SUSITNA HYDROELECTRIC PROJECT

FEDERAL ENERGY REGULATORY COMMISSION
PROJECT No. 7114

FURBEARER STUDIES

SPRING 1985 TRAPPER SURVEY

LGL Alaska Research Associates

UNDER CONTRACT TO

ARCTIC ZACHARY-EBASCO
SUSITNA JOINT VENTURE

FINAL REPORT

FEBRUARY 1986
DOCUMENT NO. 3339

Alaska Power Authority

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Report by

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Under contract to
Harza-Ebasco Susitna Joint Venture

Prepared for

Alaska Power Authority

Final Report
February 1986

NOTICE

ANY QUESTIONS OR COMMENTS CONCERNING
THIS REPORT SHOULD BE DIRECTED TO
THE ALASKA POWER AUTHORITY
SUSITNA PROJECT OFFICE

TRAPPER SURVEY

I. Introduction

Trappers in the Susitna River drainage are able to make firsthand observations of wildlife resources in the region. Many trappers maintain informal records of the furbearers they catch, the distribution of the furbearers, and apparent population fluctuations. A survey was conducted of trappers in the area that might be affected by the proposed Susitna Hydroelectric Project. Specific objectives of the survey were:

1. To gain information on historical and present use of furbearer resources in the Susitna basin, and especially in areas that might be affected by the proposed Susitna Hydroelectric Project; and

2. To gain insight into furbearer distribution and abundance from persons directly utilizing the furbearer resource.

II. Approach and Methods

A. Definition of Survey Area

Trappers interviewed for this survey included those that trapped within an area defined as: north and east of the Talkeetna River, east of the Parks Highway between the Susitna River bridge and Cantwell, south of the Alaska Range between the Parks Highway and the Richardson Highway, west of the Richardson Highway between Paxson and Glennallen, and north of the Glenn Highway between Glennallen and the Chickaloon River (Figure 1).

B. Compilation of List of Trappers

The sources used to compile the list of names of trappers to be interviewed included: Appendix A from Gipson et al. (1984) listing names of trappers and other persons knowledgeable about furbearers in the area, furbearer sealing forms from Alaska Department of Fish and Game records, and information provided by trappers during interviews.

C. Development of Interview Guide

A questionnaire was prepared for use during the interviews (Appendix A). Categories of questions included:

1. Trapping operations

   - location and size of trapping area
   - number of years the person had trapped in that area
   - mode of transportation
   - portion of income derived from trapping

2. Furbearer species

   - what furbearer species were present
   - what furbearer species were sought by trappers

