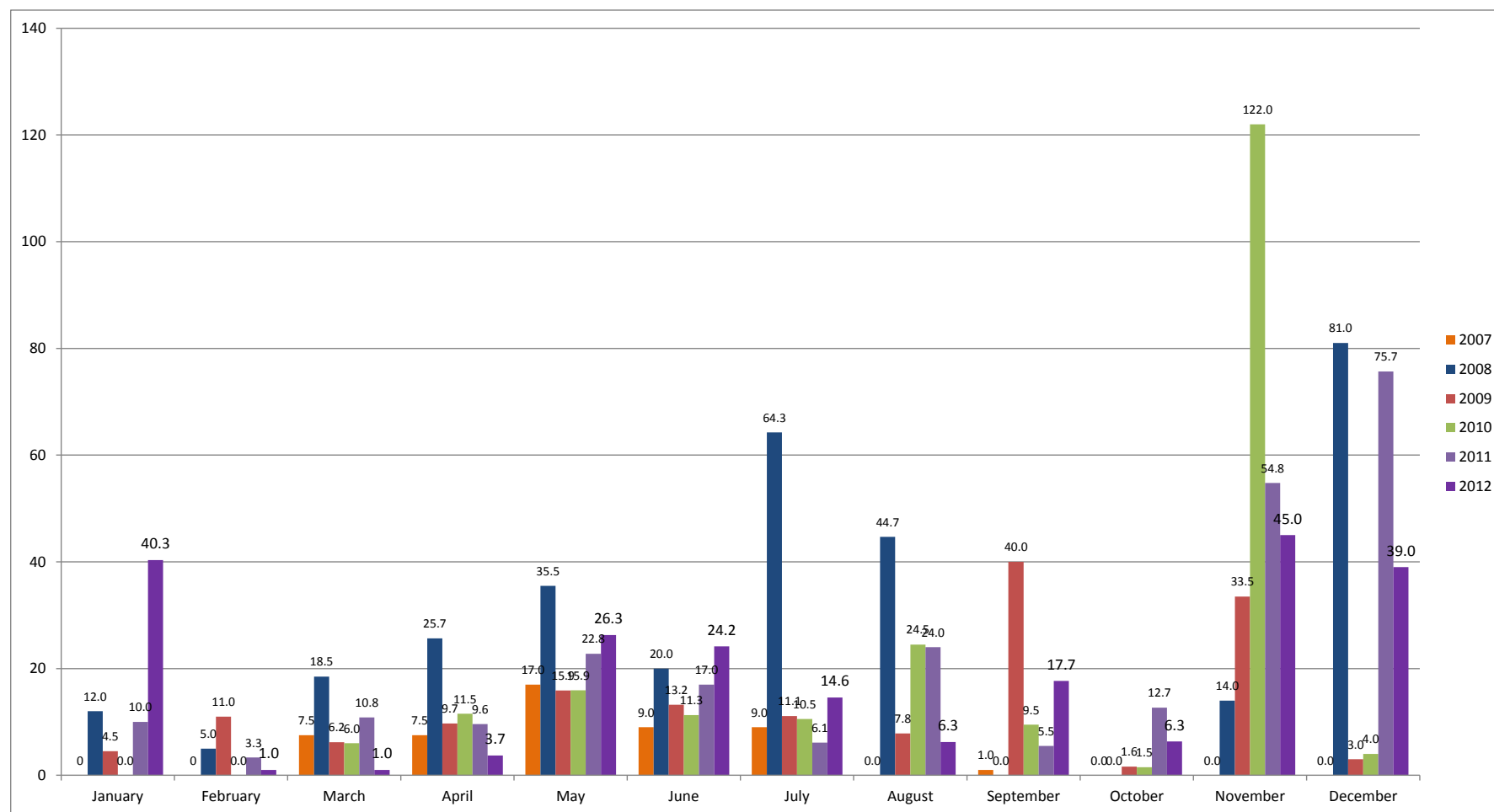


Figure 2: Fish Harvests per Month per Participant in (2008 – 2012)



Arctic Grayling catches continue to remain low across years. Arctic Char catches in 2012 were lower than reported catches from the past three years (2009-2011). Lake Trout and Lake Whitefish catches continue to vary widely between years, generally increasing, and may be confounded by the use of nets in some years (e.g., 2011 and 2012). Lake Trout catch in 2012 is much higher than most other years, except for 2011. Total Lake Whitefish reported was similar in 2011 and 2012. Creel survey data help to evaluate these types of fishing trends in the community of Baker Lake.

Fish Harvest Distribution

Arctic Char

2012 Arctic Char captures were predominantly around Whitehills Lake and Baker Lake (**Figure 3**). Fewer Arctic Char were caught in 2012, and most were caught near Baker Lake. This pattern is similar to Arctic Char captures in 2008 and 2009, which were limited primarily to Baker Lake.

