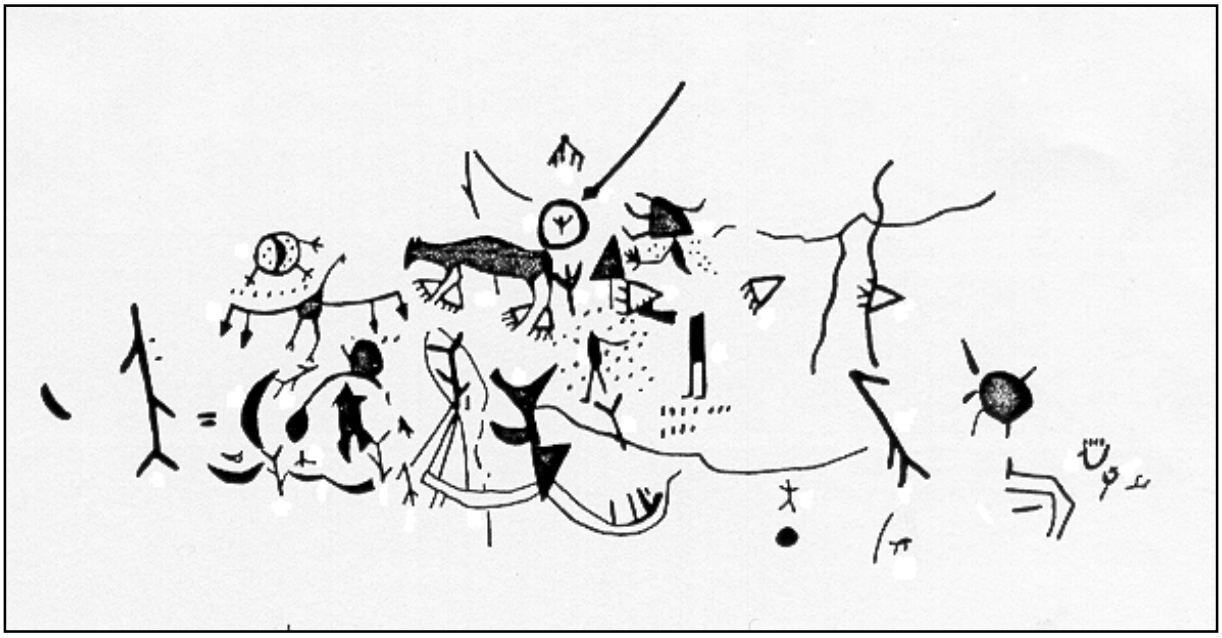
NORCAN CONSULTING LTD

INTEGRATED RESOURCE MANAGEMENT



Review of Historical White Sturgeon Distribution Within the Nechako River Watershed

Review of Historical White Sturgeon Distribution Within the Nechako River Watershed

Prepared for:

BC Ministry of Environment, Lands and Parks
Omineca Sub-Region

Prepared By

Veronica Cadden
Norcan Consulting Ltd.
RR2 Site 28, Comp 39
Prince George, BC
V2N 2H9
Ph: 250-962-1282
Fax: 250-962-1292
E-mail: norm@norcanc.com

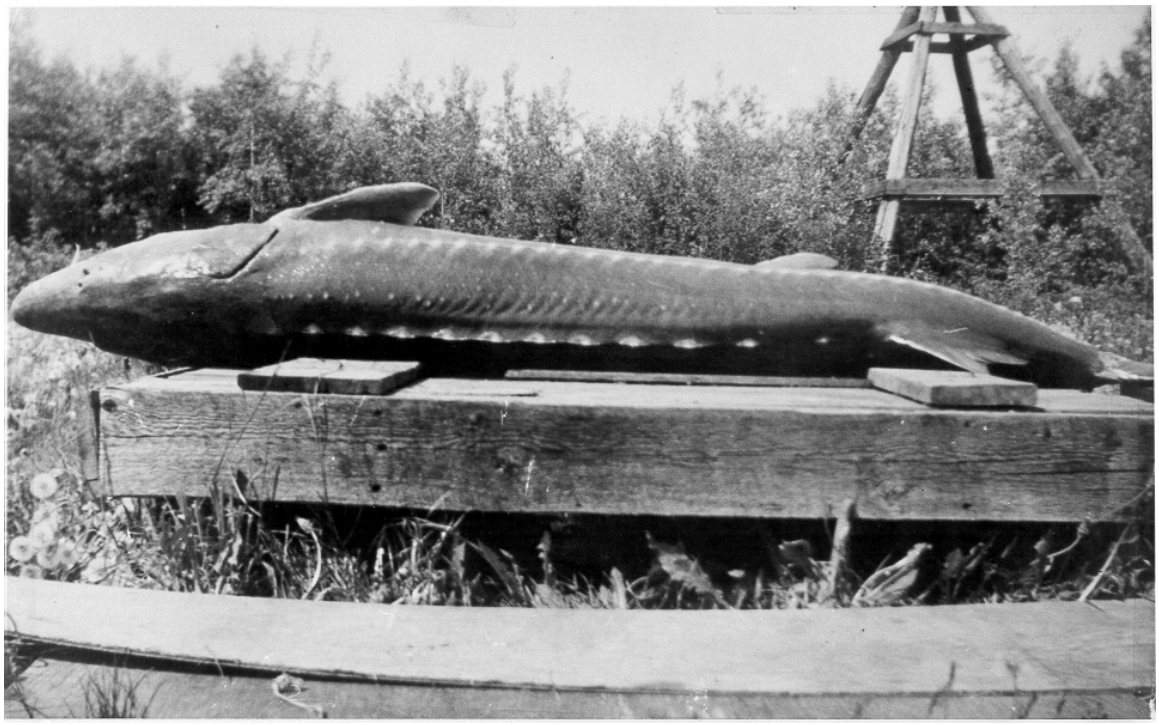
May 9, 2000

Cover image: Pictograph at Stuart Lake depicting sturgeon at center bottom of illustration. Taken from Richards 1978

Acknowledgments

During the course of this project, many people assisted with great interest and dedication. The assistance of the members of the local community was critical to the study. Norcan Consulting Ltd. would like to thank Leo LaRocque of Fort Fraser, a retired DFO guardian, Jim Simonson of Vanderhoof, the son of commercial sturgeon fisherman Ed Simonson, Wayne Salewski, who spent many hours fishing for sturgeon recreationally in the 1970s, and assisted with a College of New Caledonia Sturgeon Study in the late 1970s and early 1980s, and Bert Irvine, a guide and trapper along the upper Nechako. These four people provided valuable information regarding the distribution and history of sturgeon in the Nechako watershed.

We would also like to thank Audrey L'Heureux of Vanderhoof for her interest and contributions to the study and many other community members who were contacted by letter and phone who considered the project important. Many other people assisted in the location and gathering of information. Dave Mattison, Archivist, BC Archives; Byron Nutton, Rich Elson, and Christine Peressini of the Department of Fisheries and Oceans; and Ted Zimmerman, Senior Fisheries Biologist of Ministry of Environment Lands and Parks, Prince George Region.



Sturgeon caught by Ed and Rose Simonson in the 1950s. Weight 385lbs.
Courtesy of Jim Simonson

Table of Contents

Acknowledgments i

Table of Contents ii

1.0 Introduction 1

2.0 Study Area 3

3.0 Methodology 3

4.0 Results 4

4.1 Upper Nechako 6
4.2 Fraser Lake (Nautley) 6
4.3 Fraser Lake (Stellako) 8
4.4 Stuart Lake 8
4.5 Stuart River 10
4.6 Nechako River (Fort Fraser to Vanderhoof) 11
4.7 Nechako River (Vanderhoof to Prince George) 11

5.0 Discussion 14

5.1 Early Evidence of Over-fishing 14
5.2 Government Regulations 15
5.3 Inherent Problems with the Data Collected 16

6.0 References Cited 20

Appendices

Appendix 1 Reference Chronology 22
Appendix 2 Interview Summaries 33
Appendix 3 Sample of Request for Interview Letter 46

List of Figures

Figure 1 Study Area 2
Figure 2 Sturgeon Distribution Map 13

List of Tables

Table 1 Recorded catch rates between 1815 and 1892 at Fraser Lake Post 14
Table 2 Recorded catch rates between 1818 and 1892 at Fort St. James 14
Table 3 Sturgeon Non-tidal Fishing Licenses issued prior to 1943 16
Table 4 Incidence of Historical Documentation for Each Watershed Section 18

1.0 Introduction

White sturgeon (Asipenser transmontanus) within the Nechako watershed have been intensively studied over the past 20 years (Aitken 1981; Dixon 1986; Envirocon 1982,1983,1984; RL&L1995-1999). The current condition of the sturgeon population is now fairly well understood, but as the historic distribution and population levels are unknown, the state of the relative health of the species is not clear. Prior to the last 20 years, although the sturgeon have been fished continuously, little if any study on the Nechako resident species has been conducted. What was known of the sturgeon in the region was local knowledge, held by a few interested parties. At one time in the early 1900s, an attempt was made by the then fisheries commission to record the fishing statistics of the sturgeon in the Nechako and Stuart Rivers, but this attempt failed, due to the lack of participation of most of the fishers.

Recent studies have attempted to increase the knowledge base about this little documented fish, and in doing so, a concern has been raised regarding the future of the Nechako white sturgeon. The concern has been strong enough for the fish to be placed on the “vulnerable” list by the federal Committee on the Status of Endangered Wildlife in Canada in 1991. The term “vulnerable” refers to species ‘subject to change in response to fishing pressure and habitat disturbance’ (Echols 1995). In 1995 the BC government downgraded the sturgeon’s status to ‘endangered’. Small catch numbers, and evident low numbers of juveniles in the population have sparked this concern.

This project has been conducted in an effort to provide information by which the validity of these concerns may be determined. The intent was to gather information regarding the population as it was prior to changes in the hydrology of the system (impacts caused directly and indirectly by the construction of the Kenney Dam), and the increase of sturgeon fishing generated by the influx of people into the community in the early 1900s and later, in the 1960s and 1970s.

The study was designed to examine the historic distribution of the White Sturgeon in the Nechako Watershed. A document review and community interview process formed the basis of data collection. A second phase of the project is expected to be undertaken in the spring that will include the participation of First Nations groups that utilize the watershed. Due to the short period of time allowed for this phase of the project, the main channel of the Nechako River was the focus, although references to the species in the Stuart River system were noted and included in the report.

The goal of this project was to gather, organize, and summarize information. It is expected that this information will serve to assist in the development of a sturgeon recovery program in the Nechako River drainage by the Ministry of Environment, Lands and Parks. A chronological reference list is attached as an appendix to this report.

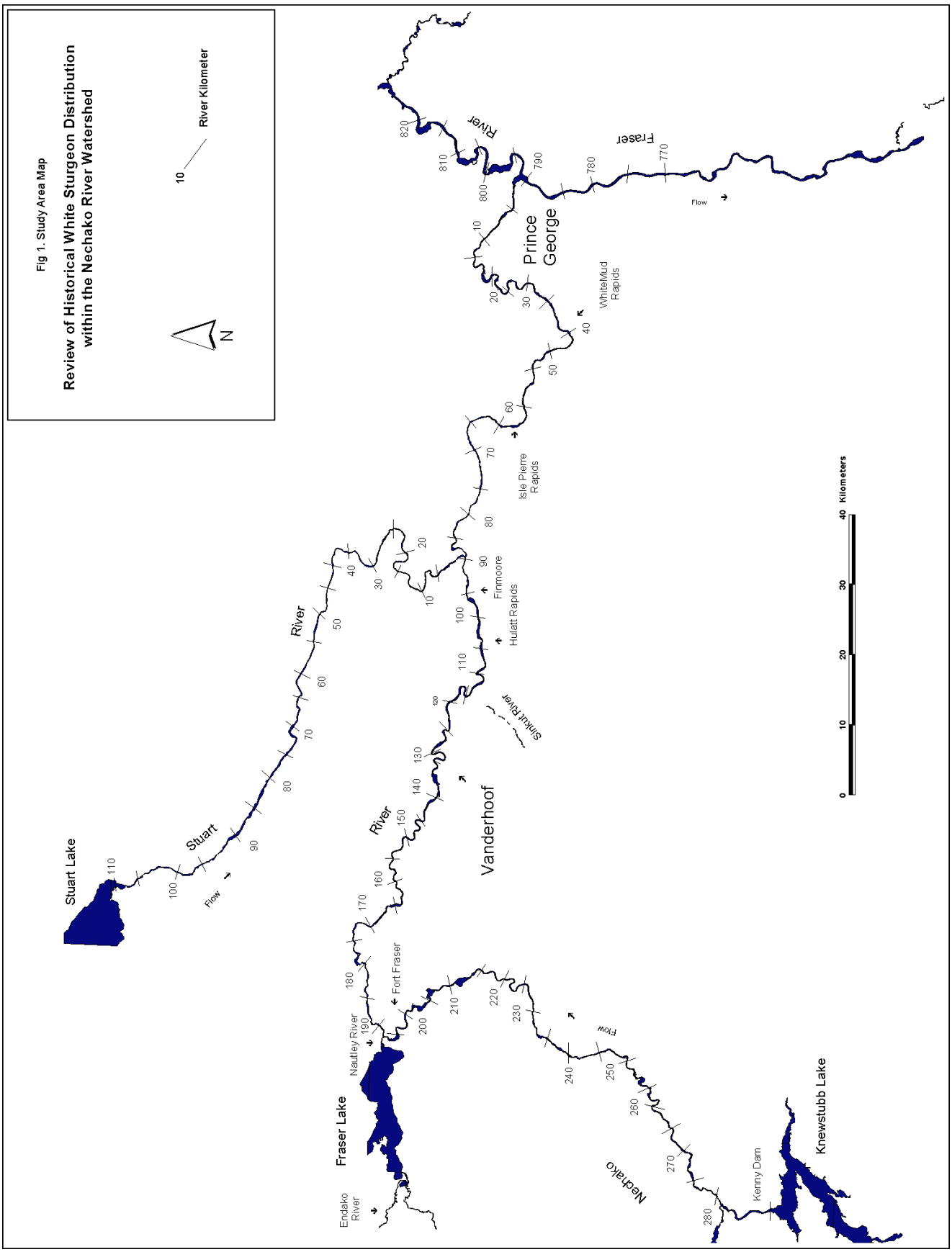


Fig 1. Study Area Map
Review of Historical White Sturgeon Distribution within the Nechako River Watershed
N
10
River Kilometer
Stuart Lake
Stuart River
Flow
Fraser River
Flow
Prince George
WhiteMud Rapids
Isle Pierre Rapids
Finmoore
Hulatt Rapids
Sinkut River
Vanderhoof
Fort Fraser
Nautley River
Fraser Lake
Endako River
Nechako
Flow
Kenny Dam
Knewstubb Lake
0
10
20
30
40
Kilometers

2.0 Study Area

The area of concern includes the Nechako watershed from the confluence of the Nechako and Fraser Rivers at Prince George, to the Nechako Canyon, Fraser Lake, the Nautley and Stellako Rivers, and Stuart Lake and Stuart River (Study Area shown in Figure 1).