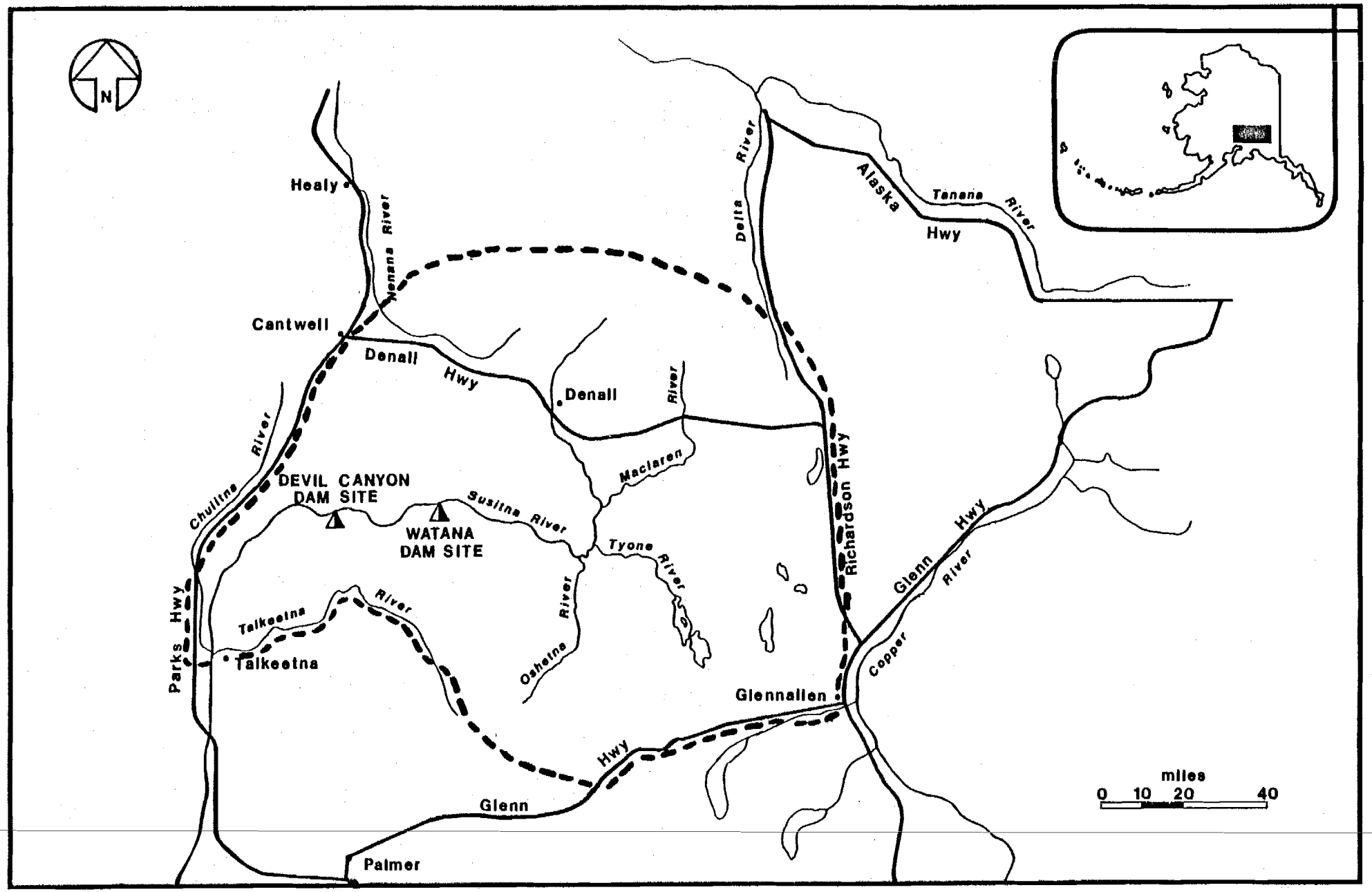

Figure 1. Susitna River above Talkeetna. Dashed line encloses trapper survey area.

- numbers and species of furbearers trapped
- information on the population status of each species

3. Other comments

- how the Susitna project might affect the trapping area
- names of other trappers
- information regarding moose or caribou falling through ice and/or drowning

D. Interviews with Trappers

Interviews were conducted during April, May, and June 1985. Persons on the list to be interviewed were contacted by telephone and in person at their residences. Trappers in remote areas were sent letters requesting them to call the interviewer at their convenience.

III. Results

Twenty-three trappers from the survey area were successfully contacted and interviewed. Of these, 17 responded that they had trapped within the survey area during the 1984-85 trapping season. Six responded that they had not trapped in the area during the 1984-85 season, but that they had trapped in the area during previous seasons, and would probably trap in the area again. Two persons trapping only within the proposed impoundments and adjacent areas responded. It is probable that other trappers operated inside or adjacent to the impoundment areas during the 1984-85 season. Evidence of possible trapping activity along the lower parts of the Oshetna and Tyone rivers and in the Fog Lakes area was observed in mid-February 1985. Trappers subsequently interviewed did not know who might have been trapping in those areas, or how many trappers might have been involved. Because these unknown trappers could not be contacted, information concerning their numbers and the distribution of their trapping areas could not be obtained. The total number of trappers operating in the survey area during the 1984-85 season is unknown, but survey responses indicated that as many as twice the number of trappers interviewed may actually trap in the area.

In this report, information on most trapping operations (size of trapping area, method of transportation, and portion of income) and numbers of furbearers caught is presented only for persons trapping during the past season. Additional information on the number of years the person had trapped in the area, opinions on furbearer population status, and other comments are presented from interviews of persons trapping during the past season and also from interviews of those that did not trap during the past season, if they had remained knowledgeable about furbearer populations in the area.

A. Trapping Operations

To protect trappers' proprietary information, locations of the operating areas of individual trappers are not presented in this report. Trappers reported that the amount of area trapped varied among different seasons and during the same season. Trapping area size also varied by mode of transportation. For example,

trappers who walked covered small areas, whereas trappers using airplanes usually covered the entire survey area (including the impoundment zones). Length of trapline was considered the basis of measurement for trappers not using aircraft to cover the entire area, and ranged between 5 and 150 miles (Table 1).

