Fishery Data Series No. 12-50

Evaluation of Game Fish in Stocked Lakes on the Kenai Peninsula, 2000–2007

by

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and

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September 2012

Alaska Department of Fish and Game **Divisions of Sport Fish and Commercial Fisheries**

Symbols and Abbreviations

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Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Measures (fisheries)

fork length	FL
mideye-to-fork	MEF
mideye-to-tail-fork	METF
standard length	SL
total length	TL

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

FISHERY DATA SERIES NO. 12-50

EVALUATION OF GAME FISH IN STOCKED LAKES ON THE KENAI PENINSULA, 2000–2007

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ABSTRACT

From 2000 to 2007, game fish populations were sampled in 28 stocked lakes of the Northern Kenai Peninsula Management Area (NKPMA) to evaluate the fish stocking program and to provide the public with timely information on species composition, size, and relative abundance of stocked fish. Attempts were made to sample each lake once every 3 years on a rotating schedule. Up to 4 variable-mesh gillnets and up to 3 fyke nets, set 24 hours overnight, were used to catch fish depending on the size and remoteness of the lake. Each lake was sampled 1 to 3 times during the study. Game fish were caught and sampled for length and age. Fish over 200 mm in length were identified to species, measured from tip of nose to fork of tail (fork length [FL]), and 3 scales were taken for age analysis. Fish measuring between 100 mm and 200 mm FL were sampled based on 1 of 3 methods, including an abundance-based formula. Fish less than 100 mm FL were identified to species, counted, and released. Initial evaluation of stocking success was based on an arbitrary fisheries management rule that stocking is successful when at least 20% of the fish in the sample are 300 mm or greater in length. Fifteen of the 28 stocked lakes in the NKPMA had at least 1 sample that satisfied this rule. Samples from 7 lakes had, at most, 10% to 20% of fish 300 mm or greater. Samples from 6 lakes had less than 10% of fish 300 mm or greater. The Statewide Harvest Survey was used as a secondary evaluation tool for each of the 28 stocked lakes. Seven of the 28 stocked lakes accounted for 78% of the total fishing effort on stocked lakes in the NKPMA over the last 10 years.

Key words: stocked lakes, Kenai Peninsula, rainbow trout, *Oncorhynchus mykiss*, Chinook salmon, *Oncorhynchus tshawytscha*, coho salmon, *Oncorhynchus kisutch*, Arctic char, *Salvelinus alpinus*, Arc Lake, Aurora Lake, Barbara Lake, Carter Lake, Cabin Lake, Cecille Lake, Centennial Lake, Chugach Estates Lake, Douglas Lake, Encelewski Lake, Elephant Lake, Island Lake, Jerome Lake, Johnson Lake, Long Lake, Longmare Lake, Loon Lake, Meridian Lake, Quintin Lake, Rainbow Lake, Roque Lake, Scout Lake, Sport Lake, Thetis Lake, Tirmore Lake, Troop Lake, Upper Summit Lake, Vagt Lake, fyke net, variable-mesh gillnet, length frequency, age class, length-at-age, stocking evaluation.

INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) currently stocks game fish in 28 lakes in the Northern Kenai Peninsula Management Area (NKPMA). The goal of the lake stocking program is to provide diverse, year-round, and dependable angling opportunities. On the Kenai Peninsula, selected lakes have been stocked on an annual, biennial, or triennial basis with hatchery-reared sport fish since 1952 (Nelson et al. 1987). Today, the stocking program on the Kenai Peninsula provides sport fishing opportunities for rainbow trout (*Oncorhynchus mykiss*), coho salmon (*Oncorhynchus kisutch*), Chinook salmon (*Oncorhynchus tshawytscha*), and Arctic char (*Salvelinus alpinus*).

The stocking program provides many benefits and has multiple roles. The program supports consumptive fisheries and creates new angling opportunities in urban areas where potential fishing effort is highest. In addition, it supports rural, remote, and campground fisheries where less intense angling pressure is desired. As a conservation tool, stocked lakes redirect angling pressure from natural stocks and benefit both sport anglers as well as the industries related to sport fishing by providing diverse, year-round fishing opportunities.

Currently, lakes are selected for stocking based on the following criteria: 1) the lake must have a legally dedicated public access, 2) the lake must not have any native game fish populations present, and must be able to sustain fish, and 3) the lake must be either a closed or intermittently open system, and if not, than a barrier must be constructed at the lake outlet preventing fish passage before stocking occurs.

The Kenai Peninsula stocked lakes range in size from about 0.02 to 1.38 km^2 (5 to 340 surface acres). Twenty-one of the stocked lakes are landlocked and do not support native populations of sport fish. The remaining 8 lakes that are not landlocked have barrier structures installed to

prevent egress and are stocked with sterile all-female rainbow trout. The particular species stocked in the landlocked lakes depends on the availability of the fish for stocking, the lake characteristics, and the expressed desires of the angling public for diversified fishing opportunities. Rainbow trout, the most popular species, are stocked in 27 lakes, coho salmon are stocked in 3 lakes, Chinook salmon are stocked in 1 lake, and Arctic char are stocked in 1 lake. The larger and more popular lakes (Elephant, Longmare, and Centennial lakes) are stocked with both rainbow trout and coho salmon. Sport Lake is stocked with both rainbow trout and Chinook salmon and Island Lake is stocked with both rainbow trout and Arctic char. Stocking of all species has been temporarily discontinued in Arc and Scout lakes due to the illegal introduction of northern pike (*Esox luscious*) which are not native to the Kenai Peninsula. When the populations of northern pike are determined to be either eradicated or under control, stocking is planned to resume at historic levels in Arc and Scout lakes. Table 1 lists all species observed in this report.