3.0 Methodology

In order to address white sturgeon population concerns, several features have been considered. The most important consideration is the historic distribution of the sturgeon species prior to the construction of the Kenney Dam in 1952. In addition, there are several other lines of information that have been pursued. Some of these include relative abundance and size. Determining the time of year the sturgeon were caught, and what quantities were considered normal by fishers would also contribute to assisting the comparison between today's statistics and historic populations. Other data including size, weight, and sex of fish considered acceptable to keep, movement, photographs, and any other relevant data were also researched.

The project was divided into two phases. The first phase was an Archival and Library search.
The steps involved in compiling the information reference included:

1) A data search using the Internet for locations, finding aids and finally reference numbers for relevant data. Libraries, pertinent websites, and archives within BC and Canada were searched.
2) Data collection involving travel to libraries and archives to retrieve pertinent data included the BC Archives, Vancouver Archives, Department of Fisheries and Oceans Libraries in Vancouver and Prince George, Prince George Regional Museum, Prince George Public Library, University of Northern British Columbia Library, the Hudson's Bay Archives via interlibrary loan, the Fort St. James Nation Historic Park library, and the Tl'azt'en Archives at Tachie.
3) Data compilation to organize the data into a useful and usable format for the Fraser River White Sturgeon Project.

The second phase of the project was to include an interview process with both First Nation groups and other community elders. First Nations, and Community members are an important source of information regarding the past and present sturgeon populations in the Nechako watershed. These people have first hand knowledge of the distributions and numbers of sturgeon found within their customary fishing areas. In some cases, dependence on fishing represented an important aspect of their livelihood. In addition, an active oral tradition among the First Nations people provides a reliable source of information for data associated with past generations no longer available for interview.

Due to time constraints, this phase of the study had to be reduced. On discussion with Ted Zimmerman (MELP SFB), it was decided that this phase would be reduced to include interviews with members of the general community only. The time frame the project was set in could not do justice to the potentially extensive information offered by First Nations people. It has been proposed that the First Nation aspect of this phase be conducted in the next fiscal year, when more time can be allotted to this important aspect of the study.

Steps involved in this phase of the study included

1) The composition and posting of a letter requesting interviews with First Nation and other community elders to discuss various aspects of the sturgeon populations in their fishing areas prior to the construction of the Kenney Dam. The purpose of the study was outlined in the letter to explain the rational behind the request. This letter was sent out to relevant First Nation groups and other local groups on February 3, 2000 (see Appendix 2 for a sample copy of the letters sent out).

2) Follow up call for request for interview letters were made in the last week of February. The delay was designed to ensure that potential contacts were given sufficient time to consider the request. Some success resulted from this process. All recipients of the letter had given the request some thought, and four interviews were conducted due to this process.

3) This phase covered the collection of interview data. Where appropriate, specific data relating to distribution and numbers of sturgeon taken from fishing locations was to be recorded, along with other pertinent data that arose during the interview process. All of the information retrieved in this process was anecdotal, and offered with considerable grace and enthusiasm.

The third and final phase was the compilation of the information retrieved from all sources, to be summarized in this report. The results of the study have been classified according to drainage sections. These drainage sections are labeled Upper Nechako, Fraser Lake, Fort Fraser to Vanderhoof, Vanderhoof to Prince George, Stuart River, and Stuart Lake. A discussion of these results is presented as well. A map indicating the known locations of sturgeon sightings or capture since 1812 to the present is included in this report.

4.0 Results

This section of the report presents the results from the references used, and the resulting record of distribution of sturgeon within the watershed from 1812 to the present. The focus of the study was on the years prior to 1950, although information was collected for later years when available. The length of the Nechako and Stuart Rivers has been measured in rkm (river kilometers) using the system presented RL&L 1999 Region 7 Data Report. Each place sturgeon have been caught

or observed has been given an 'Area' number. Areas where sturgeon have been observed are located by rkm, and referenced according to source. Area numbers are indicated on Historic Distribution of Sturgeon in the Nechako Watershed Figure 2.

Historic numbers of sturgeon caught and/or observed for each of the different watershed sections is presented here. The information has been retrieved from both written records and local knowledge. A table showing the recorded numbers of Sturgeon caught in each watershed section is presented in the discussion section of this report.

Archaeological Record

Possibly as a result of the cartilaginous nature of the skeleton of the sturgeon, the poor preservation of bone in Central Interior soils, and the general lack of extensive archaeological excavations in the area, no sturgeon remains have been uncovered in the archaeological record of the Nechako watershed. Pictographs at Stuart Lake illustrate sturgeon (Richards 1978). Although no date has been applied to the pictographs at Stuart Lake, they are presumed to be pre-contact. Morice (1893) states, in reference to these pictographs that "…is only an aggregate of pictures or signs painted in red ochre by different individuals and at different times. Most of them are very old".

Historical Record

The earliest written reference to White sturgeon in the Nechako drainage occurs in the D.W. Harmon's Hudson's Bay Post Journal for Fort St. James (Stuart Lake) in 1812. He enters:

> "June 23 Tuesday (1812). The natives this morning took a Sturgeon that might weigh 200 pounds but there are many in the lake much larger, but the Natives had no method for taking them, neither are the nets we have sufficiently strong to hold them."

In 1826, the New Caledonia, District Report states:

> "…In Fraser River and Lake and Stuarts Lake Sturgeon are caught in June and July are from two to four hundred pounds weight, but never in large quantities…"

Since that time, various documents have made reference to sturgeon within the watershed, but with the exception of the HBC post records, most documents are in the form of government correspondence regarding specific, individual issues and licensing, and anecdotal accounts in town and area histories. A summary of the document references located in the course of this project is located in Appendix 1.

Local Knowledge

Interviews with local community members were conducted to gather local knowledge of the sturgeon. Leo LaRocque of Fort Fraser, Bert Irvine from the Upper Nechako, and Wayne Salewski of Vanderhoof had information pertaining to the watershed after 1950. Jim Simonson of Vanderhoof provided information strictly from recollections of sturgeon fishing with his father Ed Simonson who fished commercially for sturgeon from 1922 through to the mid 1950s. Information given indicated fishing areas, numbers, and fishing techniques. The bulk of the information given here was in regard to sturgeon sightings and catch areas. Simonson, LaRocque and Salewski pinpointed the locations of known sturgeon fishing areas on 1:50,000 and 1:150,000 scale maps. The interviewee kept no consistent records of actual numbers caught or seen, and information regarding numbers of sturgeon was general in nature. To review a summary of the information gathered during interview, see Appendix 2.

4.1 Upper Nechako

Only one positive reference to sturgeon in this section of the river has been reported. Sturgeon 'drags', were observed in 1955 or 1956, before the spillway failure, at a place known locally as the 'Cut-banks' (Area 1) (Per com Leo LaRocque 2000). Sturgeon drags are indentations in the river floor left by sturgeon as they swim along the muddy or sandy bottom of the river.

Bert Irvine, a resident of the Upper Nechako since 1954, indicates that he has not caught or observed sturgeon in this portion of the river. He has only observed sturgeon on the Nechako between Vanderhoof and Hulatt.

Known sighting and/or capture areas:

Area 1 – at 277rkm-Nechako River. (LaRocque 2000)

4.2 Fraser Lake (Nautley)

D.W. Harmon made the first written reference to sturgeon in Fraser Lake, in his journal of travels in Monday, October 2, 1815:

> Monday, October 2 (1815). Within a few days past, we have caught, in nets made for the purpose, of strong twine, three sturgeon, one of which measured ten feet and three inches in length, and four feet and one inch found his middle, which might weigh about four hundred pounds. All that we have taken, were uncommonly fat, and of the best flavour of any that I have ever eaten." (Harmon 1820. pg. 253)

Since that time, Hudson's Bay Post records, and anecdotal accounts from the early 1900s on have indicated ongoing presence of sturgeon in Fraser Lake. Generally, sturgeon netted in the

lake were caught off the north shore directly west of the small island found at the Nautley River outlet of Fraser Lake. Hudson's Bay employees and later, Ed Gerhard fished from this point.

Known sighting and/or capture areas:

Area 3 – In Fraser Lake along the south shore at Lejac. (LaRocque 2000)

Area 4 – In Fraser Lake along north shore directly to west of island in outlet of lake. (LaRocque 2000; Fraser Lake Post Journals; Rudland 1988)

Numbers caught or observed:

1815 – 3 sturgeon caught. The largest, approximately 313cm in length and 124cm in girth (Harmon Journal 1815).

1822 – 5 sturgeon catches recorded, between 30.5cm and 213.5cm in length. The fish were netted in June and July of the year. (It is implied in one of the journal entries that further fish were captured but not recorded.) Reports of sturgeon passing through the nets are entered more than once in this year. (Hudson's Bay Post Journals)

1823 – 2 sturgeon catches recorded, both 213.5cm in length, one 106.75cm girth. (Hudson's Bay Post Journals)

1890 - 1 sturgeon (small) traded. The post journal author indicates that this is the first sturgeon he has heard of since he began at Fraser Lake in 1887. This fish was caught accidentally in a salmon net in June (Hudson's Bay Post Journals)

1891 – 1 sturgeon (small) traded. Referred to as 'first of the season'. Traded in the month of June. (Hudson's Bay Post Journals)

1892 – 1 sturgeon (small) traded. Traded in the month of August along with the 'first' salmon. (Hudson's Bay Post Journals)

1900 – mention of a sturgeon net being put in the water. No mention of sturgeon being caught. (Hudson's Bay Post Journals)

1922 – 1 sturgeon netted. License holder No. 12, George Gerhard "captured an enormous sturgeon which had been entangled in some nets he had set out for char. The fish weighed over 500 pds…George kept it captive - with rope around its armoured tail and the other end - tied to the Fraser Lake wharf." (District Historical Society 1896). Month of the year is not mentioned.

1923 – 5 sturgeon netted. License holder No. 25, H.R. Bellack reported 5 sturgeon caught in Fraser Lake that year. Weights are 65lbs, 50lbs, 125lbs, 230lbs, and 100lbs.

1924 – 1 sturgeon observed in the deep water just opposite the outfall of Fraser Lake at the Nautley River (Rudland 1988) Month of the year not mentioned.

1929 – 1 sturgeon caught in Fraser Lake for sale in New York. (Rudland 1988)

1979 – 2 sturgeon caught at Nautley netting area, while fishing salmon. (Fishery Guardian Weekly Report – week ending July 29, Leo LaRocque)

1983 – 1 sturgeon observed at Fraser Lake (Fishery Guardian Weekly Report July 18 Leo LaRocque)

1965 to present – it has been suggested that 2-3 sturgeon on average were caught each year in the earlier years at Nautley, but that the average numbers caught have declined steadily since 1965 (Leo LaRocque, per com.).

4.3 Fraser Lake (Stellako)

As no post was situated at this location, little has been reported for sturgeon presence until the 1900s. It is obvious that consideration was given to sturgeon fishing at Stellako as indicated by a Fort Fraser journal entry of June 24, 1822 that states no further sturgeon are being caught in the nets so "Jacque" takes the nets to Stella to try there. They had no luck on that attempt. The next written reference to sturgeon at Stellako is in 1980 almost 160 years later. The exact location of these recorded catches is not known.

Known sighting and/or capture areas:

Area 2 – In Fraser Lake on south shore at the outlet of Stellako River (LaRocque 2000)

Area 31 – At Hwy 16 bridge crossing over the Stellako River at the west end of Fraser Lake (LaRocque1980, 2000, Simonson 2000)

Numbers caught or observed:

1980 – 1 nine foot sturgeon caught by Mrs. Bernadette Ketlo at Stellako (Fishery Guardian Weekly Report, week ending August 24 Leo LaRocque)

1983 – 1 large sturgeon - "…14 families fishing at Stellako – 192 Sockeye, 1 very big sturgeon…" (Fishery Guardian Weekly Report, August 16 Leo LaRocque)

Both Leo LaRocque and Jim Simonson mention salmon counters on the Stellako Bridge made reports of large sturgeon following the salmon over the years. Jim said that some accounts indicated that some sturgeon were up to 16 feet long – but he doubts that this is true.

4.4 Stuart Lake

The first written reference to sturgeon in Stuart Lake is made in John Stuart's journal. It is also the first such reference to sturgeon within the watershed. As in the rest of the watershed, the First Nations have utilized the sturgeon in this part of the system for centuries, but it was not until 1812 that first documented references are made. It is clear that the largest of the sturgeon could not be caught until a technology strong enough to hold the struggling fish could be developed. They certainly were observed, and a two hundred pound sturgeon was not considered overly large. It is assumed in this report, that unless otherwise stated, all sturgeon fishing carried out by post employees was undertaken at or very near the outlet of the Stuart River, close to the shoreline as indicated by the discussion in one of the journals about attempts to net the river.

> "Took a middle sized sturgeon which weighed 130 Libs entire, this is the first fruit of the new net, we have put all the sturgeon nets, say 4 old and new in the water. Our object is to bar the channel of the river in order to ascertain whether sturgeon may not be more plentiful at a greater distance from the shore than in those stations where the nets have hitherto been generally placed". (Hudson's Bay Post Journal, James Douglas 1826-1827)

Known sighting and/or capture areas:

Area 29 – Extreme southeast end of Stuart Lake at the lake outlet - Stuart River (Hudson's Bay Post Journals; Caledonia Courier July 1973)

Numbers caught or observed:

1818 – 21 sturgeon caught in the month of June, from 224cm to 366cm in length. The largest of the sturgeon was measured 150cm in girth, it was estimated that it would weigh from five hundred and fifty, to six hundred pounds. (Hudson's Bay Post Journals)

1820 – 1 sturgeon caught in July. 228.75cm in length. (Hudson's Bay Post Journals)

1822 – 2 sturgeon caught in July. No mention of size or weight. Information retrieved from incidental note in Fraser Lake Post Journal.