Length of trapping experience in the area varied greatly (Table 2), ranging from 2 to 40 years. No trappers were interviewed that reported the 1984-85 season as their first year of trapping in the area. Because the interview list was based on known trappers, it is likely that some persons trapping in the area for the first time during the 1984-85 season were overlooked.

A variety of methods of transportation was reported by trappers (Table 3). Snowmachine was the most common. Most trappers used more than one method of transportation; for example, a common combination was snowmachine and dog team.

Most of the trappers interviewed considered trapping income supplemental to their regular income, with ten of the 17 trappers active in 1984-85 stating that 25% or less of their income came from trapping. Three trappers considered trapping income to be over 50% of their total income (Table 4). The portion contributed by trapping income varied annually for trappers, depending on trapping success, fur prices, opportunities for employment, and other factors.

B. Furbearer Species

The reported numbers of furbearers caught (Appendix B) were obtained from only the 17 trappers interviewed that had been active during the 1984-85 season, and should be considered minimum estimates of numbers of each species taken in the area. In Appendix C, the status of each furbearer species is presented as the apparent abundance noted by each trapper during the past several years, for his or her particular trapping area.

1. Wolf: The wolf population of the survey area was considered stable, though some trappers reported localized increases or decreases within the past several years within their respective areas. In general, trappers felt wolves were stable to decreasing in the northern portion of the survey area, stable to increasing in the southeastern portion, and occurred only infrequently in the southwestern portion. Only six of the 17 active trappers reported they did not trap for wolves.

2. Coyote: Coyote numbers apparently increased within the past several years in the eastern and southwestern portions of the survey area, but were perceived to be low in the northwestern portion. Ten of the 17 active trappers reported trapping for coyotes, though numbers taken were low. Several of the coyotes reported trapped were taken incidentally to trapping for other furbearers.

3. Fox: Fox numbers were thought to be stable, though some areas of localized decrease were noted. Fox continued to be an important furbearer, and all but one trapper reported actively trapping for fox.

Table 1. Trapline lengths reported by trappers interviewed. Information limited to trappers operating in the Susitna basin survey area during the 1984-85 trapping season.

Length of traplines reported	Number of trappers[1]
variable	1
5 miles	1
10	1
16	1
25	1
30	2
40	1
50	2
60	2
80	2
150	1
trapped entire area[2]	4

[1] Three trappers reported having more than one trapping area. Lengths of all reported traplines are presented.

[2] Used aircraft. Note: one other trapper used an aircraft in the same area where he trapped by dog team and snow machine.

Table 2. Number of years each person interviewed had trapped in the Susitna River basin. Includes trappers that operated in the area during the 1984-85 trapping season, and others that had trapped during previous seasons but not during the 1984-85 season.

	Number of trappers	
Number of years	Impoundment areas	Entire area[1]
2	0	3
4	0	1
5	0	1
6	1	3
7	1	2
10	0	4
12	0	2
16	0	2
17	0	2
25	0	1
31	0	1
40	0	1

[1] Includes trappers from impoundment areas.

Table 3. Method of transportation reported by trappers interviewed. Includes only those persons that trapped in the area during the 1984-85 season.

Method	Number of trappers[1]	
	Impoundment areas	Entire area[2]
walking	0	1
horse	1	1
dog team	2	6
snowmachine	2	12
automobile	0	1
airplane	0	5

[1] Eight trappers reported using more than one method of transportation.

[2] Includes trappers from impoundment areas.

Table 4. Portion of income derived from trapping during the past year as reported by trappers interviewed. Includes only those persons surveyed that had trapped in the area during the 1984-85 season.

Portion of income	Number of trappers	
	Impoundment areas	Entire area[1]
up to 10%	0	6
11 to 25%	0	4
26 to 50%	0	3
51 to 75%	2	2
76 to 100%	0	1
did not respond	0	1

[1] Includes trappers from impoundment areas.

4. Wolverine: Wolverine generally occur in low numbers throughout the Susitna basin. Trappers described wolverine fluctuations as difficult to determine (because of low density), although ten trappers felt wolverine numbers had decreased during the past several years. This trend was particularly noted in the central and southern portions of the survey area.

5. Marten: Marten remained one of the most actively sought and economically important furbearers in the area. Only six of the 17 active trappers reported they did not trap for marten, usually because marten did not occur in their areas. Marten numbers appeared to be increasing within the past several years, particularly in the eastern portion of the survey area. Some trappers reported marten in areas where they had not observed them before. Throughout the rest of the survey area, marten appeared to be locally distributed in areas of suitable mature forest. The area along the Susitna River between Talkeetna and Gold Creek continues to be an area with few marten.