All (100%) of the rainbow trout stocked prior to 1990 were reproductively viable (diploid [2n], mix-sex). From 1991 to present, both diploid rainbow trout and reproductively impaired rainbow trout (triploid [3n], all-female) were stocked in lakes depending on whether or not the lake was landlocked. Since approximately 2007, ADF&G has also been producing and stocking the following triploid (sterile) species: Arctic char, Arctic grayling (*Thymallus arcticus*), Chinook salmon, and coho salmon (Diane Loopstra, Hatchery Biologist, ADF&G, Anchorage, personal communication).

The number of public inquiries and information requests (size, age class, and numbers of available fish) on these stocked lakes increases annually. However, little information other than harvest and catch data reported in the Statewide Harvest Survey (SWHS) are available (Mills 1982-1984; Howe et al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010). In many cases, ADF&G has been stocking lakes for more than 30 years without evaluating the stocking success. It is important that ADF&G monitors all stocking efforts and to provide this information to the sport fishing public, therefore maximizing sport fishing opportunities provided through stocking.

Historically, there has been no evaluation of lake stocking on the Kenai Peninsula. A feasibility study was undertaken on 8 lakes in 2000 to determine effective methods and procedures for a stocked-lakes evaluation program. Prior to 1991, stocked lakes had been surveyed sporadically, and from 1991 through 2000, the lake stocking program was comprised of recording location, species, and stocking densities. Information about these efforts has not been published and consequently, year to year comparisons or review of past stocking efforts are cumbersome and time consuming. To gain a better understanding of previous work, and to provide a better foundation for designing future stocking of lakes on the Kenai Peninsula, ADF&G recognized the need to publish this information in 1 document. The purpose of this report is to compile the methods and associated results from the 2000–2007 Kenai Peninsula lake stocking program into 1 document to facilitate accessibility of this historic data. In addition, this report will review whether information from this program, coupled with angler data estimated in the SWHS, can be used not only as a measure of stocking success but also to revise future methodology on the Kenai Peninsula's stocked lakes. Results from this report mainly provide qualitative species composition, age, and length information that can become available for anglers through ADF&G's website and office brochures known as the "Kenai Stocked Lake Series."

METHODS

STUDY AREA

The 28 stocked lakes of NKPMA can be broken down into 4 areas including Cooper Landing–Moose Pass, Kasilof, North Kenai, and Soldotna-Sterling (Figures 1–4). All 8 lakes in the Cooper Landing–Moose Pass area are located in or are bounded by the Chugach National Forest. Elephant Lake, commonly known as Spirit Lake, is surrounded by Salamatof Native Association land and Johnson Lake is located within an Alaska State Park. The remaining lakes are in urban areas.

Most lakes can be easily reached by vehicle. Access to the 6 remote lakes (Carter, Meridian, Long, Rainbow, Vagt, and Troop lakes) is more difficult and they must be reached via hiking trails. Trail length varies from 0.4 km (0.25 miles; from trailhead to Rainbow Lake) to 6.4 km (4 miles; from trailhead to Long Lake). Hiking trails are maintained by United States Forest Service in conjunction with ADF&G Soldotna Division of Sport Fish personnel.

STUDY DESIGN

During 2000, a feasibility study was conducted on 8 stocked lakes to determine sampling methods for a stocked lakes evaluation program (Table 2). The number of lakes examined each year varied depending on available personnel, equipment, number of responses to invasive species reports, and logistical difficulties associated with each lake.

Fyke nets and variable mesh gillnets were used to sample stocked lakes. Nets were set for approximately one 24-hour sampling period in each lake. In 2000, one gillnet was set on lakes with a surface area less than 0.12 km^2 (30 surface acres), 2 nets were set on lakes between 0.12 and 0.45 km^2 (30 and 110 surface acres), and 3 to 4 nets were set on lakes greater than 0.45 km^2 (110 surface acres). In subsequent years, 1 to 3 fyke nets and variable-mesh gillnets were fished on each road-accessible lake that was sampled (Table 3). One net of each design was set on lakes with a surface area less than 0.40 km^2 (100 surface acres), 2 each on lakes between 0.40 km^2 (100 acres) and 0.81 km^2 (200 surface acres), and 3 of each net on lakes larger than 0.81 km^2 (200 surface acres). One variable-mesh gillnet and 1 fyke net were used on each remote lake during sampling events in 2001 and 2002. Beginning in 2003, only 1 variable-mesh gillnet was used on each remote lake.

Fyke nets were approximately 4.1 m in length with a mesh size of 0.5 cm. Each net consisted of two 97-cm square entrance frames followed by 6 hooped internal funnels that ultimately formed a dead end. Two 1 m × 5.5 m wings were tied onto each side of the first entrance frame forming a "V" that funneled fish to the entrance of the fyke net. Fyke nets were typically set to position the body of the net parallel to shore with 1 wing anchored to shore. A weight was attached to the other wing and positioned offshore. Fyke nets were baited with unsalted salmon roe.