1825 – sturgeon observed in May by 'Indians'. (Hudson's Bay Post Journals)

1825 – 1 sturgeon traded in the month of May (Hudson's Bay Post Journals)

1825 – 7 sturgeon netted by HBC post employee in May. Three of these fish are large with recorded lengths of 244cm N=2, and 228.75cm N=1. Three of the fish are recorded as small. The other two have no size attributed to them. (Hudson's Bay Post Journals)

1825 – 1 sturgeon observed by HBC post employees in June (Hudson's Bay Post Journals)

1825 – 2 sturgeon caught by Qua, who worked and traded with the HBC at times, in the month of June. These sturgeon were captured in a 'Vesreau'? (Hudson's Bay Post Journals)

1825 – 2 sturgeon observed passing through nets in July. (Hudson's Bay Post Journals)

1825 – 1 small sturgeon caught by Qua in July. (Hudson's Bay Post Journals)

1829 – 2 sturgeon netted by HBC employees in June. 130lbs and 128lbs in weight. (Hudson's Bay Post Journals)

1829 – 1 sturgeon netted and one sturgeon observed by HBC employees in July. 240lbs in weight. (Were using willow nets) (Hudson's Bay Post Journals)

1831 – 3 sturgeon netted by HBC employees in July. Weights include 170lbs (exclusive of head and roe), 100lbs (exclusive of head), and 135lbs (excusive of head) (Hudson's Bay Post Journals)

1831 – 1sturgeon netted by HBC employees in August. 200lbs in weight, exclusive of head. (Hudson's Bay Post Journals)

1848 – 4 small sturgeon traded in August (Accounts and Private Orders, Fort St. James)

1862 – 1 sturgeon caught in nets, August (Hudson's Bay Post Journals)

1862 – 2 sturgeon caught in nets, September (Hudson's Bay Post Journals)

1892 – 3 sturgeon caught in July. Indicates that fishing has been undertaken for some time with no success. Weight range of catch from approximately 12 to 22lbs. (Hudson's Bay Post Journals)

1893 – 2 sturgeon caught in July. (Hudson's Bay Post Journals)

1893 – 1 sturgeon caught in August. (Hudson's Bay Post Journals)

1973 – 1 sturgeon caught in July by Francesca Antoine and Betsy Prince. Approximately 250 lbs in weight. (Caledonia Courier, July 1973)

4.5 Stuart River

The Stuart River extends from the southeast end of Stuart Lake, and continues for approximately 110 km to its confluence with the Nechako River to the south and east. The Stuart River area, as used in this report includes the extent of the river except for its outlet at Stuart Lake. No reports of sturgeon, or sturgeon fishing are made in Hudson's Bay records for this part of the watershed, although travel up and down the waterway was frequent. Accounts of sturgeon fishing along the river began after settlement began in the early and mid 1900s and documented or first hand information regarding the numbers caught or observed is sparse.

Known sighting and/or capture areas:

Area 25 – at 42 rkm Stuart River (notes for Nechako Valley Historical Society 1979)

Area 26 – at 45rkm Stuart River (notes for Nechako Valley Historical Society 1979; Salewski 2000; Simonson 2000)

Area 27 – at 46.5 rkm Stuart River (Salewski 2000)

Area 28 – at 48 rkm Stuart River (Simonson 2000)

Area 30 – at 91rkm Stuart River (Salewski 2000)

Numbers caught or observed:

1914-1930 – large sturgeon caught periodically at Sturgeon Point. Small sturgeon caught approximately 3km downstream from Sturgeon Point (Vanderhoof, the Town that Wouldn't Wait. Notes).

1985 – large sturgeon observed while fishing for trout at Sturgeon Point (Wayne Salewski Per Com. 2000)

1970-1985 – report of a large sturgeon caught across the river from Chinlac Village site (Wayne Salewski)

Generally, all reports of sturgeon catches and sighting in the Stuart River are anecdotal. No community members were interviewed who spent time fishing on the Stuart River.

4.6 Nechako River (Fort Fraser to Vanderhoof)

This section of the Nechako River is approximately 60km in length. The confluence of the Nechako and Nautley Rivers is at the upper end of this section. Virtually no records have been kept on sturgeon in this section of the river. With the exception of Fort Fraser and Fort Fraser North, settlement along the upper end of this section was not as active as the middle portion of the river, in the Vanderhoof area. No Hudson's Bay Co. records mention sturgeon in this stretch of the river.

Known sighting and/or capture areas:

Area 5 – at 191 rkm Nechako River (Rudland 1988)

Numbers caught or observed:

1919 – 1 sturgeon, weighing 250 lbs. (Rudland 1988)

1919 – several small sturgeon. August 15, "… I always understood that [it] and several smaller ones were killed when they were blasting out the false-work for the bridge construction." (Rudland 1988). This refers to the highway bridge built in 1919 that crossed the Nechako River approximately 150m below the confluence of the Nautley and Nechako Rivers

4.7 Nechako River (Vanderhoof to Prince George)

This section of the Nechako is approximately 135km in length. It incorporates several known sturgeon-fishing locations between Vanderhoof and the confluence of the Stuart and Nechako Rivers and two others in the vicinity of Isle Pierre. Regarding this portion of the river, information was gathered from government records (BC Archives), town histories, HBC post records and anecdotal sources. The information pertaining to sturgeon fishing locations is more plentiful than actual numbers caught. Until 1920, it was not legal to net sturgeon on the Nechako or Stuart Rivers. In May of 1920, section 21 of the fishery regulations was amended to allow the netting of sturgeon on these two rivers.

Known sighting and/or capture areas:

Area 6 – at 136 rkm Nechako River at Vanderhoof (Salewski 2000)

Area 7 – at 134.5 rkm Nechako River (Salewski 2000)

Area 8 – at 134 rkm Nechako River (Salewski 2000)

Area 9 – at 133.5 rkm Nechako River (Salewski 2000)

Area 10 – at 132 rkm Nechako River (Salewski 2000)

Area 11 – at 131.5 rkm Nechako River (Salewski 2000)

Area 12 – at 125 rkm Nechako River (Salewski 2000)

Area 12a – at 124 rkm Nechako River at Shortreid's Eddy (Simonson 2000; Salewski 2000)

Area 13 – at 124 rkm Nechako River (Salewski 2000)

Area 14 – at 121 rkm Nechako River (Salewski 2000)

Area 15 – 114 - 118 rkm Nechako River (Salewski 2000)

Area 16 – at 114 rkm Nechako River at mouth of Sinkut River (Salewski 2000)

Area 17 – 111.5 rkm Nechako River (Salewski 2000)

Area 18 – at 110 rkm Nechako River at Simonson's Eddy (Simonson 2000; Salewski 2000)

Area 19 – at 104 rkm Nechako River near Hulatt (Simonson 2000; LaRocque 2000; Salewski 2000)

Area 20 – 95 rkm Nechako River at Finmoore (LaRocque 2000; Simonson 2000)

Area 21 – 90 rkm Nechako River at mouth of Stuart River (Salewski 2000)

Area 22 – 82.5 rkm Nechako River – at Wedgwood (Simonson 2000)

Area 23 – 62 rkm Nechako River at Isle Pierre crossing (LaRocque 2000)

Area 24 – 0 - 1 rkm Nechako River at confluence of Nechako and Fraser rivers (HBC Post Journals)

Numbers caught or observed:

1926 – Sturgeon caught in Nechako River (?) 150lbs. (Government records, BC Archives)

1939 – 2 sturgeon caught in the Nechako River (Government records, BC Archives)

1941 – 2 sturgeon caught in the Nechako River, total weight 380lbs. (Government records, BC Archives)

1942 – up to 5 sturgeon caught in the Nechako River (Government records, BC Archives)

1942 – 3 sturgeon caught in Nechako in August; total weight 220 lbs, 2 sturgeon caught in the Nechako in September; total weight 80 lbs. (Note: these five fish may be the same five reported on the other document.) (Government records, BC Archives)

1950s – 1 large sturgeon caught at Finmoore (LaRocque Per Com. 2000)

1922-1956 – 4-5 sturgeon caught each year, on average, by Ed Simonson. Some years the fish were scarce, others years they were plentiful. (Simonson Per Com. 2000)

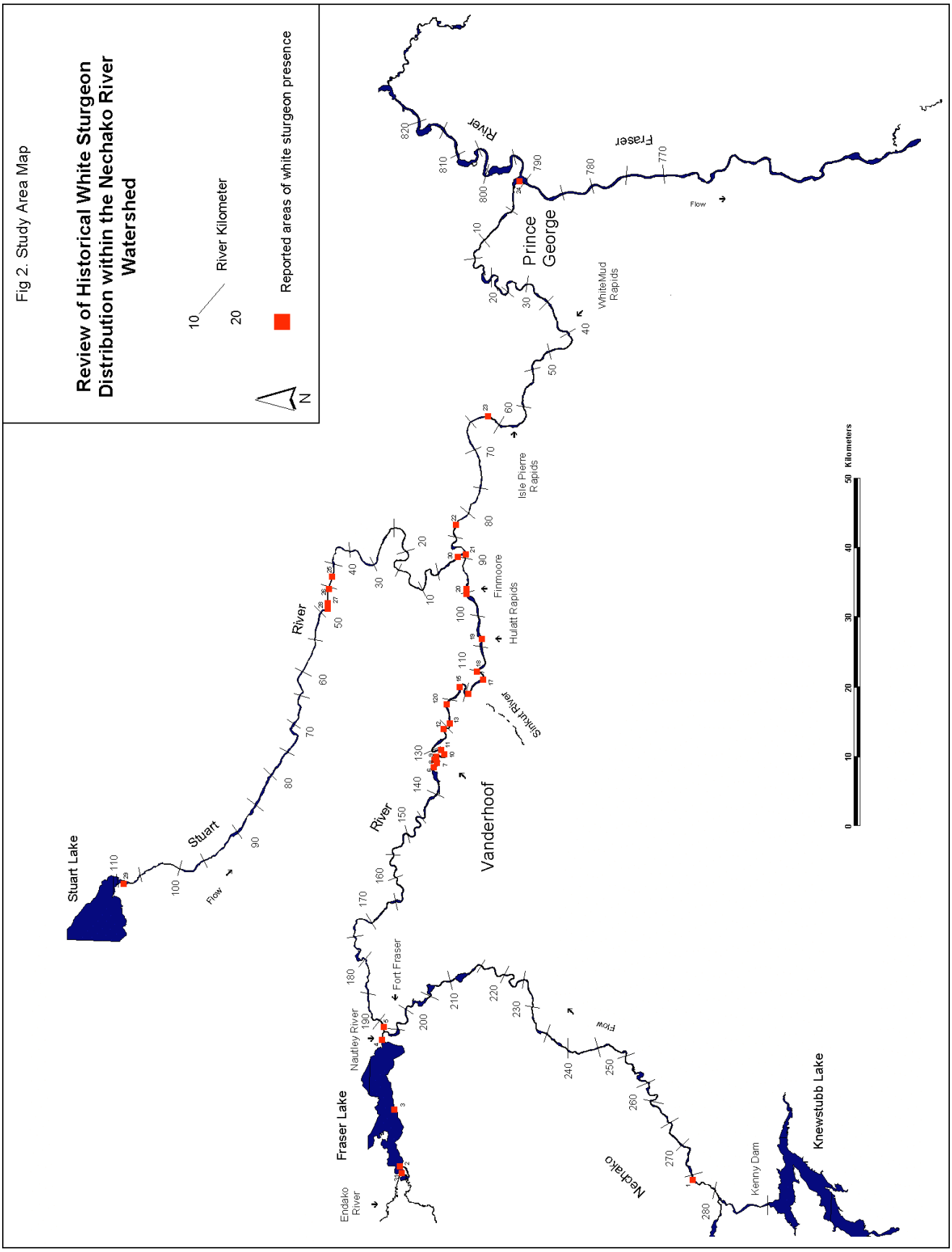


Fig 2. Study Area Map

5.0 Discussion

5.1 Early Evidence of Over-fishing

Over-fishing may have an almost immediate impact on the sturgeon population in the Nechako Drainage. Hudson's Bay records from the early 1800s seem to support this theory. The records show sharp drops in numbers of sturgeon caught after an initial year or two of fishing. Table 1 indicates recorded catch numbers for Fraser Lake – Nautley between 1815 and 1892, and Table 2 indicates recorded catch numbers for Stuart Lake between 1818 and 1892. These two areas have relatively well recorded catch numbers for the early years of the 1800s.

Table 1.Recorded catch rates between 1815 and 1892 at Fraser Lake Post, New Caledonia.

Year	Recorded Number Caught
1815	3
1822	9
1823	4
1890	1
1891	1
1892	1

River Section - Fraser Lake - Nautley

Table 2. Recorded catch rates between 1818 and 1892 at Fort St. James, New Caledonia

Year	Recorded Number Caught
1818	21
1820	1
1822	2
1825	13
1829	3
1831	4
1848	4
1862	3
1892	6

River Section - Stuart Lake

Sturgeon populations seem to be very sensitive to fishing, as was seen in the late 1890 with the sturgeon population in the Lower Fraser River (Echols 1995), and in the lower Columbia River, where in six years (1888-1894) the entire sturgeon fishing industry collapsed (Sturgeon of the Columbia3.htm 2000). A similar pattern, of much smaller dimensions can be seen in these Hudson's Bay Company records.

5.2 Government Regulations

Prior to 1918, sturgeon fishing in the Nechako watershed, or elsewhere in Non-Tidal Waters was not licensed. Section 21 of the British Columbia Fishery Regulations did not mention sturgeon at all (Canada Gazette, 1917). In 1914, correspondence between P. Wallace of Wallace Fisheries and D.N. Deputy commissioner of Fisheries mentions the merits of sturgeon fishing in the lakes at the headwaters of the Fraser. He suggested the issuance of licenses for commercial fishing (BC Archives, 1914). A lengthy correspondence between Victoria and the local parties ensued. The government officials in Victoria and Ottawa were opposed to sturgeon fishing as they presumed that the upper Fraser watershed was the spawning area for the sturgeon found in the lower Fraser River. Assurances by local government officials that the sturgeon in the Nechako region were resident were offered and amendments to the fishery regulations were considered.

In 1918, amendments were recommended to include the taking of sturgeon, by gill net, in the fresh water lakes of the Fort George and Omineca Districts of the Province. There were restrictions on the size of the lakes to be fished, and also the time of year and length and mesh of net that could be used. Later the same year it was proposed that the regulations be amended to include the taking of sturgeon in the Nechako and Stuart Rivers as well.

By May of 1920, the BC Government had received the amendment, and fishing with gill nets in the Nechako and Stuart Rivers was approved. Sturgeon licenses from the 1920s cost $2.50 until the 1950s. In 1956, or 1957, the cost of a commercial sturgeon-fishing license increased from $2.50 to $75.00. After this time, the cost of the permit was not worth the return derived from fishing sturgeon commercially (Simonson 2000). Table 3 provides a table of licenses issued to catch sturgeon from 1918 to 1943. Records for licenses issued after 1943 were not located during the course of this study.

From the mid 1950s on, most sturgeon fishing was recreational. However, some community members (Mennonites, local fishers, First Nations) relied, to a certain extent, on the sturgeon as a source of food well into the 1970s and later (Salewski 2000). During the 1970s the regulations were changed again to allow only setline fishing of sturgeon in the Nechako and Stuart Rivers. Until 1994, only one sturgeon a year was allowed to be kept. In 1994 a ban on the retention of caught sturgeon was imposed. All sturgeon fishing was to be ‘catch and release’. The First Nations groups agreed to a voluntary release of sturgeon caught incidentally while salmon fishing (Echols 1995).