Arctic Grayling

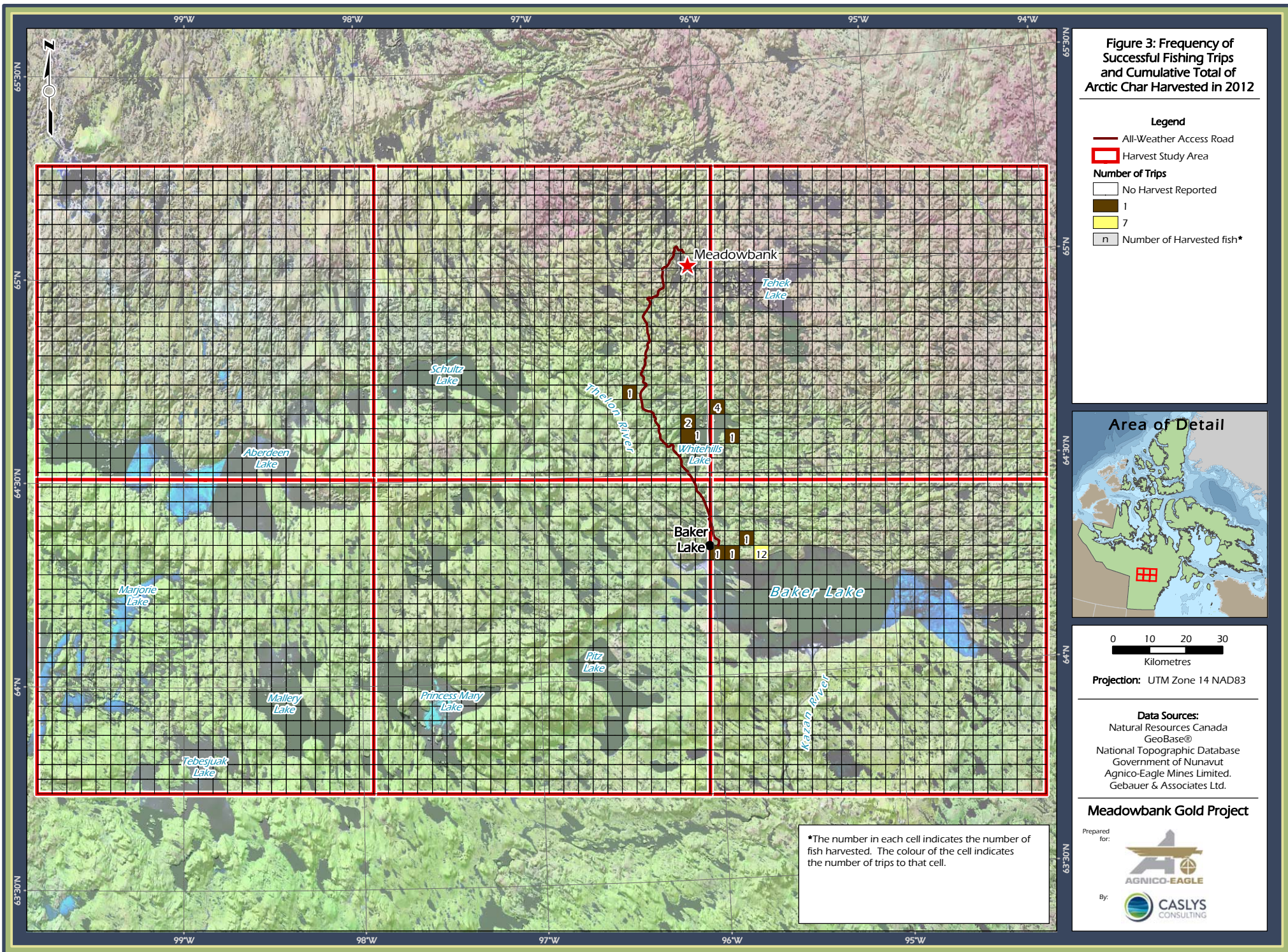
Only one (1) Arctic Grayling capture was reported in 2012. In previous years, Arctic Grayling has most often been caught along the shores of Baker Lake by net. Prior to 2009, no Arctic Grayling captures were reported.