Sinking variable-mesh gillnets were set perpendicular to shore in water deeper than 2 meters. Nets were 36 m × 2 m in length consisting of six 6-m hung panels of variable mesh and monofilament strand sizes (½ in mesh, 0.20 mm diameter strand; ⅝ in mesh, 0.20 mm diameter strand; ¾ in mesh, 0.25 mm diameter strand; 1 in mesh, 0.30 mm diameter strand; 1½ in mesh, 0.30 mm diameter strand; and 2 in mesh, 0.30 mm diameter strand).

Fyke and variable-mesh gillnets used on remote lakes were slightly smaller. The fyke net had the same mesh size (about 0.5 cm) and the same size wings (1 m × 5.5 m), but was approximately

3.7 m in length with two 87-cm square frames and 6 hoops. Variable-mesh gill nets were 30 m × 2 m in length consisting of five 6-m hung panels of variable mesh and monofilament strand sizes (⅝ in mesh, 0.20 mm diameter strand; ¾ in mesh, 0.25 mm diameter strand; 1 in mesh, 0.30 mm diameter strand; 1½ in mesh, 0.30 mm diameter strand; and 2 in mesh, 0.30 mm diameter strand).

Upon retrieval of each net, all surviving fish were placed in a tote filled with lake water to allow live fish to recover. For each net, the number of fish captured by species, number by length class, and gear was recorded. All Arctic char, Chinook salmon, coho salmon, and rainbow trout less than 100 mm were counted but not sampled for length or age (determined from scale samples) because these fish were most likely stocked that same year. During the feasibility study in 2000, scales were taken from 10 randomly selected rainbow trout, coho salmon, or both from the following length classes: 100–150 mm, 151–200 mm, and greater than 200 mm. In succeeding years, all salmon and rainbow trout greater than 200 mm were measured from the tip of the nose to the fork of the tail (fork length [FL] to the nearest millimeter) and a scale sample was taken. During 2001 through 2005, a random sample of 30 Chinook salmon, 30 coho salmon, and 30 rainbow trout from each net and length class were sampled for age and length. Beginning in 2006, a systematic sample of 70 fish per species and gear type was taken for length and age determination from Chinook salmon, coho salmon, and rainbow trout between 100 and 200 mm (Figure 5).

Scales from coho and Chinook salmon were taken from the preferred area on the left side of the fish at a point on the diagonal line from the posterior insertion of the dorsal fin to the anterior insertion of the anal fin, 2 rows above the lateral line (Scarnecchia 1979) and (Welander 1940). Scales from rainbow trout were removed from the preferred area on the left side of the fish between the dorsal fin and lateral line (Alvord 1954). Age interpretations were made from projections of the slides using a microfiche reader (Clutter and Whitesel 1956). Age was determined from the coho and Chinook salmon scales by the pattern of annuli formed during successive winter months when the circuli of the scales become crowded and finely etched (Clutter and Whitesel 1956). Rainbow trout annuli were characterized by "cutting over" (annuli crossing over previous marks), packing of circuli, and irregularities associated with a change in growth of the scale (Alvord 1954). All captured Arctic char were measured (FL) and live char were released into the lake. No scales were taken from Arctic char because of the imprecise nature of using this method for age determination (Baker and Timmons 1991).

On lakes that are not landlocked, the flow-structure barriers were examined, and necessary maintenance or replacement was conducted. Access sites were inspected, litter was removed, and vandalized signage was repaired or replaced.

RESULTS

COOPER LANDING–MOOSE PASS AREA LAKES

Carter Lake

Carter Lake is located between Cooper Landing and Moose Pass at mile 33 of the Seward Highway (Figure 6). It is approximately 0.19 km^2 (48 surface acres), and was first stocked in 1963 with Arctic grayling (Appendix A1). Grayling were only stocked once and since 1976, the lake has been stocked with rainbow trout. Carter Lake was sampled in 2003 and 2005, on 11 September and 19 September, respectively.

Only rainbow trout were captured during sampling in both years. In 2003, 95 rainbow trout were caught and length-at-age was estimated for 79. Fork length ranged from 122 to 471 mm, and age ranged from 1 to 7 (Table 4). In 2005, 163 rainbow trout were caught and length-at-age was estimated for 85. Fork length ranged from 124 to 520 mm, and age ranged from 1 to 8. Length frequencies were estimated for all rainbow trout caught in 2003 and 2005 (Appendix B1).

The annual Statewide Harvest Survey (SWHS) detected fishing effort on Carter Lake every year since 1983 (except 1989; Appendix C1). From 1983 through 2007, participation averaged 157 angler days per year. The most recent 10-year average (1998–2007) was 169 angler days per year.

Jerome Lake

Jerome Lake is located about 10 miles east of Cooper Landing off the Seward Highway (Figure 7). It is approximately 0.06 km^2 (16 surface acres), and was first stocked in 1962 with Arctic grayling (Appendix A1). Grayling were only stocked once and from 1968 to 1997, the lake was irregularly stocked with rainbow trout. Since 1997, rainbow trout have been stocked annually. Jerome Lake was sampled in 2001, 2004, and 2007, on 18 September, 22 September, and 10 September, respectively.

Dolly Varden (*Salvelinus malma*) and rainbow trout were captured during sampling. In 2001, 132 rainbow trout were caught and length-at-age was estimated for 114. Fork length ranged from 132 to 337 mm, and age ranged from 1 to 3 (Table 5). In 2004, 204 rainbow trout were caught and length-at-age was estimated for 125. Fork length ranged from 135 to 365 mm, and age ranged from 1 to 5. In 2007, 24 rainbow trout were caught and length-at-age was estimated for all 24. Fork length ranged from 148 to 314 mm, and age ranged from 1 to 4. Length frequencies were estimated for all rainbow trout caught in 2001, 2004, and 2007 (Appendix B2).