Table 3. Sturgeon Non-tidal Fishing Licenses issued prior to 1943.									
Year	**Fraser Lake**	**Stuart Lake**	**Fraser/Stuart Lake**	**Nechako River Fraser Lake**	**Nechako River**	**Nechako/Stuart River**	**Nechako/ Fraser River**	**Unknown location**	**Total**
1918								1	1
1919		1							1
1920*	1			1	1	2		1	6
1921		1					1		2
1922				1	1			1	3
1923	1	4			1				6
1924	1								1
1925	1							1	2
1927							2		2
1928**					1		1		2
1929							1		1
1930				1			1		2
1937					1		1		2
1938					1		1		2
1941					1				1
1942					1				1
1943					1				1
									36

*In 1920, net fishing for sturgeon was allowed in the Nechako, and Stuart Rivers.
**After 1927, commercial fishing in Stuart Lake was disallowed.
Note: Missing years only reflect a lack of documentation, not the lack of issuance of licenses.

5.3 Inherent Problems with the Data Collected

There has been a general decline noted in the number of sturgeon caught incidentally since the 1960s (LaRocque 2000). This may be due to a reduction in the amount of salmon netting each year resulting from a diversification of diet in the First Nations groups which was the primary source of these incidental catches, or it may represent an actual decline in sturgeon numbers caused by habitat loss and/or over fishing.

In addition a lack of information pertaining to different areas throughout the same time periods, may appear to misrepresent the recorded numbers of sturgeon. What may look like a time of low sturgeon counts may simply reflect a lack or loss of records for that area. The recorded numbers of sturgeon caught in any given year do not reflect actual catch numbers, except perhaps the earlier counts found in the Hudson's Bay Post records at Fraser and Stuart Lakes. The HBC was known for its meticulous record keeping. Even understanding this however, it also became clear when reading the journals that each post journal author had specific interests and orders that biased his record keeping at times. In addition, post *accounts* kept track of items traded, but not

necessarily provisions procured by the post employees. Most of the sturgeon-catch entries in the post *journals* relate to post employee catches. Table 4 outlines the references found for each watershed section. It is important to note however, that for references pertaining to more than one section, the same reference has been included for each. Therefore, (1) reference for Fraser Lake, may also apply to (1) reference for Upper Nechako. This does not mean there were two different references, but one reference applied to two different sections. In addition, the Government and Alcan generated sturgeon studies undertaken over the last 20 years have not been included in this table. Many of these studies span several years and areas, and are incorporated into one document.

It is also important to note, as every sturgeon fisher pointed out throughout the course of this study, and others as well, that for every legally or documented sturgeon fished, one or more illegal or not documented sturgeon were caught. Some of the interviewees had known people in the past that regularly fished for sturgeon without acquiring a permit. In the 1970s, permitted sturgeon fishers had to hide their set-lines under the gravels of the river bank, in an attempt to prevent poachers taking off with their catch and lines (Salewski 2000).

The database provided here is by no means complete. Information that may have been provided by First Nations people regarding sturgeon distribution and numbers, both historically and through oral history into pre-contact, has not been collected due to the time constraints put on this study. The result is a large gap in the information base provided here. First Nation groups were not confined to Hudson's Bay posts, or 'whistle-stops' along the Grand Trunk Railway, to hunt and fish, as were European traders and settlers. First Nation groups had thousands of years to determine good fishing locations, and utilize them at a sustainable level. This study cannot be considered conclusive until full First Nation input has been included, and it is strongly recommended that the First Nation component of this study be completed.

Table 4. Incidence of Historical Documentation for Each Watershed Section. (Written records only)

Decade	Fraser Lake Nautley	Fraser Lake Stellako	Stuart Lake	Upper Nechako*	Nechako River Fort Fraser - Vanderhoof	Nechako River Vanderhoof - Prince George	Stuart River
1810-1820	1815 (1)		1812 (1)				
	1818 (1)		1820 (3)				
1821-1830	1822 (11)		1825 (14)				
	1823 (9)		1826 (1)				
			1829 (3)				
1831-1840			1831 (5)				
1841-1850			1848 (1)				
1851-1860							
1861-1870			1862 (2)				
1871-1880							
1881-1890	1890 (2)						
1891-1900	1891 (1)					1891 (1)	
	1892 (1)		1892 (1)				
			1893 (2)				
	1895 (1)						
	1900 (1)						
1901-1910							
1911-1920	1918 (1)						
	1919 (1)		1919 (1)				
	1920 (2)			1920 (4)	1920 (4)	1920 (4)	1920 (3)

* Records in this column are Sturgeon Non-tidal Fishing License issuances that stipulate “Nechako River” as the permitted area to fish. They do not indicate the area was fished, or supported sturgeon.

Table 4. Incidence of Historical Documentation for Each Watershed Section. (Written records only)

Decade	Fraser Lake Nautley	Fraser Lake Stellako	Stuart Lake	Upper Nechako*	Nechako River Fort Fraser - Vanderhoof	Nechako River Vanderhoof - Prince George	Stuart River
1921-1930			1921 (1)	1921 (1)	1921 (1)	1921 (1)	1921 (1)
	1922 (2)			1922 (1)	1922 (1)	1922 (2)	
	1923 (1)	1923 (1)	1923 (4)		1923 (1)	1923 (1)	1927 (1)
	1924 (1)						
	1925 (2)						
			1926 (1)			1926 (1)	
	1927 (1)	1927 (1)	1927 (1)	1927 (1)	1927 (1)	1927 (2)	
						1928 (2)	
						1929 (1)	
	1930 (1)	1930 (1)		1930 (1)	1930 (1)	1930 (1)	
1931-1940						1937 (2)	
						1938 (1)	
				1939 (1)	1939 (1)	1939 (1)	
1941-1950						1941 (1)	
				1942 (1)	1942 (1)	1942 (2)	
						1943 (1)	
1951-1960							
1961-1970							
1971-1980	1979 (1)	1980 (1)	1973 (1)				
1981-1999	1983 (1)	1983 (2)					

* Records in this column are Sturgeon Non-tidal Fishing License issuances that stipulate “Nechako River” as the permitted area to fish. They do not indicate the area was fished, or supported sturgeon.

6.0 References Cited

Dixon, B.M.
1986 Age, Growth and Migration of White Sturgeon in the Nechako and Upper Fraser Rivers of British Columbia. Ministry of Environment. Fish. Tech. Dirc. No. 70.

Echols, J.C.
1995 Fraser River Sturgeon. Department of Fisheries and Oceans, Vancouver BC

Envirocon
1982 Nechako River White Sturgeon Study. TM 1881/65 Draft.

1884 Environmental Studies Associated with the Proposed Kemano Completion Hydroelectric Development. Vol 5. Fish Resources of the Nechako River System Baseline Information Prepared for Alcan.

Fraser Lake and District Historical Society
1986 Deeper Roots and Greener Valleys. Friesin Printers, Manitoba.

Hudson's Bay Post Journals
1812-1930 Fort St. James, Fort Fraser, Stoney Creek and Fort George. Retrieved from Hudson's Bay Archives, Winnipeg.

Irvine, Bert and Mary
2000 Personal Communication.

Lamb, W. Kaye
1957 Sixteen Years in the Indian Country – the Journal of Daniel William Harmon 1800-1816. MacMillan Company of Canada Ltd.

LaRocque, Leo
2000 Personal Communication

Morice O.M.I., A.G.
1893 Notes Archaeological, Industrial, and Sociological, on the Western Denes with an Ethnographical Sketch of the Same, Transactions of the Canadian Institute 4:3-222, Toronto

Nechako Valley Historical Society
1979 Vanderhoof, The Town that Wouldn't Wait. Edited by Lyn Hancock, Vanderhoof, BC.

Richards, Thomas H.
1978 A Pictograph Survey of Southeast Stuart Lake, British Columbia". Annual Research Report, Selected Research Reports of the Heritage Conservation Branch, pp133-162. (Park Library; Infomedia Carrier Volume)

RL&L Environmental Services Ltd.
1999 Fraser River White Sturgeon Monitoring Program Region 7 (Omineca-Peace) 1999 Data Report

Rudland, Eric and Lenore
1988 Fort Fraser (Where the Hell's That?). W.D. Friesen and Sons, Cloverdale, BC

Simonson, Jim and Shirley
2000 Personal Communication

Wayne Salewski
2000 Personal communication

Tanner, Thomas W.
1969 The Fur Trade: Fort St. James. Manuscript Report Number 131 Misc. Historical Papers. National Historic Parks and Sites Branch.

Appendix 1
Reference Chronology

Sturgeon Study Results.

Years	Resource	Findings
1800-1810	Sixteen Years in Indian Country. From: The Journal of Daniel W. Harmon. Edited by W.K.. Lamb 1957	Page 153. June 23 Tuesday (1812). The natives this morning took a Sturgeon that might weigh 200 pounds but there are many in the lake much larger, but the Natives had no method for taking them, neither are the nets we have sufficiently strong to hold them. (Stuart Lake)
1811-1820	Reference: "A Journal of Voyages and Travels in the Interior of North America Between the 47th and 58th Degrees North Latitude, extending from Montreal nearly to the Pacific: A distance of About 5000 Miles" Daniel William Harmon. The Courier Press 1911 (FC 3212.41.H37 1911 UNBC)	Page 186. Tuesday, 23 (June 1812). This morning, the Natives caught a sturgeon that would weigh about two hundred and fifty pounds. We frequently see in this lake, those which are much larger, which we cannot take, for the want of nets, sufficiently strong to hold them. (Stuart Lake) Page 215. Monday, October 2 (1815). Within a few days past, we have caught, in nets made for the purpose, of strong twine, three sturgeon, one of which measured ten feet and three inches in length, and four feet and one inch round his middle, which might weigh about four hundred pounds. All that we have taken, were uncommonly fat, and of the best flavour of any that I have ever eaten. (Fraser Lake) Page 227. Thursday September 3, 1818. Last night, there fell about four inches of snow, which is earlier than I have ever before seen it fall, in this part of the country. On the 6th ult. Salmon began to come up this river: but they are not very numerous. In the month of June, we took out of this lake twenty one sturgeon, that were from eight to twelve feet in length. One of them measured twelve feet two inches, from its extreme points, four feet eleven inches round the middle;, and would weigh from five hundred and fifty, to six hundred pounds. All the sturgeon that we have caught, on this side of the mountain, are far superior in flavour, to any I ever saw in any other part of the world. (probably at Stuart Lake)
1821-1830	Excerpt of Post Journal (1820-1821) noted in "The role of the Carrier Indians in the Fur Trade at Fort St. James, 1806-1915. Frieda Esau Klippenstein. 1992 Microfiche Report Series 526. CHPC	1820 May 22. Took up our Sturgeon nets this morning found nothing in them. 1820 June 14th. Qua left us have 33 fresh fish, he asked for a Blkt for fish which I let him have as we want him this Year more than ever and God only Knows how we will do if we take no Sturgeon for the few Salmon we have are not fit for the Dogs even. 1820 July 6. Took a Sturgeon of seven and a half feet long, all the Indians of the Village came in hopes to get a share but as we are short of provisions & it is bad custom I gave them none.
	New Caledonia District Report 1822-1823. By John Stuart	" in some places a few sturgion of a large size averaging about 400(?) and various kinds of Trout, none of them large, are processed, and in the fall during spawning season in some places a (Astemable) white fish fishery is made, but no dependence can be placed on a regular supply..."

Sturgeon Study Results.

Years	Resource	Findings
	Excerpt of Fraser Lake Post Journal (1822-1824) John McDonell. HBC Archives, B/74/a/1 Reel No. 1M54	1822 May 25. ...Waccan began the sturgeon net. 1822 May 29. ...Waccan finished the sturgeon net. 1822 June 2. …In the evening we set the sturgeon nets 1822 June 5. Jacque took a sturgeon measuring nine feet in length, and he says that another has passed through the nets… 1822 June 7. Took a small sturgeon 1 feet in length… 1822 June 24. (not a quote) no further fish are being caught in the nets, so Jacque takes the nets to Stella to try there. They had no luck there, but the weather was not good. 1822 July 3. We took a sturgeon 6 1/2 feet long …. 1822 July 4. …We took a sturgeon today measuring seven feet… 1822 July 8. Took a sturgeon measuring seven feet, as is almost daily the case… 1822 July 9. Waccan and his wife went off this morning he has fifty salmon to take to Fort St. James…Waccan to the village where he is to any(?) the sturgeon nets and will not come back till he has checked(?) the net tomorrow morning... 1822 July 24. (not a quote) mentions 2 sturgeon being caught at Fort St. James lately 1823 May 28. Preparing to set nets again 1823 June 3. No sturgeon caught yet. 1823 June 14. Bringing in net, but does not say if they are successful 1823 June 17. Two sturgeon go through the nets 1823 June 22. …took up sturgeon net but took no sturgeon… 1823 July 18. …Jacque took a sturgeon measuring seven feet... 1823 July 19. ...In the evening the wind having fallen, he set the nets and is to pass the night close to the sturgeon net... 1823 July 24. Took a Sturgeon seven feet long and three feet and a half girth. 1823 July-Aug. Only a mention of sturgeon from this
	Excerpts from Fort St. James Post Journal (1825) HBC Archives B/188/a/4 Reel No. 1M 129	1825 May 21. "…Bouchi set the Sturgeon Net as the Indians say they have seen some already." 1825 May 23. "…Waccan making floats for the Sturgeon Nets…" 1825 May 24. "Got 90 fresh fish from Qua, a Sturgeon…" 1825 May 28. "Bouchi took a Sturgeon about 8 feet long…" 1825 June 2. "…attending the Sturgeon Nets in which we took 2 small Sturgeon this 1825 June 6. " Took a Sturgeon in our nets…"

Sturgeon Study Results.