6. River Otter: Most trappers reported that river otter numbers were stable or increasing throughout the survey area, but only six trappers stated that they actively sought to catch otter. Low pelt prices were generally cited as the reason for not trapping otter.

7. Mink: Mink numbers were reported as generally stable throughout most of the survey area, with some areas of localized decrease or increase. Despite areas of local abundance, ten of the 17 active trappers reported they did not trap for mink. Low pelt prices were often cited as the reason for not trapping mink.

8. Weasel spp.: A notable increase in short-tailed weasels was reported from the eastern portion of the survey area. No trapper reported trying to catch them, but large catches of up to 40 or 50 weasels were made by some trappers incidentally to trapping for other furbearers (mostly marten).

9. Lynx: Low lynx numbers were reported for the entire survey area. A decrease in already-low lynx numbers was reported by trappers in the eastern portion of the survey area. Trappers in the western portion reported that lynx numbers were so low that it was difficult to say anything about trends in the population. Because of low lynx numbers, most trappers did not trap for lynx even though pelt prices were relatively high.

10. Beaver: Beaver numbers were described as stable or increasing by most trappers. Beaver were reported from throughout the survey area where suitable aquatic habitat occurred. Only six of the 17 active trappers reported they trapped for beaver. Most trappers did not actively trap for beaver because of low pelt prices.

11. Muskrat: Muskrat were reported from throughout the survey area where suitable aquatic habitat occurred. Trappers generally described muskrat numbers as stable and low, and most (15 of the 17) did not trap for muskrats.

12. Snowshoe hare: Although the snowshoe hare is not considered a furbearer, information on hare abundance and distribution was requested from trappers because hares are prey for many furbearers. Most trappers described the snowshoe hare population as having decreased from past levels, with few or none in most places. A notable exception was in the Talkeetna area, where most of the trappers interviewed felt the previously low population had increased slightly during the past several years. It is likely that low snowshoe hare abundance contributes to the correspondingly low lynx abundance reported by the trappers.

C. Other Comments

Most of the trappers interviewed indicated that the increased access created by project construction would be more detrimental to the area furbearer population than would habitat loss. Some expressed concern that increased numbers of people in the area, including other trappers displaced by the impoundments, would create competition in their own trapping areas. Many felt that the Susitna project would have beneficial effects on the local economy.

Trappers were asked if they had observed moose or caribou falling through ice and drowning. Most indicated they had observed this, though it was not common.

IV. Conclusions

Because the interview list was based on known trappers, and because a number of trappers on the list were not available to be interviewed, the results presented on the extent of trapping that might be affected by the Susitna Hydroelectric Project should be considered a minimum. As noted by Gipson et al. (1984), only several persons trapped exclusively within or immediately adjacent to the proposed impoundment areas during any one year. However, this should not be taken to imply that only those few trappers might be affected by the project. Most of the five trappers using aircraft trapped over an extended area of the Susitna basin, and reported taking furbearers from the impoundment areas. In addition, numbers of persons trapping, areas trapped, and take of furbearers during the period covered by this survey reflected conditions such as interest in trapping, employment opportunities, furbearer population levels, and pelt prices. These conditions would not likely remain the same from year to year. Consequently, the number of trappers operating within the area that might be affected by the Susitna project could change from year to year.

Most of the trappers interviewed indicated that they tried to catch all species of furbearers occurring in the survey area except beaver, muskrat, weasel, and river otter. Few reported trapping for lynx because of low lynx numbers. Income from trapping was considered by most of the trappers to be supplemental to income derived from other sources.

V. Literature Cited

Gipson, P.S., S.W. Buskirk, T.W. Hobgood, and J.D. Woolington. 1984. Susitna Hydroelectric Project. Furbearer Studies. Phase I Report Update. Alaska Cooperative Wildl. Res. Unit. Prepared for Alaska Power Authority. 100 pp.

APPENDIX A: Trapper Questionnaire

Name:
Address:
Trapping area:
size:
Number of years:
Mode of Transportation:

		This Year	Last Year		
Species	Present?	Trapped for? Number caught	Trapped for? Number caught	Population Status	Comments
Wolf					
Coyote					
Fox					
Wolverine					
Marten					
River Otter					
Mink					
Weasels					
Lynx					
Beaver					
Muskrat					
Snowshoe hares					

- What part of income is derived from trapping?:

- How might the hydroelectric project affect your trapping area?:

- Name of other trappers, or knowledge of other areas being trapped:

- Information regarding moose or caribou drowning, or falling through ice:

APPENDIX B: Number of furbearers reported trapped during the 1984-85 season by trappers interviewed.