The SWHS detected fishing effort on Jerome Lake since 1983, except for 2 years (Appendix C1). From 1983 through 2007, participation averaged 163 angler days per year. The most recent 10-year average (1998–2007) was 182 angler days per year.

Long Lake

Long Lake is located a few miles south of Moose Pass off the Seward Highway (Figure 8). It is approximately 0.06 km^2 (15 surface acres), and was first stocked in 1987 with rainbow trout (Appendix A1). Since 1999, it has been stocked biennially. Long Lake was sampled in 2003 and 2006, on 26 August and 11 September, respectively.

Only rainbow trout were captured during sampling. In 2003, 31 rainbow trout were caught and length-at-age was estimated for all 31. Fork length ranged from 130 to 465 mm, and age ranged from 2 to 6 (Table 6). In 2006, 55 rainbow trout were caught and length-at-age was estimated for 54. Fork length ranged from 120 to 300 mm, and age ranged from 1 to 5. Length frequencies were estimated for all rainbow trout caught in 2003 and 2006 (Appendix B3).

Since 1987, the SWHS detected fishing effort on Long Lake in only 1 year. In 2002, there were an estimated 91 angler days of effort (Appendix C1). Between 1987 and 2007, participation averaged 4 angler days per year. The most recent 10-year average (1998–2007) was 9 angler days per year.

Meridian Lake

Meridian Lake is located a few miles south of Moose Pass off the Seward Highway (Figure 9). It is approximately 0.06 km^2 (15 surface acres), and was first stocked in 1985 with rainbow trout (Appendix A1). Since that initial year, rainbow trout have been stocked biennially. Meridian Lake was sampled in 2003 and 2006, on 25 August and 13 September, respectively.

Only rainbow trout were captured during sampling. In 2003, 40 rainbow trout were caught and length-at-age was estimated for all 40. Fork length ranged from 124 to 483 mm, and age ranged from 2 to 6 (Table 7). In 2006, 52 rainbow trout were caught and length-at-age was estimated for all 52. Fork length ranged from 118 to 490 mm, and age ranged from 1 to 5. Length frequencies were estimated for all rainbow trout caught in 2003 and 2006 (Appendix B4).

Although SWHS records go back to 1985 when Meridian Lake was first stocked, fishing effort on Meridian Lake has only been detected sporadically since 1998 (Appendix C1). From 1985 through 2007, participation averaged 9 angler days per year. The most recent 10-year average (1998–2007) was 20 angler days per year.

Rainbow Lake

Rainbow Lake is located approximately 10 miles southeast of Cooper Landing off the Seward Highway (Figure 10). It is approximately 0.06 km^2 (15 surface acres), and was first stocked in 1971 with rainbow trout (Appendix A1). Since 1998, rainbow trout have been stocked biennially. Rainbow Lake was sampled in 2002, 2004, and 2007, on 16 September, 27 July, and 29 August, respectively.

Only rainbow trout were captured during sampling. In 2002, 161 rainbow trout were caught and length-at-age was estimated for 47. Fork length ranged from 128 to 265 mm, and age ranged from 2 to 4 (Table 8). In 2004, 20 rainbow trout were caught and length-at-age was estimated for 19. Fork length ranged from 145 to 325 mm, and age ranged from 1 to 4. In 2007, 8 rainbow trout were caught and length-at-age was estimated for all 8. Fork length ranged from 146 to 263 mm, and age ranged from age 1 to 4. Length frequencies were estimated for all rainbow trout caught in 2002, 2004, and 2007 (Appendix B5).

There are 2 "Rainbow" lakes on the Kenai Peninsula, and historically there was no separation of the two in the SWHS until 2005. The other Rainbow Lake is a very popular sport fishing lake off of Swanson River Rd. and has a campground and boat launch. Fishing effort on "Rainbow" lakes has been detected by at least 1 respondent annually by the SWHS since 1983, except in 1987 and 2007 (Appendix C1). From 1983 through 2007, participation averaged 245 angler days per year. The most recent 10-year average (1998–2007) was 278 angler days per year. From 2005 through 2007, when the two lakes were separated in the SWHS, estimates of angler days for the Rainbow Lake described here (Figure 10) were 117 in 2005, 34 in 2006, and 0 in 2007.

Troop Lake

Troop Lake is located approximately 10 miles south of Moose Pass off the Seward Highway (Figure 11). It is approximately 0.11 km^2 (27 surface acres), and was first stocked in 1977 with coho salmon (Appendix A1). Coho salmon were only stocked once, and since 1993, the lake has been stocked biennially with rainbow trout. Troop Lake was sampled in 2003 and 2006, on 22 September and 13 September, respectively.

Only rainbow trout were captured during sampling. In 2003, 28 rainbow trout were caught and length-at-age was estimated for all 28. Fork length ranged from 143 to 315 mm, and age ranged from 1 to 5 (Table 9). In 2006, 51 rainbow trout were caught and length-at-age was estimated for all 51. Fork length ranged from 122 to 384 mm, and age ranged from 1 to 5. Length frequencies were estimated for all rainbow trout caught in 2003 and 2006 (Appendix B6).