Years	Resource	Findings
		1825 June 7. "Took a small sturgeon, we have not taken a large Sturgeon this year, and they are all very lean and poor…" 1825 June 10. "…Took a Sturgeon about 7 1/2 feet long of which a basket was given to the Indians…" 1825 June 17. "…a Sturgeon went through our nets…" 1825 June 20. "Qua and his brother with some others were to go off on a hunting excursion, he Qua having taken a Sturgeon in one of his [Varvors/Vesreau?](Varveaux, or basket) put a stop to their doing what they intended, these Indians properly arrived this evening at the village." 1825 June 24. "…This morning we took a most excellent Sturgeon, measuring about 8 feet long…" 1825 June 26. "…Qua took a very large Sturgeon in one of his [Varvors/Vesreau?] with part of which he feasted his friends…" 1825 July 3, 10. Reports of sturgeon passing through the nets. Qua attempted to spear one of them without success. 1825 July 28. "Got 115 fresh fish from Qua's Family he himself being still about the Evening…the half of a small sturgeon about foot long, which was taken the 1826 (District Report) "…In Fraser River and Lake and Stuarts Lake Sturgeon are caught in June and July are from two to four hundred pounds weight, but never in large quantities…" 1829 June 2. "Took a middle sized sturgeon which weighed 130 Libs entire, this is the first fruit of the new net, we have put all the Sturgeon nets, say 4 old and new in the water. Our object is to bar the channel of the river in order to ascertain whether sturgeon may not be more plentiful at a greater distance from the shore than in those stations where the nets have hitherto been generally placed. All hands employed about the nets... 1829 June 6. "Caught a sturgeon entire weight 128 Libs…" 1829 July 10. "Caught a sturgeon weighing entire 240 Libs. Another passed thro our willow net…"
1831-1840	Excerpts from Fort St. James Post Journal (1825) HBC Archives Reel No. 1M 130	1831 July 15. "This morning we took a Sturgeon weighing 170 lbs exclusive of the head and roe, this at this season is most acceptable, it has a fine flavour…" 1831 July 20. "This morning we caught another Sturgeon weighing 100 lbs exclusive of the head…" 1831 July 26. "Took another Sturgeon this morning weighing exclusive of the head 135 lbs…" 1831 July 30. "Jose on visiting our Sturgeon Net this morning found that Quaw had sett his net above ours this is very unfair - as there is plenty of room at the end of our net and in the channel the old fellow must be aware that by so doing he would prevent us from taking any. I shall ___ the impropriety of his doing so and should he not take up his net I shall certainly place our old one above his..." 1831 August 8. "We took a Sturgeon this morning weighing exclusive of the head 200 lb…"

Sturgeon Study Results.

Years	Resource	Findings
1841-1850	Accounts and Private Orders of People Attached to Hudson's Bay Co. Fort St. James 1838-1848	1848 August 4. 4 small sturgeon. Credit.
1851-1860		
1861-1870	Fort St. James Post Journals. Ft. St. James Historic site library. Photocopy of original.	1862(?) August 2 Friday. Raining hard. Took a mudy(?) sturgeon in nets. Men as usual. 1862(?) Sept. 6 Tuesday. Wet rainy weather. Took 2 fine sturgeon in nets. Dechamp ----the others at hay.
1871-1880		
1881-1890	Excerpts from Fort Fraser Post Journal (1887-1893) HBC Archives B/74/a/2 Reel No. 1M 54	1890 June Monday 30th. …Traded a small sturgeon. The first one, not only this season, but since I have been residing at Fraser's Lake. This one was caught in a net accidentally. 1890 July Wednesday 9th. …Traded a piece sturgeon from J Sutherland which he caught in a net at the mouth of the "Nechako" River.
1891-1900		1891 July Wednesday 28th. …bought or traded a small sturgeon, first of the season… 1892 August Tuesday 2nd. Cloudy. Sky overcast; and calm. Traded a small sturgeon and some bark for the byre roof. Joe and Pack Train arrived, also Messrs. Traill and Peters from Stuarts Lake. 1895 August Wednesday 7th. Rained nearly all night, and morning. Slight wind, NW. Traded the first salmon caught - this season, also a small sturgeon.
	Excerpt of Post Journal (1892-93) noted in "The role of the Carrier Indians in the Fur Trade at Fort St. James, 1806-1915. Frieda Esau Klippenstein. 1992 Microfiche Report Series 526. CHPC	1892. July 4. (W.E. Traill) Started the packtrain to McLeod late in afternoon…Old Man Naquon who is hired as temporary fisherman brought three Sturgeon - the first we have had altho we have been setting nets for some time. The largest of these weighed over 22 lbs. The smaller little more than half that weight. 1893. July 10. Two sturgeon were caught in the lake today. 1893. Aug. 9. Two men staying at boat camp. Naquon caught 3 salmon today of which I got one. He also caught a sturgeon.
	Transactions of the Canadian Institute Session 1892-93. "Notes Archaeological , Industrial and Sociological on the Western Denes" by Rev. AG Morice OMI. Nov. 1893	Page 75 "I did not mention the sturgeon, because, although it is a welcome visitor to our lakes its visits are too rare and far between to entitle it to serious consideration in this connection. It is caught in large meshed nets. Page 149 - reference to sturgeon glue, and 'used to coat clothing, "it formed an armour perfectly arrow proof".
	Excerpt from Fort Fraser Post Journal (1900) HBC Archives B/74/a/2 Reel No. 1M 54	1900 May Tuesday 15th. Put a large net, which Allan's mother made for me, in the water to try and catch some sturgeon…. Note: sturgeon not mentioned again in this journal.
1901-1910	1911 Fort George Herald. Jan 14. "Caledonia and its Oborigines" AG Morice OMI	Quote: "A few sturgeon are occasionally caught in Lake Stuart and outlet, but that fish is unknown in the other basins…"

Sturgeon Study Results.

Years	Resource	Findings
1911-1920	GR 435 Box 144 File 8 British Columbia Archives (BCA)	1914. Letter from P. Wallace (of Wallace Fisheries) to D.N. McIntyre, Deputy Commissioner of Fisheries, dated Sept 8 1914. Mentions the merits of examining the "lakes at the headwaters of the Fraser". Thinks there may be an industry there. Suggests that settlers would benefit. Suggests no company be allowed more than 3 licenses, and would have to be a licensed packer. Other licenses granted to settlers only. States, in reference to sturgeon, "They exist where there are fresh water clams. as they feed on them".
	GR 435 Box 2 File 13 BCA	1917 Extract from the Canada Gazette of the 14th April. British Columbia Fishery Regulations - Amendments - no mention of sturgeon and regulation thereof.
	GR 435 Box 1 File 10 BCA	1917. Several items of correspondence in regard to a G. Starratt requesting licenses to fish sturgeon in Fraser, Babine, and Francois Lakes. Correspondence was between G. Starratt, John Gould, G. Gillis and the Commissioner of Fisheries. Requested sturgeon fishing licenses were not issued as applicants were not 'bona fide' residents of the community in which they wanted to fish.
	GR 435 B0x 2 File 13; GR 435 Box 6 File 53 BCA	1918. Correspondence to the Honourable Commissioner of Fisheries. Presenting draft changes to Section 21 of the British Columbia Fishery Regulations - Amendments. Regulations were revised in 1922, and again in 1930.
	GR 435 Box 2 File 14 BCA	1918. November 14. Endako. Sturgeon License issued to H.R. Bellack. License No. 1
	GR 435 Box 3 File 19 BCA	1919 Fraser Lake. April 22. Request for Sturgeon license by J. Lafondo Esq. License No. 2(?)
	GR 435 Box 3 File 19 BCA	1919 Stuart Lake. May 8. Response to request for sturgeon information to P Evanoff, Fort St. James. Notes drag nets are not allowed on Stuart Lake.
	GR 435 Box 3 File 19 BCA	1919 Stuart Lake. May 22. Sturgeon license issued to Joh Samilin to fish in Stuart Lake.
	GR 435 Box 3 File 20 BCA	1920 December 9th. Excerpt from correspondence - 'the food fished found in the lakes of that district (Francois, Ootsa, and Eutsuk Lakes etc) are trout, char, whitefish and sturgeon. They have so far been taken commercially by means of nets, and mostly during the winter time by fishing through the ice..."
	GR 435 Box 3 File 20 BCA	1920 June 16th. Response to L. P. Thornton Esq. CPR Portland Oregon from Assistant to the Commissioner. "I have to submit that sturgeon are taken in the Stuart and Nechaco Rivers and Stuart and Fraser Lakes by means of nets. I enclose a copy of section 21 giving the regulations which however, have recently been amended so as to permit the taking of sturgeon in the Stuart and Nechaco Rivers"
	The Citizen, Prince George BC. Pg 5	1920 August 6. "Nechako Sturgeon Sells for One Dollar Pound". For the first time in the long and famous history o the Nechaco River, sturgeon fishing has been put on a commercial basis, says the "Interior New" published at Smithers., and this through the efforts of Mr. Starrett, the man who started the first fisheries on the coast tributary to Prince Rupert... (note, this sturgeon was rejected on arrival in New York per.com Jim Simonson. The project was abandoned.)

Sturgeon Study Results.

Years	Resource	Findings
	GR 435 Box 3 File 20 BCA	1920 January 17th. Vanderhoof. To Mr. J.P. Babcock from E.B.Smith (Vanderhoof and District Liberal Association). "Now in regard to Sturgeon as you state that sturgeon spawn in fresh water and their young proceed to sea and when matured seek those lakes to spawn in, quite likely you are right but as a resident here and being somewhat familiar with local conditions and in conversation with others who have casually observed those matters will say for your information that sturgeon can be taken here in these waters at any time of the year ranging from fish three to four inches long up to two and three hundred pounds in weight so I am strongly inclined to believe that sturgeon are native to these waters born raised mature and die here in these lakes and rivers just the same as sturgeon do in the lakes in Minnesota or the Great Lakes or the Lake of the Woods for by no possibility can the sturgeon in those lakes reach the sea."
	Note:	By 1919-1920 the Provincial Fisheries Dept. is considering recommending the use of 12 " mesh nets to allow fish less than 4 feet in length to pass through the nets.
	GR 435 Box 3 File 20 BCA	1920. June 2. Letter from the Assistant to the Commissioner to W.G. McMynn, Superintendent, Provincial Police Dept. Victoria. Due to amendments to Section 21 of the fishery regulations of the Province a request is made to collect: "The names of the men fishing for sturgeon in Nechaco and Stuart Rivers and the number of licenses held by them. 2. The number of sturgeon and their total weight taken monthly by each of them. 3. The sex of the fish taken. 4. Did eggs or milt extrude from them - or could they be expressed by applying mild pressure to the abdomen of the fish." Unfortunately, no information was found in the file answering to this request. It would be perfect data!
	GR 435 Box 6 File 51 BCA	1920. May 18. Sturgeon license issued to H. Huffman to fish on the Stuart and Nechako Rivers. License No. 3
	GR 435 Box 6 File 51 BCA	1920. May 26. Sturgeon license issued to M. Costello to fish on the Nechako River and Fraser Lake. License No. 4
	GR 435 Box 6 File 51 BCA	1920. May 27. Sturgeon license issued to Frank Gilliland Esq. To fish in the Nechako River. License No. 5. Reply to application addresses Section 21 of the regulations which allows catching of sturgeon in the Nechako River with 12' mesh gill nets.
	GR 435 Box 6 File 51 BCA	1920. May 27. Commercial Sturgeon license issued to Duncan Campbell. License No. 6.
	GR 435 Box 6 File 51 BCA	1920. May 27. Sturgeon license issued to Stewart Sedore to fish in the Nechako and Stuart Rivers. License No. 7 (two days prior to this issuance, the amendments to the fishery regulations had not been received in BC.)
	GR 435 Box 6 File 51 BCA	1920. May 27. Vanderhoof. Sturgeon license issued to James Jacobson to fish in Fraser Lake. License No. 8

Sturgeon Study Results.

Years	Resource	Findings
	MS 1629 [A1218] Reminiscences and Autobiographies accumulated in the course of writing "Vanderhoof, the Town that Wouldn't Wait"	Tom Hamilton states during an interview by Mike Tweed, 1970. Page 2 " We caught quite a lot of trout and squaw fish…and sturgeon...we used to catch some small sturgeon but when the Indians came down here they used to give us a piece of some quite large ones... they used to catch large ones at Sturgeon Point about 2 miles up from where we homesteaded..." came to Vanderhoof in fall of 1914 - homesteaded on the Stuart River.
1921-1930	GR 435 Box 6 File 52 BCA	1921. May 13. Sturgeon license issued to George Gerhard to fish in the Fraser and Nechako Rivers. License No. 9
	GR 435 Box 6 File 52 BCA	1921. June 17. Sturgeon license issued to William J. Goodlad and Mr. Sobels to fish in Stuart Lake. License No. 14
	GR 435 Box 3 File 22 BCA	1922, February 14. Response to William Sloan from J.A. Motherwell, Chief Inspector of Fisheries. "There can be no objection to extending to the waters of the Fraser River from Prince George to the head of navigation the privilege of fishing for sturgeon in the same manner as covered by the existing regulations, as applying to the rivers and lakes west and north of Prince George"
	The Citizen, Prince George BC Feb 10-March 24, 1922	Feb 10-March 24, 1922. Article pertinent to Grier Staratt's bid to exploit sturgeon fishing commercially in Stuart Lake, and then the upper Fraser.
	GR 435 Box 6 File 54 BCA	1922. April 7 Sturgeon license issued to George Gerhard to fish in Fraser Lake and Nechako River. License No. 12
	Deeper Roots and Greener Valleys. Fraser Lake and District Historical Society, Friesin Printers, Manitoba, 1986. Page 85	"There have always been a few sturgeon patrolling the muddier depths of the lake bottom. In 1815 D.W. Harmon recorded that the Nautley Indians had caught several in their nets and one weighed approximately 400 lbs.. About 1922 a man named George Gerhard captured an enormous sturgeon which had been entangled in some nets he had set out for char. The fish weighed over 500 lbs.. He wired a fish cannery in New York, to learn of a method of preserving the roe to ensure its remaining palatable after several days on the trail. While awaiting an answer to his query, George kept it captive - with rope around its armoured tail and the other end - tied to the Fraser Lake wharf.
	GR 435 Box 6 File 53 BCA	1922. Aug. 18. Aleza Lake. Sturgeon license issued to Harry Hendricksen. Allowable fishing area not noted. License No. 18
	GR 435 Box 6 File 53 BCA	1922. Oct. 5. Vanderhoof. Sturgeon license issued to Ed Simonson to fish on the Nechako River. License No. 19
	GR 435 Box 6 File 54 BCA	1923. April 7. Fort St. James. Sturgeon license issued to Harry West to fish in the Stuart Lake District. License No. 21
	GR 435 Box 6 File 54 BCA	1923. April 16. Fort St. James. Sturgeon license issued to Ernest Ringbloom to fish in Stuart Lake. License No. 22
	GR 435 Box 6 File 54 BCA	1923. April 16. Fort St. James. Gill net Sturgeon license issued to Samuel Rossiti to fish in Stuart Lake. License No. 23
	GR 435 Box 6 File 54 BCA	1923. April 16. Fort St. James. Sturgeon license issued to Thomas Alexandra to fish in Stuart Lake. License No. 24

Sturgeon Study Results.