Furbearers Trapped During 1984-85 Season

Species	Number trapped	Number of trappers: Impoundment areas	Number of trappers: Entire area[1]
Wolf	0	0	4
	1	0	3
	3	0	1
	9	0	1
	12	0	1
	39	0	1
	did not trap for wolves	2	6
Coyote	0	0	4
	1	1	2
	2	0	3
	7	0	1
	did not trap for coyotes	1	7
Fox	0	0	1
	1	0	1
	2	0	3
	3	1	2
	5	0	1
	15	1	3
	18	0	1
	20	0	1
	22	0	1
	30	0	1
	125	0	1
	did not trap for fox	0	1
Wolverine	0	1	5
	1	0	2
	3	0	1
	4	1	3
	6	0	1
	did not trap for wolverine	0	5

[1] Includes trappers from impoundment areas.

APPENDIX B (cont.)

Species	Number trapped	Number of trappers: Impoundment areas	Number of trappers: Entire area[1]
Marten	0	0	0
	2	0	1
	3	0	1
	5	1	1
	7	0	1
	20	0	1
	22	0	1
	25	0	1
	32	0	1
	44	0	1
	45	0	1
	110	0	1
	did not trap for marten	1	6
River Otter	0	1	3
	3	0	3
	did not trap for river otter	1	11
Mink	0	0	2
	1	0	1
	3	1	1
	4	0	1
	5	0	1
	6	0	1
	did not trap for mink	1	10
Weasels	Trapping of short-tailed and least weasels was usually incidental to trapping for other furbearers, and numbers were not recorded.		
Lynx	0	1	6
	did not trap for lynx	1	11
Beaver	0	1	1
	2	0	1
	20	0	4
	did not trap for beaver	1	11

[1] Includes trappers from impoundment areas.

APPENDIX B (cont.)

Species	Number trapped	Number of trappers: Impoundment areas	Number of trappers: Entire area[1]
Muskrat	3	1	1
	40	0	1
	did not trap for muskrat	1	15

[1] Includes trappers from impoundment areas.

APPENDIX C: Apparent furbearer abundance in the Susitna basin survey area as described by trappers interviewed. Information is from persons that trapped in the area during the 1984-85 season, and others that had trapped during previous seasons but not during the 1984-85 season.

Descriptions of Relative Furbearer Abundance by All Trappers

Species	Status	Number of trappers: Impoundment areas	Number of trappers: Entire area[1]
Wolf	stable	1	8
	increased	0	4
	decreased	1	5
	unknown	0	0
	very few, or not present	0	6
Coyote	stable	0	5
	increased	0	10
	decreased	0	1
	unknown	0	2
	very few, or not present	2	5
Fox	stable	0	12
	increased	1	3
	decreased	1	7
	unknown	0	0
	very few, or not present	0	1
Wolverine	stable	1	9
	increased	0	0
	decreased	1	10
	unknown	0	2
	very few, or not present	0	2
Marten	stable	0	4
	increased	2	9
	decreased	0	3
	unknown	0	2
	very few, or not present	0	5

[1] Includes trappers from impoundment areas.

APPENDIX C (cont.)

Species	Status	Number of trappers: Impoundment areas	Number of trappers: Entire area[1]
River Otter	stable	2	13
	increased	0	7
	decreased	0	2
	unknown	0	1
	very few, or not present	0	0
Mink	stable	2	11
	increased	0	2
	decreased	0	3
	unknown	0	7
	very few, or not present	0	0
Weasels	stable	0	6
	increased	2	9
	decreased	0	2
	unknown	0	6
	very few, or not present	0	0
Lynx	stable	0	1
	increased	0	0
	decreased	0	9
	unknown	0	0
	very few, or not present	2	13
Beaver	stable	1	11
	increased	0	7
	decreased	0	0
	unknown	1	5
	very few, or not present	0	0
Muskrat	stable	2	8
	increased	0	2
	decreased	0	1
	unknown	0	4
	very few, or not present	0	8
Snowshoe hare	stable	0	0
	increased	1	6
	decreased	0	7
	unknown	0	1
	very few, or not present	1	9

[1] Includes trappers from impoundment areas.