Since initial stocking with rainbow trout in 1993, fishing effort on Troop Lake has been detected by the SWHS only twice. In 1998, there were an estimated 41 angler days of effort, and in 2006, 86 angler days were estimated (Appendix C1). From 1993 through 2007, participation averaged 8 angler days per year. The most recent 10-year average (1998–2007) was 13 angler days per year.

Upper Summit Lake

Upper Summit Lake is located about 20 miles north of Cooper Landing and is adjacent to the Seward Highway (Figure 12). It is approximately 1.04 km^2 (258 surface acres), and was first stocked in 1962 with rainbow trout (Appendix A1). Since then, the lake has been stocked with lake trout (*Salvelinus namaycush*), Chinook salmon, coho salmon, and has been stocked with rainbow trout on an annual basis since 2001. Upper Summit Lake was sampled in 2001, 2004, and 2007, on 18 September, 22 September, and 11 September, respectively.

Dolly Varden, rainbow trout, and threespine stickleback were captured during sampling. In 2001, 69 rainbow trout were caught and length-at-age was estimated for 27. Fork length ranged from 127 to 330 mm, and age ranged from 1 to 4 (Table 10). In 2004, 38 rainbow trout were caught and length-at-age was estimated for 35. Fork length ranged from 115 to 535 mm, and age ranged from 1 to 5. In 2007, 194 rainbow trout were caught and length-at-age was estimated for 138. Fork length ranged from 104 to 543 mm, and age ranged from 1 to 7. Length frequencies were estimated for all rainbow trout caught in 2001 and 2004, but were only estimated for 154 of the 194 caught in 2007 (Appendix B7).

The SWHS detected fishing effort on Upper Summit Lake every year since 1983, except 1989 (Appendix C1). From 1983 through 2007, participation averaged 440 angler days per year. The most recent 10-year average (1998–2007) was 560 angler days per year.

Vagt Lake

Vagt Lake is located approximately 2 miles south of Moose Pass off the Seward Highway (Figure 13). It is approximately 0.17 km^2 (43 surface acres), and was first stocked in 1963 and 1965 with Arctic grayling (Appendix A1). Since 1974, it has been stocked with only rainbow trout, annually since 1988. Vagt Lake was sampled in 2002, 2004, and 2007 during the study, on 18 September, 16 September, and 6 September, respectively.

Dolly Varden and rainbow trout were captured during sampling. In 2002, 197 rainbow trout were caught and length-at-age was estimated for 60. Fork length ranged from 129 to 400 mm, and age ranged from 2 to 7 (Table 11). In 2004, 51 rainbow trout were caught and length-at-age was estimated for 49. Fork length ranged from 120 to 290 mm, and age ranged from 1 to 3. In 2007, 96 rainbow trout were caught and length-at-age was estimated for 91. Fork length ranged from 115 to 395 mm, and age ranged from 1 to 5. Length frequencies were estimated for all rainbow trout caught in 2002, 2004, and 2007 (Appendix B8).

The SWHS detected fishing effort on Vagt Lake every year since 1983, except 2007 (Appendix C1). Over this time period, participation averaged 195 angler days per year. The most recent 10-year average (1998–2007) was 107 angler days per year.

KASILOF AREA LAKES

Centennial Lake

Centennial Lake is located approximately 4 miles east of Kasilof off of Tustumena Lake road (Figure 14). It is approximately 0.10 km^2 (25 surface acres), and was first stocked with coho salmon in 1969 (Appendix A1). Since that time, it has been primarily stocked with coho salmon, however, Chinook salmon were stocked in 1984 and 1996, and rainbow trout have been stocked annually starting in 2003. Centennial Lake was sampled in 2001, 2004, and 2007, on 25 September, 20 September, and 27 September, respectively.

Coho salmon, rainbow trout, and threespine stickleback were captured during sampling. In 2001, 153 coho salmon were caught and length-at-age was estimated for 67. Fork length ranged from 100 to 242 mm, and age ranged from 1 to 4 (Table 12). In 2004, 25 coho salmon were caught and length-at-age was estimated for all 25. Fork length ranged from 100 to 270 mm, and age ranged from 1 to 4. A total of 41 rainbow trout were also caught at this time and length-at-age was estimated for 40. Fork length ranged from 125 to 230 mm, and age ranged from 1 to 2 (Table 13). In 2007, 164 coho salmon were caught and length-at-age was estimated for 162. Fork length ranged from 105 to 236 mm, and age ranged from 1 to 3 (Table 12). A total of 54 rainbow trout were also caught at this time and length-at-age was estimated for 39. Fork length ranged from 135 to 355 mm, and age ranged from 1 to 4 (Table 13). Length frequencies were estimated for all coho salmon and rainbow trout caught in 2004 and 2007, but were estimated for only 77 coho salmon in 2001 (Appendix D1; Appendix D2).

The SWHS detected fishing effort on Centennial Lake since 1983, except for 6 years (Appendix C1). From 1983 through 2007, participation averaged 119 angler days per year. The most recent 10-year average (1998–2007) was 105 angler days per year.

Encelewski Lake

Encelewski Lake is located approximately 2 miles east of Kasilof from the Sterling Highway (Figure 15). It is approximately 0.41 km^2 (101 surface acres), and was first stocked in 1986 with coho salmon (Appendix A1). It has been stocked with only rainbow trout since then, with the exception of Chinook salmon in 1994. Encelewski Lake was sampled in 2001, 2004, and 2007, on 26 September, 29 September, and 28 September, respectively.