Years	Resource	Findings
	GR 435 Box 6 File 54 BCA	1923. April 28. Endako. Sturgeon license issued to H.R. Bellack to fish in Fraser Lake. License No. 25. Other correspondence that year (Sept 18) indicates that, with a 12' mesh, 300yd net, under this license, 5 sturgeon were caught in Fraser Lake. Wts 65lbs, 50lbs, 125lbs, 230lbs, and 100 lbs.
	GR 435 Box 6 File 54 BCA	1923. July 3. Sturgeon license issued to Archie Stewart to fish in Vanderhoof District. License No. 26.
	GR 435 Box 130 File 6 BCA	1923. **All of BC**. Total sturgeon taken for year ending Dec 31 1922. N=6440
	GR 435 Box 6 File 55 BCA	1924. May 19. Sturgeon license issued to George Gerhard to fish in Fraser Lake. License No. 27
	GR 435 Box 6 File 56 BCA	1925. April 11. Francois Lake. Sturgeon license issued to J.R. Stanyer . License No. 28
	GR 435 Box 6 File 56 BCA	1925. April 27. Sturgeon license issued to George Gerhard to fish in Fraser Lake. License No. 29
	GR 435 Box 7 File 63 BCA	1926 G. Gerhard reports catching 150lb of Sturgeon on Nechako and Fraser Rivers. License No. 30
	Provincial Fisheries Dept. Correspondence. GR 435 Box 7 File 58 BCA	1926 Fort St. James. November 23. Sturgeon license issued to George McMullen. License No. 31
	GR 435 Box 7 File 58 BCA	1926 Francois Lake. Non-tidal license requested for William J Goodlad. Notes he has held a sturgeon license previously.
	GR 435 Box 7 File 59 BCA	1927 South Fort George. Sturgeon license issued to George Gerhard to fish in Fraser and Nechako Rivers. License No. 30 (?)
	GR 435 Box 7 File 59 BCA	1927 Vancouver, BC. Sturgeon license issued to International funding Co. to fish in Fraser River between Prince George and headwaters. License No. 32.
	GR 435 Box 7 File 63; Box 5 File 35 BCA	Commercial fishing in Stuart Lake curtailed by Federal Government after 1927.
	GR 435 Box 7 File 64 BCA	1928 South Fort George. Sturgeon license issued to George Gehard to fish in Fraser and Nechako Rivers between Prince George and the head of navigation. License No. 34
	GR 435 Box 7 File 64 BCA	1928 Hullat BC. July 31. Sturgeon license issued to Ed Simonson. License No. 33
	GR 435 Box 7 File 65 BCA	1929 South Fort George. April 2. Sturgeon license issued to George Gerhard. License No. 35. And drag-seine license No. 289.
	GR 435 Box 7 File 67 BCA	1930 South Fort George. April 3. Sturgeon license issued to George Gerhard for the Fraser and Nechako. License No. 36.
	GR 435 Box 7 File 67 BCA	1930 Fort Fraser, BC. May 28. Sturgeon license issued to M.L. Sias for Fraser Lake and portions of Nechako River above Vanderhoof. License No. 37.

Sturgeon Study Results.

Years	Resource	Findings
	MS 1629 [A1218] Reminiscences and Autobiographies accumulated in the course of writing "Vanderhoof, the Town that Wouldn't Wait"	Mrs. Rose Simonson - married to Ed Simonson in 1929. Managed general store, post office, and ferry at Hulatt. "…Mr. Simonson was also a fisherman. Many a winter night he spent making his own fish nets. These nets had to be big enough to catch and hold sturgeon. The Nechako river was home for these large fish which Mr. Simonson sold commercially. They were shipped by rail to Prince George, there they were received by a Mr. Yip who sold the delicious meat and kept the heads for fish head soup..." recorded by Bev Evans.
	GR 435 Box 4 File 35 BCA	1931, March 17th. To O.W. Jonsson, Burns Lake BC. "With regards to sturgeon fishing we have to submit that gill nets may be used in Babine, Fraser, Francois lakes and the Nechako and that portion of the Fraser River between Prince George and the head of navigation for the capture of sturgeon. The use of gill nets in any lake in the Omineca, Prince George and Carriboo districts is prohibited during the months of March and April. Commercial fishing of any kind is not permitted in Stuart Lake.
	GR 435 Box 10 File 90 BCA	1937. Sturgeon License issued to George Gerhard . License No. 50
	GR 435 Box 10 File 90 BCA	1937. Sturgeon License issued to Ed Simonson . License No. 52
	GR 435 Box 10 File 89 BCA	1938, May 25. Sturgeon license issued to Joe Gagne to fish sturgeon in the Fraser River in the vicinity of Prince George. License No. 53.
	GR 435 Box 10 File 87 BCA	1938 Hulatt BC. September 9. Sturgeon license issued to Ed Simonson for taking sturgeon on the Nechako River. License No. 54
1931-1940	GR 435 Box 5 File 38 BCA	1939 Number of Non-tidal sturgeon fishing licensed issued up to Nov 20 of 1939. Fraser River Prince George - 1. Nechako River - 2.
1941-1950	GR 435 Box 5 File 40 BCA	1940-41. G. Gerhard (in Fraser River near Prince George) 3 sturgeon total 75lbs.
	GR 435 Box 5 File 41 BCA	1941. Ed Simonson (Nechako River) 2 sturgeon total 380lbs.
	GR 435 Box 5 File 41 BCA	1942-43. No names attached. 5 sturgeon caught (some doubt as to where. Francois Lake, Nechako and Fraser River. One document states one in the Fraser and five in the Nechako River).
	GR 435 Box 5 File 42 BCA	1942 Ed Simonson. License No. 61. Nechako River. August, 3 sturgeon total 220lbs. September, 2 sturgeon total 80lbs.
	GR 435 Box 5 File 44 BCA	1943 Ed Simonson. License No. 62. Nechako River. No sturgeon caught in 1943
1951-1960		
1961-1970		
1971-1980	Caledonia Courier, Fort St. James BC. Pg 6	1973 Wednesday July 25. "Saturday was a great day at Necoslie Indian Reserve…Mrs. Francesca Antoine and her mother, Mrs. Betsy Prince managed to land a huge sturgeon from the waters of Stuart Lake. The big bottom feeder rang in at an estimated 250 pounds...The two women landed the fish alone, using heavy lines...The landing of a sturgeon has for centuries been a major incident among the Indian people. In the early 1800s nets were set with bells attached and when a fish floundered into the nets the bells alerted everyone in the Village, prompting a joyous celebration...

Sturgeon Study Results.

Years	Resource	Findings
	Weekly Report of Fishery Guardian/Patrolman Fort Fraser-Fraser Lake	1980 Week ending August 24. General comments. One 9' sturgeon caught by Mrs. Bernadette Ketlo at Stellako. 1979 Week ending July 29. General comments. "Nautley netting area, 6 families fishing - 29 salmon and 2 sturgeon caught".
1981-1990	Weekly Report of Fishery Guardian/Patrolman Fort Fraser-Fraser Lake	1983 Tuesday, August 16th. "Base to Stellako Indian Fishery. On to Nautely Band Office and North Shore. Back to Nautley and return to base. 14 families fishing at Stellako - 192 Sockeye, 1 very big sturgeon, 6 from Stoney Creek - 68 Sockeye, 12 families fishing at Nautley - 243 fish and 1 spring. No salmon in Ormond Creek yet." Leo LaRocque 1983 Monday, July 18th. "Base to West Fraser Mills to pick up material for channel markers. On to Fraser Lake, Stellako, Endako River and return to base. Nechako River coming up fast. Saw one Sturgeon, one Chinook, six sockeye." Leo LaRocque
	Review of Kemano Completion - Environmental Impacts Assessment Reports. By Garry Alexander (draft) Biologist, Mining; Habitat Protection and Inventory. Fisheries Branch	1984 Quote " The low number of trout presently observed in the Nechako is the result of habitat disruption due to Kemano 1 and over exploitation. As a result, the Nechako is a diminished river at present and not representable of historic levels. (Nov 29, 1984)
	Environmental Studies Associated with the Proposed Kemano Completion Hydroelectric Development. Vol 5. Fish Resources of the Nechako River System Baseline Information Prepared for Alcan by Envirocon Ltd. Jan. 1984	1982 Quote " White sturgeon utilize the Nechako River as far upstream as the Nautley River confluence. The greatest number of the 42 sturgeon captured in the Nechako River between July 16 and 31 August 1982 was found in the vicinity of the Sinkut River with smaller numbers found at Vanderhoof and Finmoore. These sturgeon ranged in length and weight from 70-114 cm and 1.4 to 8.2 kg respectively. Growth estimated for 27 sturgeon between 5 and 20 years old appeared slower than that described for populations in the Sacramento - San Jooquin estuary and the lower Fraser River".
1991-2000		
Notes	National Historic Parks and Sites Branch Manuscript Report Number 131 Misc. Historical Papers. The Fur Trade Fort St. James, Thomas W. Tanner 1969	In reference to sturgeon: "During June, July and August nets were set and the journal records comments such as: 'Caught a sturgeon weighing entire 240 Libs another passed thro our willow net'. Sturgeon measuring eight feet in length and weighing 250 pounds were uncommon enough to warrant mention in the journal, but a small number of that size seem to have been taken for many years.
	BCUC Kemano Completion Project. BC Information Requests #2 and #3 responses. March 23 1994. Ex. 549 BCUC Hearings File No. 18025-001	Quote "Historically, there has been little monitoring by the province of the fish populations in the Nechako Reservoir prior to KCP…..given shortage of staff and funding, monitoring of Nechako Reservoir was not assigned a high regional priority".
	Traplines and Timber: Social and Economic Change Among the Carrier Indians of Northern British Columbia. By Doug Hudson, PhD. Thesis, Dept of Anthropology, Edmonton, Alta. 1983.	States that historical records indicate that they (sturgeon) were rarely used because the technology was inadequate. Did state that in one season, the Hudson's Bay Co. netted over a dozen. Notes their presence today is considered more of a nuisance than a food source.
	Carrier Sekani fish Quality Questionaire - Tl'azt'en Nation	Questionaire filled out by 12 Tl'azt'en members indicate that sturgeon have been caught in Trembleur Lake, Middle River, Stuart Lake, and Tachie River. In general the comments state that sturgeon were caught incidentally while fishing for salmon.

Appendix 2
Interview Summaries

Leo LaRocque Interview Summary
March 10th 2000
Interview conducted at Leo home
Interviewer – Veronica Cadden
This interview was not taped. Summary compiled from notes and memory.

Leo's first encounter with a sturgeon was at Finmoore where he saw a large fish – 8-10 feet long tied by the tail from the bank of the river. The person who caught it was tethering it until he could find a market for it.

1. **What was your involvement with sturgeon?** Leo worked for DFO from 1983 to 1995. He regularly traveled, once a week, down the river from the canyon to Prince George. Previous to that he has owned a guiding outfit and trapped the area extensively. Leo started working in a sawmill in Fort Fraser for 35 cents an hour in the early fifties (he grew up in Edmonton), and when his first child was due, he walked for three days across country to the head of the Nechako Canyon, and got a job working on the Kenney Dam, for $3.00 an hour. He has been concerned with the condition of the Nechako drainage since they turned the water off to fill the dam. During his rounds as a patrolman for DFO, he had occasion to note when sturgeon were caught by the local people.

2. **Where, on the Nechako did you encounter sturgeon?** Leo noted sturgeon caught on a regular basis by the Nautley, and other fishers just west of the island in the outlet of Fraser Lake, where the water is deep. These fish were caught in nets incidentally while fishing for salmon. Leo also had seen or heard of sturgeon being netted at Finmoore, Isle Pierre (Mary John), Hulatt, and were observed following the salmon under the bridge at Stellako. All of the sturgeon he encountered had been caught incidentally while fishing for salmon. He and Peter H. observed sturgeon drags in the Nechako River just downstream of the canyon in 1955-56, before the spillway failure, at a place he refers to as the 'Cutbanks'. Sturgeon drags are the marks left in the mud or sand in the river bottom, when the sturgeon is traveling along the bottom of the river – similar to the marks a snake would leave when it travels across sand.

3. **What level of occurrence would you suggest?** Around 1965, Leo thinks there were likely two to three sturgeon caught a year in the river. He says that since that time the number has reduced to rare occurrences today. He feels sure that the silting of the river caused by the spillway failure has been the major contributor to the reduction of Sturgeon. He believes that it has silted up the spawning beds, and made them unusable for the sturgeon.

4. **How were the Sturgeon captured?** All the captures he was aware of were in the process of salmon fishing with nets. The sturgeon were always caught up in the salmon nets.

5. **How were the sturgeon used?** People did not set out to capture sturgeon. It is such a large fish, that it was generally cut up and shared out before he arrived. He was aware that commercial fishing had been undertaken in the past (good friends with Jim Simonson) but was not aware of it happening in the recent past. (Was it Leo who mentions that Sturgeon smoked well, and tasted good that way?)

6. **Did you ever see sturgeon or hear of the fish caught upstream of Nautley?** Yes. See question 2. This sighting was a one-time occurrence. Leo has never seen a sturgeon in the water under the present highway bridge.

7. **When did these encounters occur?** Leo noted annually the sturgeon caught in the native fishery at Nautley. Each year it would be two to three sturgeon reported.

Notes: Leo noted that unlicensed fishing of sturgeon likely happened on the river. He also suggested that Margaret Nooski, Lea Patrick and Mary John would be good people to talk to in order to gather information about the sturgeon in the River.

Wayne Salewski Interview Summary
March 20th 2000
Interview conducted at MoF office
Interviewer – Veronica Cadden
This interview was not taped. Summary compiled from notes and memory.

Wayne arrived in Vanderhoof in the 1970s from the prairie provinces. His passion has always been the outdoors, and fishing in particular. He began fishing sturgeon (licensed) shortly after arriving in Vanderhoof. He fished for sturgeon from 1977 to 1984.

1. **What was your involvement with sturgeon?** Wayne's involvement was, for the most part, recreational. In the early 1980s he and a companion were approached by Dan Aitken from CNC, and Dennis Ableson from the province to assist in a sturgeon study designed to gather information on a little studied species. The job entailed catching and radio tagging the fish to try to determine spawning areas, and their range. Fish were measured, sexed (?) and a sample taken from a fin to determine age. Wayne and his companion did not participate in the project to its completion, but were successful at capturing sturgeon while they were involved.

2. **Where, on the Nechako did you encounter sturgeon?** Wayne only fished for sturgeon on the Nechako River between the Vanderhoof Bridge in the town of Vanderhoof, and Hulatt. He was aware of good fishing at the confluence of the Nechako and Stuart River, and of a sturgeon capture directly across the Stuart River from site of Chinlac Village. In addition, he was well aware of sturgeon sighted and caught in Fraser and Stuart Lakes, and of sturgeon being observed and caught at or near the end of Sturgeon Point Road on the Stuart River.

3. **What level of occurrence would you suggest?** During the 1970s he believes there were many sturgeon, and of all ages, in the system. Aside from sturgeon caught under permit, he states there were perhaps twice as many people fishing without a license. He mentioned the Mennonite community utilizing the fish as a food source at that time. He indicated that sturgeon of all sizes were observed and caught, from 1-2m in length. Smaller fish were not caught due to the size of the bait being used. Wayne does not fish for sturgeon at this time, but still sees them frequently in the river while he is in his boat.