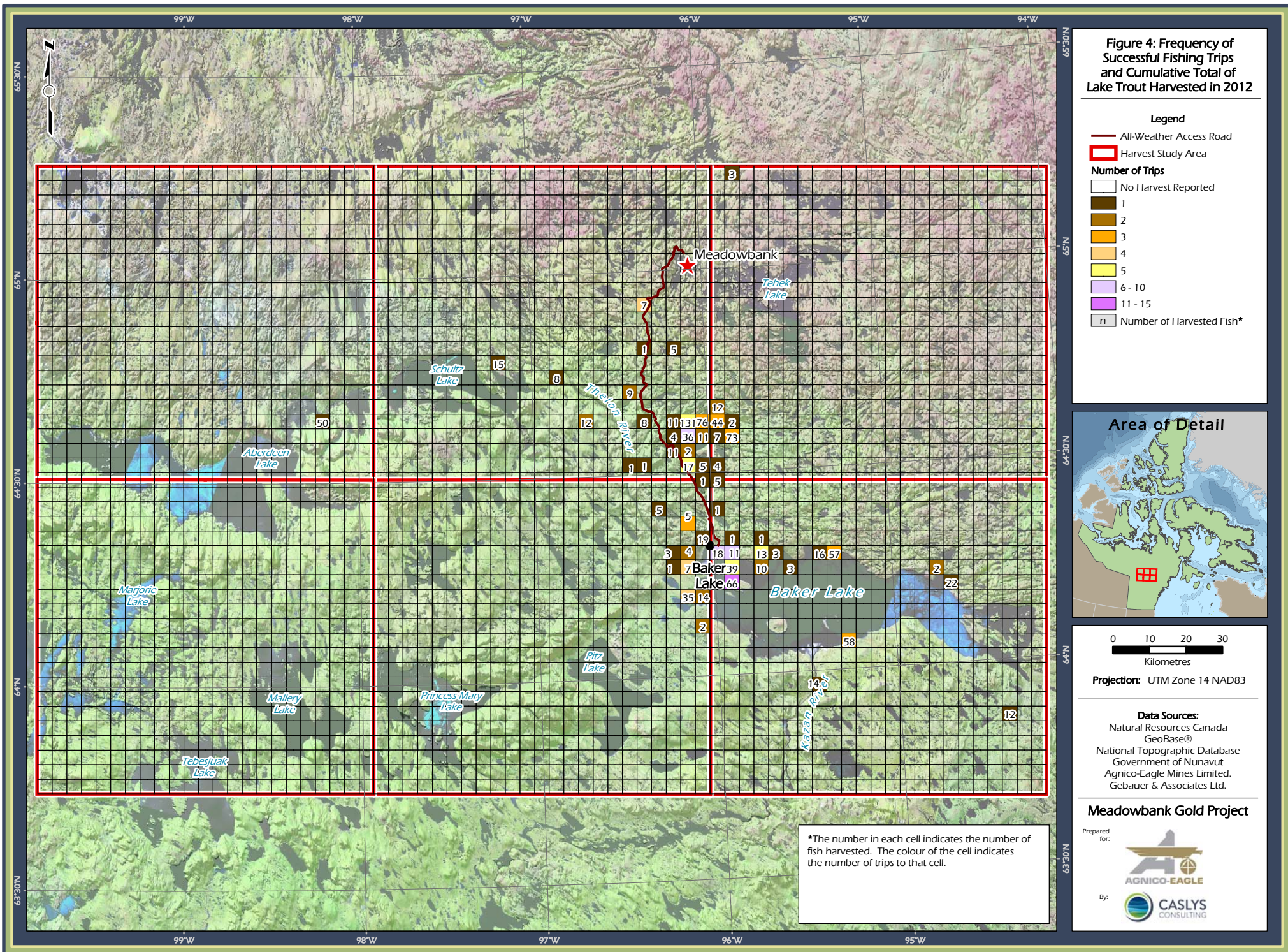
Lake Trout

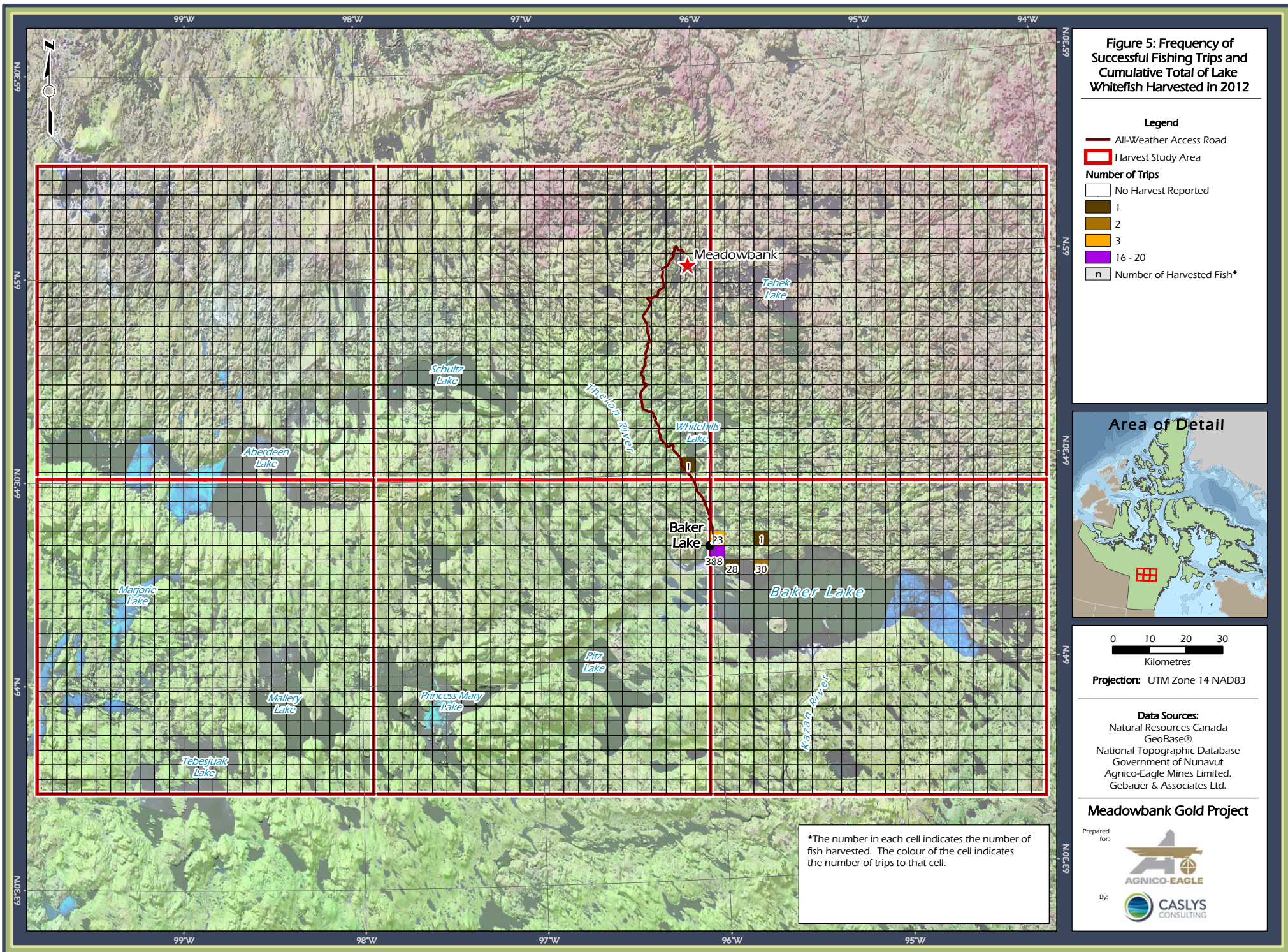
As in previous years, most Lake Trout capture was from the area around the Hamlet of Baker Lake, Whitehills Lake and in close proximity to the AWAR (**Figure 4**). The number of fishing trips to Baker and Whitehills lakes was much higher than other areas in 2012, with correspondingly higher catches. Some fishing spots were visited more than 10 times. Fewer trips and lower catches were recorded in farther afield areas such as the Thelon River, Schultz Lake and north of Whitehills Lake with most Lake Trout fishing.

Lake Whitefish

Lake Whitefish captures continued to occur in relatively low densities with successful fishing effort centred south of the Hamlet of Baker Lake in 2012 (**Figure 5**). Most Lake Whitefish were caught in this area along the shores of Baker Lake via nets, as in previous years. No visits to the Kazan River were recorded in 2012. Only one Lake Whitefish was caught outside of the Hamlet of Baker Lake, at Whitehills Lake.







All Fish

Creel results between 2007 and 2012 are presented in **Figure 6**. The highest densities of fish captures continue to be Whitehills Lake and the shores of Baker Lake. While the fishing effort in areas such as the Thelon River, north of Whitehills Lake, and along the eastern, western and southern shores of Baker Lake does not appear to have changed greatly over the duration of the creel survey, an increased number of fishing trips appears to be occurring in areas along the AWAR over time (i.e., Whitehills Lake, close to the Hamlet of Baker Lake).

Project-related Effects

The majority of participants continue to fish around the perimeters of Baker Lake and Whitehills Lake irrespective of the AWAR as high fishing rates were also reported for Whitehills Lake in 2007 and 2008 prior to AWAR construction. Thus, unless fishing trips are tied to hunting trips, it would appear that study participants are less willing to travel long distances to catch fish, regardless of AWAR access, likely due to the abundance of fish in close proximity to the Hamlet of Baker Lake.

We trust this provides the information you currently require. Should you have any questions, please do not hesitate to contact the undersigned at 604-261-2716.

Respectfully submitted,

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