Both rainbow trout and threespine stickleback were captured during sampling. In 2001, 100 rainbow trout were caught and length-at-age was estimated for 82. Fork length ranged from 135 to 512 mm, and age ranged from 1 to 7 (Table 14). In 2004, 199 rainbow trout were caught and length-at-age was estimated for 112. Fork length ranged from 133 to 480 mm, and age ranged from 1 to 7. In 2007, 137 rainbow trout were caught and length-at-age was estimated for 123. Fork length ranged from 125 to 378 mm, and age ranged from 1 to 5. Length frequencies were estimated for all rainbow trout caught in 2001, 2004, and 2007 (Appendix D3).

Although Encelewski Lake was first stocked in 1986, fishing effort was not detected by the SWHS until 1999 (Appendix C1). From 1986 through 2007, participation averaged 21 angler days per year. The most recent 10-year average (1998–2007) was 46 angler days per year.

Johnson Lake

Johnson Lake is located approximately 3 miles south of Kasilof from the Sterling Highway (Figure 16). It is approximately 0.34 km^2 (85 surface acres), and was first stocked in 1962 with rainbow trout (Appendix A1). Since then, it has been stocked with coho salmon, rainbow trout, and steelhead trout (*Oncorhynchus mykiss*). Since 1984, it has been stocked annually with only rainbow trout. Johnson Lake was sampled in 2000, 2003, and 2006, on 20 September, 1 October, and 2 October, respectively.

Rainbow trout and threespine stickleback were captured during sampling. In 2000, 154 rainbow trout were caught and length-at-age was estimated for 24. Fork length ranged from 112 to 355 mm, and age ranged from 2 to 4 (Table 15). In 2003, 44 rainbow trout were caught and length-at-age was estimated for 28. Fork length ranged from 245 to 442 mm, and age ranged from 2 to 5. In 2006, 26 rainbow trout were caught and length-at-age was estimated for 14. Fork length ranged from 243 to 455 mm, and age ranged from 2 to 4. Length frequencies were estimated for all rainbow trout caught in 2000, 2003, and 2006 (Appendix D4).

There are 2 "Johnson" lakes on the Kenai Peninsula, and there has never been separation of the two in the SWHS. The other Johnson Lake is a remote lake found on Johnson Pass trail, which is maintained by the U.S. Forest Service. Fishing effort on "Johnson" lakes has been detected by the SWHS every year since 1983 (Appendix C1). From 1983 through 2007, participation averaged 1,565 angler days per year, the highest average participation level seen on any of our 28 stocked lakes. The most recent 10-year average (1998–2007) was 1,753 angler days per year.

Quintin Lake

Quintin Lake is located approximately 3 miles south of Kasilof off the Sterling Highway (Figure 17). It is approximately 0.06 km^2 (14 surface acres), and was first stocked in 1986 with coho salmon (Appendix A1). Since 1987, only rainbow trout have been stocked (biennially). Quintin Lake was sampled in 2001, 2004, and 2007, on 27 September, 30 September, and 4 September, respectively.

One lake trout, and several rainbow trout and threespine stickleback were captured during sampling. In 2001, 7 rainbow trout were caught and length-at-age was estimated for 6. Fork length ranged from 414 to 465 mm, and age 6 was the only age class (Table 16). In 2004, 68 rainbow trout were caught and length-at-age was estimated for all 68. Fork length ranged from 125 to 327 mm, and age ranged from 1 to 3. In 2007, 18 rainbow trout were caught and length-at-age was estimated for 17. Fork length ranged from 195 to 340 mm, and age ranged from 2 to 4. Length frequencies were estimated for all rainbow trout caught in 2001, 2004, and 2007 (Appendix D5).

Since initial stocking in 1986, fishing effort on Quintin Lake has been detected only once by the SWHS, with 18 angler days estimated in 2005 (Appendix C1). From 1986 through 2007, participation averaged 1 angler day per year. The most recent 10-year average (1998–2007) was 2 angler days per year.

Roque Lake

Roque Lake is located approximately 3 miles north of Kasilof immediately off of the Sterling Highway (Figure 18). It is approximately 0.02 km^2 (5 surface acres), and was first stocked with rainbow trout in 1973 (Appendix A1). Since 1974, it has been stocked primarily with coho

salmon, except in 1984 and 1996 when Chinook salmon were stocked. Stocking of coho salmon ended in 2002; from 2003 through 2007, rainbow trout were stocked instead. Roque Lake was sampled in 2000, 2003, and 2006 on 12 October, 6 October, and 7 September, respectively.

Only coho salmon were captured during sampling in 2000, coho salmon and 1 rainbow trout were caught in 2003, and only rainbow trout were captured in 2006. In 2000, 681 coho salmon were caught and length-at-age was estimated for 17. Fork length ranged from 128 to 171 mm, and age 2 was the only age class (Table 17). In 2003, 59 coho salmon were caught and length-at-age was estimated for 53. Fork length ranged from 158 to 209 mm, and age ranged from 2 to 4. In 2006, 18 rainbow trout were caught and length-at-age was estimated for all 18. Fork length ranged from 200 to 308 mm, and age ranged from 1 to 3 (Table 18). Length frequencies were estimated for 168 coho salmon caught in 2000, and for all coho salmon and rainbow trout caught in 2003 and 2006 (Appendices D6 and D7).

Since 1983, the SWHS has detected fishing effort on Roque Lake only twice. In 2004, the SWHS estimated 15 angler days of effort and in 2005, 170 angler days were estimated (Appendix C1). From 1983 through 2007, participation averaged 7 angler days per year. The most recent 10-year average (1998–2007) was 19 angler days per year.