4. **How were the Sturgeon captured?** At the time he was fishing, setlines were approved by the government and used to capture sturgeon. One line was allowed under license. A strong line was fixed with a hook, covered with squawfish, tied to the shore, and played out into a deep, slow moving pool during the day, and left. In the evening the sturgeon moved out of the deep pools into the faster moving water to feed. Sturgeon could also be caught in the faster moving waters, but regular sturgeon fishers generally preferred to fish the holes. The line was checked every day or so, and dragged in when there was a sturgeon caught. He also mentioned that all experienced sturgeon fishers used to hide their lines under the gravel on the river shore primarily in an attempt to prevent their lines and catches from being stolen by poachers. Also, experienced sturgeon fishers did not want to reveal their fishing holes to the general public.

5. **How were the sturgeon used?** Sturgeon was used as a food source for some (Mennonites, First Nations and others) – but at that time (in the 1970s and early 1980s) most of the fishers were recreational fishers. Some of these recreational fishers practiced catch and release at that time. The sturgeon meat was palatable, but not as good as other fish in the region.

6. **Did you ever see sturgeon or hear of the fish caught upstream of Nautley?** No. Wayne has never seen or heard of sturgeon upstream of the Nautley River.

7. **When did these encounters occur?** Wayne noted that sturgeon fishing in the Nechako was best in the early and late summer. The periods of high water were not productive fishing times.

Notes: The outflow of the Nautley River from Fraser Lake was altered (raised) by Alcan to prevent the lake from getting too low during the time the river was shut off to fill the reservoir. This may have had some affect on the movement of the sturgeon during that time.
Wayne also suggested talking to Mary John (Sai kuz), Jean Keillour (community member), Doug Turner and Alvin Breitkreutz (retired DFO employees).

Bert Irvine Interview Summary
March 20th 2000
Interview conducted at Bert and Mary Irvine's residence
Interviewer – Veronica Cadden
This interview was not taped. Summary compiled from notes and memory.

Bert and his wife have lived in their present location (79Km along the Kenney Dam Road) since 1954, and have guided and trapped, and conducted river readings for the DFO for many years. Bert has spent thousands of hours on the river, in all types of watercraft.

1. **What was your involvement with sturgeon?** Bert was not involved with sturgeon in the Nechako watershed, or anywhere else.

2. and Hulatt. He had occasion to observe three sturgeon in the water while on a one time rowing trip from Vanderhoof to Hulatt.

3. **What level of occurrence Where, on the Nechako did you encounter sturgeon?** The only place Bert has every observed sturgeon in the Nechako system is in the stretch of the Nechako between Vanderhoof **would you suggest?** This question was not asked.

4. **How were the Sturgeon captured?** This question was not asked.

5. **How were the sturgeon used?** This question was not asked.

6. **Did you ever see sturgeon or hear of the fish caught upstream of Nautley?** No. Bert has spent many hours observing the river upstream of Nautley and has never seen a sturgeon, or seen evidence of a sturgeon in this portion of the river. He did say that he had heard there were sturgeon below Greer Creek, but that he had never observed them there. He did not believe the sturgeon utilized the river above Nautley – at least not in his time.

7. **When did these encounters occur?** This question not addressed.

Notes: Bert and Mary believe that the riverbed is not suitable for the sturgeons' needs. They believe it is too rocky for a fish that likes to hang out in a sandy, or muddy bottom.

Jim Simonson Interview Transcribed
March 10th 2000
Interview conducted at Jim's home
Interviewer – Veronica Cadden
This interview was taped.

V. This is an interview with Jim Simonson on March 10, 2000. Talking about sturgeon. I was in the BC archives and I found this and I thought you might be interested in seeing a copy of it (show photocopy of letter written by Ed Simonson to the Fisheries commission to get a sturgeon fishing license).

J. Yes, yes (Laughs). That's a long time ago – 1938. Actually he had a license up until um well even after Alcan shut the water off – even after the water come back on – he still maintained his license. I believe it was, oh what would it be now, 56, maybe 57, they decided to raise the price of the license to, I'm guessing I think $75.

V. From 2.50?

J. Yes I think it was $75 I'm not really sure but any how it wasn't worth it for him to do it because it was a fairly, there wasn't actually too much money in it anyhow … so he let it drop at that time and I guess he was the last one that ever had a commercial fishing license for sturgeon on the Nechako or Stuart River. Now even all the while he did it, he started about 1929 as far as I can gather, even all the while he did it he was the only one that a, that a licensed to fish commercially.

V. Show him the 1922 license letter. He was interested to see that it was that early. I say that it doesn't show if it was a commercial license.

J. I dare say it probably was I think probably the commercial one was kept up all along. I was born in 1929 and I wasn't sure how long he had fished sturgeon before that but I was surprised to see it go back to 1922. Oh yes he fished for a long time. It's got to be the commercial license that he had.

V. I think that the latest one that we came across was from 1943 for him.

J. When was that?

V. 1943.

J. Oh yes he had a license after that. There's something I've often heard my dad speak of him. Where did I find here? Oh yea. Gerhardi he's at the end of the lake. Gerhardi we used to call him. Maybe that was someone who was different too? 1924!

V. It doesn't seem like there were ever more than 5 or 6 people in the whole of the Nechako system who had sturgeon licenses.

J. My dad was the only one I knew that ever sold any. I never ever heard of anyone selling them but I wouldn't start remembering until um I was born in 29 so it would be 35, 36 or 37 before I'd remember much about it. I never heard of anyone who…

Shirley leaves Jim says goodbye.

J. Isn't that interesting… I didn't realize they'd have records like that.

V. From what I understand…I go on to explain what happened to the records. Then I say I have a list of questions so I wont forget, then go on to explain the purpose of the study. Mention that I talked to Leo and that he had seen sturgeon drags in the river upstream of Nautley.

J. Well of course, at that time there was no reason why they couldn't have got up there because ah the Nechako river went past the Cheslatta Falls is now because there was no Cheslatta falls at that time. The river went completely by there so I imagine the sturgeon went up until it got too swift of water but probably when the water was fairly big like that they could make it right up into the lake chain and so forth, I would think.

V. I know that some of the licenses we saw were issued for Francois lake and I don't know if they were fishing in the lake or just lived there.

J. And they were definitely sturgeon fishing licenses?

V. Yes, because they would apply for two licenses, one for non-tidal and one for sturgeon.

J. Um I had never heard about sturgeon in Francois Lake, now I'm not saying there wasn't any but I never heard about it. Now there was sturgeon in Fraser lake of course, and there was sturgeon in Stuart Lake of course but (Stellako?) as a matter of fact years ago they used to count salmon, I knew some of the local fellows who used to count salmon, at the Stellako River bridge, and periodically they would see a sturgeon go through going up the river, you know they would be watching for salmon and a sturgeon would swim along up the river. They had fantastic stories about them being 16 feet long but of course you know, them down in the water, and so forth, and not being used to seeing salmon about so long (indicates about 1m) and then when they go through they say they look about 16 ft but I don't think that was the case.

Ah my dad always had the theory that they probably didn't get much over 300-400 lbs in the river. Now he may not be right but I mean you hear rumors, ahh, a game warden was telling me about seeing a sturgeon at Fort St. James that weighed 1100 lbs. And I said my "god how long was it", oh he said "I don't know it was cut up and it was in a bathtub, and two Indians were packing it up to the house from the lake", well 1100 lbs sturgeon and two Indians packing it – it didn't really jive with me. I took it with a grain of salt. I think my dad probably caught as many if not more than anyone ever did in the area and the biggest one he weighed was 315 lbs. Now it probably went a little bigger than that but definitely not over 400. You hear about the lower Fraser getting bigger ones but that's a different kind of sturgeon too. We have what we call the white sturgeon here and then of course we have the sea sturgeon, black sturgeon whatever I guess in the lower Fraser.

V. Yes I've read an article about green sturgeon that lives in the ocean

J. Yes, well I guess that's what we call years ago, the black sturgeon. Now they were an ocean going similar to a steelhead trout, and so forth, and spend some time in the ocean and the rest of the time in the fresh water. I don't know if they'd ever get up this far. I guess they probably wouldn't make it through hells gate canyon or you know places down there… well even then I doubt if they would have made it through. Sturgeon didn't really like fast water they always liked to hang in the back eddies. My dad always caught them in back eddies; that was the only place you could net them. You put a net in the current, and the net would stay so tight or taut that it would go right through it. It would just go straight through it. Whereas if it was in a back eddy, and it was laying loose, a sturgeon would come, and of course it was a 12" mesh, which was 6" of each way they measure a mesh by stretching it and its 6" each way, and the sturgeon would simply get his nose in it, and he thought he was in a weed bed and consequently he would try to swim through it and the net would come around him and then these sharp knives on either side and on his back and a couple of little ones on his stomach, this is kind of insignificant, but the sharpest ones were these (we are looking at a

photograph of a sturgeon, and he is pointing out the places he's talking about) three they would get caught in the Irish linen net and he would realize he was getting caught so he would start rolling and he would roll wrap the net around. When you got him he wouldn't be gill netted. You never gill netted a sturgeon they were just simply rolled in the net.

V. Right, trapped.

J. Yes, they couldn't get loose. In most cases they would still be alive. Periodically, a sturgeon would be dead because his gills would be pulled in but you had to check the net every morning anyhow so that they could still be OK. Anyhow, continue on with your questions, I'm getting side tracked here (laughter)

V. Lets look at the map to locate some of the specific areas.

J. My dad only had one specific area he fished in. It was an eddy, about, a backwater about a mile and a half west of Hulatt.

V. Shall I get the map out?

J. Yes, I spent all my younger years around there, I'm sure I can find it.

V. This is where the Stuart comes into the Nechako….

J. My, My here is, ummm, here, right here, OK. This is the back eddy right here my dad used to fish in. (then explains how the current flows along to create a back-eddy.) There was another eddy up close to Vanderhoof here that was also good too, but I think he had gone there years ago but that was before I was even born. All the time that I was born, we used to live in Hulatt here, and ah, and ah just looked about a mile and half up the river here, pretty close to two miles.

V. Do you think if I got out the other map you would be able to find the other eddy?

J. If you have the one east of Vanderhoof I could…(more) map shuffle. He always used to call it Shortreid's Eddy because of a guy by the name of Johnny Shortreid used to have the land across the river from there and him and my dad were friends…. Here's Vanderhoof….um…it would be the next one down?… OK we have got it here, OK, points out Shortreid's Eddy. This looks familiar; I used to take the water samples down here. Here we are (trying to locate the eddy). Its this one right there. That was the other area, my dad had always dreamt about going up there again apparently he had been up there one time and there seemed to be a lot of sturgeon, and he caught in the river and he was even a little scared because every once in a while another one would pop up and um you know, they used to rear up out of the water, about half the fish would come up out of the water, and he'd splash back down again, as a way of probably delousing themselves or something – that's what the rainbow do it for anyhow. That would have to be Shortreid's Eddy.

J. I know it would have to be it; I'm familiar with it, (Discusses back eddy again).

V. How many, about how many fish a year, would you catch?

J. It would vary quite a bit. Some years he would probably only get two or three, but then of course, he didn't fish on a steady basis. There was no use catching a fish if he didn't have a market for it. So consequently he would put the net out and maybe get one, and then he wouldn't probably do it for a while until he maybe got rid of that one at Prince George or Vanderhoof, and then he would set it out again, and probably get another one in time but some years they were a lot scarcer than others, they were a lot harder to catch. Some years there seemed to be a fair number of them around. I remember one particular case he had

three of them in the net at one time. He was quite happy. He supplied the market for most of that summer. But I would think on the average he probably got oh 4 or 5 a year. But as I say that wasn't steady that was just fishing what the market could handle.

V. Did he fish at a certain time of the year?

J. Well, through all the year, mostly, spring of the year was a good time, he always had the theory that the sturgeon went into Fraser Lake for the winter but I don't know if that was right or not, but he figures they went into Fraser Lake and spent the winter and in the spring they would come back down again. He would usually have to wait until well he'd either have to get in before high water, or after high water. During high-water you would get a current even in the eddy there was so much water in the river, and he couldn't set the nets, well he could set them but he wouldn't catch fish because they'd go right through it. So he would probably catch one before the high water came, and that would be in about June, and then he would fish again once the water went down again which was the end of July some time and then of course he could fish right through till September and I believe I think that's why he figured they went into Fraser Lake because later on in the fall I don't think he had much luck and he assumed they left the river now I'm not too sure this is right, but I know this was his theory that they would go into Fraser Lake for the winter.

V. I suppose that the fish above the Stuart where the, the Stuart comes in would have gone to Fraser Lake?

J. Oh I think so. Yes, I would think so. The fish in Stuart River probably would go into Stuart Lake if they went for the winter. And these go into Fraser Lake because there's pretty bad rapids right at the mouth of the Nechako and the Stuart, on the Stuart they call it the Chinlac. I'm not too sure if the Sturgeon would be too excited about going through that they, they just don't like fast water no they are a slow water feeder.

V. What do you think about the idea that they spawn in the shallow water?

J. We never really knew where they spawned. Periodically he would get a female sturgeon that had oh had a bucket or a water pail full of eggs in it you know, but he really didn't have a theory about where they spawned that I know of. Now where did they spawn did they spawn in the lake or?

V. They don't know.

J. They don't know, OK I don't think Dad would have been much help on it, but some of the ones that he caught were getting close to the spawning stage. You know, periodically you would get ones that had small eggs in it and then you'd get one that had fairly large eggs in it you know, probably not separated yet but getting awfully close to separating. About the size of number 4 lead shot or something to that effect (discussion about the size of #4 lead shot!)

V. Some articles that I've read about sturgeon suggest that they spawn in the shallows in fast water.

J. Similar to a trout I guess. It would kind of surprise me, they didn't like fast water. I would like to believe more that they would spawn in a back eddy someplace where there wasn't much current or even in a lake but I may not be right. You get ____thinking about it and you kind of put it together, and ah you're not always right.

V. Did you know, other people who fished for them?

J. Commercially?

V. Well, not even necessarily commercially.

J. Oh, I've known many people that fished, most of them even without having a permit. They would fish for sturgeon. I know there was some old fellow at Finmoore that used to fish for sturgeon all the time but of course he was way out in the boondocks, nobody monitored him. He used to get several.

V. Do you know whereabouts he fished?

J. I wouldn't be sure. Maybe out in the Finmoore area somewhere. And I know periodically…

We get out maps again. Show Jim where Leo had located sturgeon areas.

J. I would guess, Hutchinson, Hutchinson, that's below the Stuart. I know the Indians used to go to Hutchison to net salmon Indians from Stoney Creek would go to Hutchison to net salmon in the fall of the year, and periodically they would get a sturgeon in the salmon net.