NORTH KENAI AREA LAKES

Barbara Lake

Barbara Lake is located approximately 2 miles east of Nikiski from Kenai Spur Highway (Figure 19). It is approximately 0.18 km^2 (45 surface acres), and was first stocked in 1983 with rainbow trout (Appendix A1). Since then, only rainbow trout have been stocked except in 1993, when steelhead trout were stocked. It has been stocked annually with rainbow trout since 2000, and before that it was stocked only in even years. Barbara Lake was sampled in 2002 and 2005, on 25 September and 30 September, respectively.

Both rainbow trout and threespine stickleback were captured during sampling in both years. In 2002, 63 rainbow trout were caught and length-at-age was estimated for 45. Fork length ranged from 104 to 410 mm, and age ranged from 2 to 6 (Table 19). In 2005, 17 rainbow trout were caught and length-at-age was estimated for all 17. Fork length ranged from 194 to 393 mm, and age ranged from 2 to 5. Length frequencies were estimated for all rainbow trout caught in 2002 and 2005 (Appendix E1).

Fishing effort on Barbara Lake was first detected by the SWHS in 2001 (Appendix C1). From 1983 through 2007, participation averaged 37 angler days per year. The most recent 10-year average (1998–2007) was 92 angler days per year.

Cabin Lake

Cabin Lake is located approximately 3 miles north of Kenai off of Kenai Spur Highway (Figure 20). It is approximately 0.21 km^2 (53 surface acres), and was first stocked in 1970 with rainbow trout (Appendix A1). Since then, it has been stocked with only rainbow trout (except in 1979 when it was stocked with coho salmon), and has been stocked annually since 1986. Barbara Lake was sampled in 2002 and 2005, on 25 September and 28 September, respectively.

Both rainbow trout and threespine stickleback were captured during sampling in both years. In 2002, 95 rainbow trout were caught and length-at-age was estimated for 67. Fork length ranged from 141 to 358 mm, and age ranged from 3 to 6 (Table 20). In 2005, 37 rainbow trout were

caught and length-at-age was estimated for 36. Fork length ranged from 186 to 436 mm, and age ranged from 2 to 5. Length frequencies were estimated for all rainbow trout caught in 2002 and 2005 (Appendix E2).

The SWHS has detected fishing effort on Cabin Lake sporadically since 1985 (Appendix C1). From 1983 through 2007, participation averaged 111 angler days per year. The most recent 10-year average (1998–2007) was 147 angler days per year.

Cecille Lake

Cecille Lake is located approximately 2 miles east of Nikiski from Kenai Spur Highway (Figure 21). It is approximately 0.04 km^2 (10 surface acres), and was first stocked in 1987 with rainbow trout (Appendix A1). Since then, it has been stocked biennially with rainbow trout. Cecille Lake was sampled in 2002 and 2005, on 1 October and 4 October, respectively.

Both rainbow trout and threespine stickleback were captured during sampling in both years. In 2002, 89 rainbow trout were caught and length-at-age was estimated for 65. Fork length ranged from 140 to 312 mm, and age ranged from 3 to 5 (Table 21). In 2005, 19 rainbow trout were caught and length-at-age was estimated for all 19. Fork length ranged from 238 to 365 mm, and age ranged from 2 to 4. Length frequencies were estimated for all rainbow trout caught in 2002 and 2005 (Appendix E3).

Since initial stocking in 1987, fishing effort on Cecille Lake has never been detected by the SWHS (Appendix C1).

Chugach Estates Lake

Chugach Estates Lake is located approximately one mile east of Nikiski off of Kenai Spur Highway (Figure 22). It is approximately 0.07 km^2 (18 surface acres), and was first stocked in 1984 and subsequently on a biennial basis with rainbow trout (Appendix A1). It has been stocked with rainbow trout annually since 2000. Since 2000, it has also been stocked with coho salmon fry from students involved with the Nikiski Northstar elementary school incubation project. Chugach Estates Lake was sampled in 2002 and 2005, on 2 October and 3 October, respectively.

Both coho salmon and rainbow trout were captured during sampling in both years. In 2002, 37 coho salmon were caught and length-at-age was estimated for 29. Fork length ranged from 110 to 250 mm, and age ranged from 1 to 4 (Table 22). In addition, 159 rainbow trout were caught and length-at-age was estimated for 98. Fork length ranged from 120 to 352 mm, and age ranged from 1 to 6 (Table 23). In 2005, 30 coho salmon were caught and length-at-age was estimated for all 30. Fork length ranged from 184 to 370 mm, and age ranged from 2 to 4 (Table 22). In addition, 48 rainbow trout were caught and length-at-age was estimated for 47. Fork length ranged from 155 to 400 mm, and age ranged from 1 to 5 (Table 23). Length frequencies were estimated for all coho salmon and rainbow trout caught in 2002 and 2005 (Appendices E4 and E5).

Since initial stocking in 1984, fishing effort on Chugach Estates Lake has never been detected by the SWHS (Appendix C1).

Douglas Lake

Douglas Lake is located approximately 3 miles east of Nikiski from the Kenai Spur Highway (Figure 23). It is approximately 0.36 km^2 (90 surface acres), and was first stocked in 1982 with

rainbow trout (Appendix A1). It has been stocked with rainbow trout biennially since 1985, and annually starting in 2003. Douglas Lake was sampled in 2002 and 2005, on 23 September and 22 September, respectively.