V. Hutchison?

J. Hutchison. Hutchison is the first station below Finmoore. (Look at maps again). Hutchison must be 7 miles below Finmoore. Probably longer than that by river because the river is not as straight as the road. (Look at maps again). Yes the Indians used to fish salmon above Hutchison would be in this area here, I guess, and periodically they would get a sturgeon in their salmon nets. It was usually a small one, because a salmon net is 4" mesh, I think they used 4" mesh. Whereas sturgeon we would use a 12" mesh but they would get one tangled in their nets periodically and I would think it would be right in that, no I'm wrong – Wedgwood, Wedgwood this is where he used to fish. I said Hutchison because its where there, the only place where there was a section crew, but Wedgwood was an old section that was eliminated many, many, many years ago, back in the 20s I guess.

V. There's an archaeological site there too.

J. OK yes, yes that's about where they fished, maybe even a little up river from there.

V. And they got small fish?

J. They used to get the odd small sturgeon, that right. You know by small I mean 50lbs or thereabouts. I don't think they ever got much over 50. I used to know some of the Indians and they'd tell me about it and yes…but I dare say there's sturgeon in the whole Nechako and of course the Fraser I don't know if they come up as far as Prince George up the Fraser or not I've heard many stories about Lilloet and a the lower Fraser (Somewhat off topic now…)

J. There's no reason why they shouldn't come up the Fraser I guess. (Still off topic)

(483)

V. You got to know most of the people who fished in the river?

J. Oh we knew everybody well not everybody (laughter) yes its different now but before Alcan went in, if you saw a stranger here in Vanderhoof here, you'd kind of look at him and wonder…

Notes that he was born in the little log house in the museum in Vanderhoof. (Murray House) Shirley comes home. Invites her to come and join the conversation.

J. I was going to tell you about the nets my dad used. They were made out of Irish linen, and Irish linen is a fine, fairly fine string, I don't know if your familiar with what we used to call store string years ago, when you bought something at the store and it was always tied up with string?

V. It was white?

J. Oh yes it was white. Anyhow, the Irish linen was similar to the store string only it was a little smaller, but very, very tough. You couldn't possibly break it with your hand you'd cut into your hand but you wouldn't break it, and my dad used to buy that in well balls, balls where the string comes out of the center you know, and it kept unraveling, and he would get enough to build a net, and he would take two strings to start making the net a double string, he'd pull it out and then he would give it a little twist, and then he would knitting his net with it. And that would take all winter to knit one net.

V. One net?

J. Oh gosh yes lots of work. The net was about, well once it hung, it was about 8' deep and he used to have it about 100, maybe not, maybe about 80' long but then when you are knitting it you are knitting it stretched so you would have to knit it twice the length so that once you hung it, it would shrink in size by half because it gets pulled out like a rope. All of your meshes were there but pulled out. And then there would be a float line and a sinker line on so it will stay in square meshes. But he was into all winter on a net like that. Then once he got it and it was all white cord, well he would get birch bark, and boil it in a big boiler and dye the net with birch bark water from the birch bark to make it colored to make it a sort of brownish colour a kind of coloured … he figured the fish wouldn't see it well and he figured it …And ah consequently that's what he'd do.

V. Where did he get the idea to use birch bark?

J. Oh the Indians used to use birch bark for pretty near every thing years ago and I guess he caught on from them possibly in Norway – he come over from Norway in 1903, and they might have used something like that over there. His traps, he was a trapper too, and he always took them and boiled them in birch bark it took all the human scent away from the traps some animals can detect human scent pretty close, like coyotes, and foxes and wolves in particular do that. And so he would boil his traps in his birch bark solution as well.

J. Anyhow, that was how he got his nets. Now you could get them commercially knitted, they were made of Irish linen but they would only use one strand, and he didn't figure that was strong enough. And his was a double, and give it a slight twist, and in the 6" side of the net he would probably have about a turn and a half or two turns of twist.

V. And even that wouldn't be strong enough in a current?

J. Oh no, a sturgeon would go right through it, if it was hanging taut. Even in slack water, if you caught a sturgeon in the net, you were bound to have a big hole, probably 5, 6 feet across you'd have to repair, but of course that was cut with these sharp knives there and they were cut – some were bigger than others, but they would cut the net with no problem at all. Periodically one would even get away – they cut holes in the net big enough that they would get away. Quite often they would com up here and there would be a big hole in the net, and twenty feet of the net would be all tied up in a ball, and the sturgeon was gone. My dad always had the theory that sturgeon traveled in pairs. Now the female was usually the biggest, and the male would be a little smaller, that's common in salmon too if I'm not mistaken. And sturgeon was the same way. If he happened to get one, he always figured there'd be another one around. They were very timid fish though. If you happened to make any noise in the eddy when you were setting the net out or something you would probably

never get a sturgeon that night, because they would have been scared away with the noise. He wouldn't drive the outboard motor into the eddy. He would stop it downstream quite a ways and row on up, quietly row up into the eddy when he was setting the net out, or even checking the net. If he was going to pick the net up then that would be a different thing he could run right up there, he didn't really worry about scaring them then because he was going to go pick it up anyhow. I know um well he used to use a block of wood for a float on the far end of the net to hold it up. And one time he got the idea he would use a gasoline a four gallon gasoline can, you know they were made of tin, you probably don't even know what they are?

V. They were round tins?

J. No these were square. Usually these were square, about so square and about so high with a handle on top and of course a lid that you could pour it out of and so he figure oh that would make a good float so he used that for a float, and he didn't get any fish, and he didn't get any fish, and finally he went up one evening and just when he was there the sun was going down, and everything was cooling off and the tin can let off a big bang out of it when it was shrinking down and of course he realized why he wasn't getting any fish. The can banging in the morning and banging at night and so that's the last time he ever used a gasoline, or kerosene can for a float. Noise really affects them. If there's a rifle shot in the eddy um one evening or something, he was sure he'd never get a fish that night. They'd be gone, more would come in, or that one would come back in if it was good feeding around they might come back in and you know start hanging around the eddy again.

V. Were you ever there when he was cleaning the fish to see what was in their stomach?

J. Oh, yes many times. Actually it was usually always small fish that they fed on because it's the mouth, its on the bottom, you know how the mouth is set up is I guess right on the bottom, not in front like other fish right underneath, an accordion sort of a mouth, and my dad had watched them feeding when he had them tethered out they would be tethered on about 50ft of rope and he would he would hang about in the boat and they didn't seem to mind him being there, and he watched them feeding and it seemed like, he figured anyhow that the sturgeon let a secretion out of its mouth that attracted little fish, and all these little fish would come and gather and gather and gather below him and the sturgeon he would slowly, slowly raise up and when lots of these little fish got below and his mouth would accordion out and he'd take in a pail full of water and probably 25 of these little fish and that's how he fed. But periodically he would get one that maybe had a squawfish about so big, or even a ling that might have even been bigger in it, and the only way he figured out that they might have been able to catch that, because he certainly couldn't chase it down and catch it because of the way the mouth but maybe the ling or squawfish would come in after these little fish just about the time the sturgeon decided he was going to take a mouthful and the unlucky squawfish just happened to be in the way. Because periodically, there would be a good sized, maybe even a couple of good-sized fish in their stomach.

V. What about clams?

J. Clams, I don't remember anything about him mentioning clams. I have heard that sturgeon will feed on clams I don't know if they swallow the shells and everything? They're going to have to if they're clams there's no way…They didn't have teeth... They inhale everything. Periodically, he would find even a stick about so long in the sturgeons' stomach. Well of course that stick happened to be in the way when he inhaled a bunch of fish and the stick was probably floating close and it went down too. I suppose it would just stay in the sturgeons stomach till it disintegrated and ah it didn't seem to hurt them, they were none the worse for wear.

V. I mention article about sturgeon with a dead cat in it.

J. Oh, I'm sure they'd take anything that was there. They used to set line sturgeon. Well of course, after commercial fishing for sturgeon ended you could get a permit to set line sturgeon and I heard rumors of them using anything for bait, but in most cases, the squawfish was used for bait. A squawfish about so long. And ah undoubtedly the sturgeon would be puttering around, and he'd inhale the squawfish on his way by. But they're definitely a bottom feeder, and you now they're looking for anything and if a squawfish is lying on the bottom he'd probably spot it and go over and just inhale it. And of course the squawfish has the hook in it and that's the way he gets caught.

V. Were they doing that here, with setlines?

J. Oh all over here, oh sure, oh people in Vanderhoof were, actually after the commercial fishing stopped you could get, they would let out a certain amount of permits, for sturgeon and of course there were probably twice as many people did it without permits _____ I'm not too sure how successful they were. I heard of several getting caught but I think a lot of people probably fished for a summer or two and didn't get any and so they gave up. Then again you have to have special areas where they were feeding, an ordinary person just has their set line out in the current, well of course, your not likely to get one there but he wouldn't be feeding in the current. (General sturgeon discussion – barbells on mouth of sturgeon.)

V. Where is Sturgeon Point road?

J. Sturgeon Point is on the Stuart River. There used to be a bridge there. But that bridge is gone a long, long time ago. …My dad had a permit to fish the Stuart River too, but he never ever fished up there. The old Omineca trail, that where the 'old ferry' used to be….

V. Asked about fishing in the mouth of the Stuart. Mention there we studies done in the 70s and 80s in that area.

J. I wouldn't be surprised, this guy at Finmoore, he used to be an old guy down there, we called him Whiskey Jack, he, well Whiskey was a good name for him, and he used to catch sturgeon in this area someplace and I wouldn't be surprised unless it was kind of down around this area some where…

V. Leo says that he doesn't remember anybody ever catching one there (pointing to Finmoore – Stuart River area).

J. This Jack guy at Finmoore, he used to live on sturgeon he'd smoke sturgeon – I understand. Smoked sturgeon is good. Sturgeon is very fat, but no, it smokes, it smokes with no trouble at all, in the smoker, it probably, the fat comes out of it. It'd even be easier to eat once the fat dripped out of it, once it'd been smoked because you get it warm enough so some of the fat would drip out of it. Char is about the same way. Char is very fat, and um, some of the fat would drip out.

V. So sturgeon would be a good thing to eat in the wintertime?

J. Oh yes... It has hide on it just like a shark…you had to skin it before you cooked it. (We go off on a tangent).

Side 2

V. I describe a letter written in the 20s about the origin of the Nechako River. I mention that in this letter it is mentioned that sturgeon of 3-4 inches long have been seen in the river.

J. I don't remember ever having seen one that small. But I remember seeing the odd one you know in about this range (gestures about a meter long) maybe about a pound, 2 pounds or so I know someone caught one on a ling line, with a… Oh certainly there are smaller ones there we just don't ever seen one I guess.

V. What about when they shut the river off, did you ever go up the river upstream from Nautley and see the fish in the dry bed?

J. No, no. No I um, actually I don't know what happened to the sturgeon once they shut it off. I would kind of hope that they had made it up into Fraser Lake or something. But I, me, I'm not often up at the upper end, I'm not too sure that they could do that; even though the Nechako was shut off, we were still getting the water that comes through the Nautley. So its possible that it might have been enough that they could follow channels and make their way back the Nautley and back into Fraser Lake, because uh, I don't really think they could have lived in the river the way it was you know once the Nechako was shut off. They wouldn't have had many options, it was either going down, or back up again. If they went down they would have to go in the Fraser I guess, I don't see they'd make it up the Stuart, through the Chinlac rapids.

V. So you didn't actually walk up the riverbed?

J. No, not at all, nothing, no, and they'd still get a little bit of water, because you've got Greer Creek, that comes into the Nechako about half way between Nautley and Kenney Dam and then you've got Cut Off creek that comes into it 10 miles above Greer creek and probably another few little streams that come in so that it would never have been absolutely dry, but it would have been just a little trickle of water compared to what it used to be. Because Greer creek in the summer time is not very big - it wouldn't have amounted to too much. Cut Off creek, Harvey creek, they're all the same way. The summertime, they're just little creeks. In the spring of the year, they get some good runoffs out of them. But, the dry part of the year, there's not much water in them. (More general conversation about Alcan)

End of sturgeon interview.

Notes: - Ed Simonson only fished in two areas in the time Jim could remember. He may have fished in the Stuart before Jim was born, or when he was too young to remember.

- Fished before high water and after- but not in the fall.
- Fished in about 10 ft of water in a backeddie.
- His father believed sturgeon traveled in pairs. Where there was one, there was usually another nearby.
- Believed them to be a timid fish.
- Setlines were used after commercial fishing stopped.
- Small sturgeon in the 50 lbs range
- If the fish were 50 lbs or less, they were turned loose.
- Good years and bad years – did not last for extended periods of time.
- Heaviest weighed fish Ed caught was 315 lbs.

Appendix 3
Sample of Request for Interview Letter

Norcan
Consulting Ltd.

Integrated Resource Management

RR2 Site 28 Comp 39, Prince George, BC V2N 2H9
Street Address: 4202 Kinsley Rd. Prince George, BC
Phone: 250-962-1282 Fax: 250-962-1292

XXXXXXX
XXXXXXXXX
Prince George, BC

Month X, 2000

Dear _____:

The Ministry of Environment, Lands and Parks and the Ministry of Fisheries, with funding provided by the Habitat Conservation Trust Fund, have completed a five-year project to evaluate the status of white sturgeon within the Fraser watershed. This project has indicated that recruitment in the Nechako River has been low for almost 20 years. The province is proposing to develop a sturgeon recovery program in the Nechako River watershed to assist in the enhancement of the sturgeon habitat and to increase sturgeon population to sustainable levels. In order to achieve this end, it was determined that information pertaining to the historic distribution and use of sturgeon would be integral to the development of the recovery program. **NORCAN CONSULTING LTD**. is under contract to conduct a Review of Historical White Sturgeon Distribution Within the Nechako River Watershed.

Along with document research regarding the historic distribution and numbers of sturgeon in the Nechako watershed, we wish to conduct interviews with long-time members of the community who have knowledge of the Nechako white sturgeon, particularly prior to the construction of the Kenney Dam in 1952.

We are requesting that this letter be presented to your members in the hope that people will have some information relating to the historic range of sturgeon, or know of someone who may have recollections regarding the Nechako white sturgeon, and who may be willing to be interviewed regarding this subject.

We are hoping to conduct interviews with community members in early March, as the project is due to be presented to the province near the end of March 2000. We will make a follow-up telephone call in the third week of February, in the hopes that sufficient time has elapsed to present this letter to your members and consider the request. At that time, we will contact interested members to set up an agreeable interview date and time, and answer any relevant questions that prospective interviewees may have. If members would like to contact us directly, we may be reached at (phone) 250-962-1282, (fax) 250-962-1292 or (e-mail) norm@norcanc.com.

Thank you for taking the time to read and consider this request. Any information that can lead to a successful recovery of the Nechako white sturgeon will be welcomed. The sturgeon is a wonderful species with a long and distinguished history, and worthy of our consideration.

Yours truly,

Veronica Cadden