Both rainbow trout and threespine stickleback were captured during sampling in both years. In 2002, 109 rainbow trout were caught and length-at-age was estimated for 52. Fork length ranged from 125 to 423 mm, and age ranged from 2 to 6 (Table 24). In 2005, 116 rainbow trout were caught and length-at-age was estimated for 115. Fork length ranged from 148 to 406 mm, and age ranged from 1 to 5. Length frequencies were estimated for all rainbow trout caught in 2002 and 2005 (Appendix E6).

Fishing effort on Douglas Lake was first detected by the SWHS in 1992 (Appendix C1). From 1983 through 2007, participation averaged 127 angler days per year. The most recent 10-year average (1998–2007) was 164 angler days per year.

Island Lake

Island Lake is located approximately 3 miles east of Nikiski from the Kenai Spur Highway (Figure 24). It is approximately 1.08 km^2 (268 surface acres), and was first stocked with sockeye salmon in 1968 (Appendix A1). Since 1969, it has been stocked primarily with rainbow trout, and has been stocked annually since 1993. It has also been stocked annually with Arctic char starting in 2003. Island Lake was sampled in 2000, 2003, and 2006, on 3 October, 29 September, and 25 September, respectively.

Arctic char, rainbow trout, slimy sculpin (*Cottus cognatus*), and threespine stickleback were captured during sampling. In 2000, 25 rainbow trout were caught and length-at-age was estimated for 16. Fork length ranged from 130 to 447 mm, and age ranged from 2 to 4 (Table 25). In 2003, 79 Arctic char were caught and all 79 were measured. No scale samples were taken but fork length ranged from 163 to 455 mm (Appendix E7). In addition, 39 rainbow trout were caught and length-at-age was estimated for 30. Fork length ranged from 165 to 480 mm, and age ranged from 3 to 8 (Table 25). In 2006, 45 Arctic char were caught and all 45 were measured. No scale samples were taken but fork length ranged from 217 to 461 mm. In addition, 36 rainbow trout were caught and length-at-age was estimated for 35. Fork length ranged from 118 to 498 mm, and age ranged from 1 to 6. Length frequencies were estimated for all Arctic char and rainbow trout caught in 2000, 2003, and 2006 (Appendices E7 and E8).

Fishing effort on Island Lake has been detected by the SWHS since 1983, except for 4 years (Appendix C1). From 1983 through 2007, participation averaged 358 angler days per year. The most recent 10-year average (1998–2007) was 261 angler days per year.

Thetis Lake

Thetis Lake is located approximately 3 miles east of Nikiski from the Kenai Spur Highway (Figure 25). It is approximately 0.15 km^2 (38 surface acres), and was first stocked in 1984 with rainbow trout (Appendix A1). It has been stocked with rainbow trout biennially since 1984, and annually starting in 2002. Thetis Lake was sampled in 2001, 2004, and 2007, on 24 September, 27 September, and 24 September, respectively.

Only rainbow trout were captured during sampling. In 2001, 151 rainbow trout were caught and length-at-age was estimated for 121. Fork length ranged from 111 to 504 mm, and age ranged from 1 to 7 (Table 26). In 2004, 10 rainbow trout were caught and length-at-age was estimated

for all 10. Fork length ranged from 265 to 480 mm, and age ranged from 3 to 6. In 2007, 56 rainbow trout were caught and length-at-age was estimated for 52. Fork length ranged from 125 to 486 mm, and age ranged from 1 to 6. Length frequencies were estimated for all rainbow trout caught in 2001, 2004, and 2007 (Appendix E9).

Since initial stocking in 1984, fishing effort on Thetis Lake has been detected only twice by the SWHS. The SWHS estimated 272 angler days of effort in 1999, and in 2001, 43 angler days were estimated (Appendix C1). From 1984 through 2007, participation averaged 13 angler days per year. The most recent 10-year average (1998–2007) was 32 angler days per year.

Tirmore Lake

Tirmore Lake is located approximately 3 miles east of Nikiski from the Kenai Spur Highway (Figure 26). It is approximately 0.21 km^2 (52 surface acres), and was first stocked in 1973 with rainbow trout (Appendix A1). It has been stocked biennially since 1986. Tirmore Lake was sampled in 2001, 2004, and 2007, on 20 September, 27 September, and 25 September, respectively.

Rainbow trout and stickleback were captured during sampling. In 2001, 86 rainbow trout were caught and length-at-age was estimated for 65. Fork length ranged from 105 to 270 mm, and age ranged from 1 to 3 (Table 27). In 2004, 8 rainbow trout were caught and length-at-age was estimated for 6. Fork length ranged from 370 to 510 mm, and age ranged from 4 to 7. In 2007, 47 rainbow trout were caught and length-at-age was estimated for 40. Fork length ranged from 134 to 518 mm, and age ranged from 1 to 6. Length frequencies were estimated for all rainbow trout caught in 2001 and 2004, and for 45 of the 47 rainbow trout caught in 2007 (Appendix E10).

Fishing effort on Tirmore Lake has been detected only 3 times by the SWHS since 1983; in 2002, 2004, and 2005; with 22, 17, and 19 angler days, respectively (Appendix C1). From 1983 through 2007, participation averaged 2 angler days per year. The most recent 10-year average (1998–2007) was 6 angler days per year.

SOLDOTNA-STERLING AREA LAKES

Arc Lake

Arc Lake is located next to the Sterling highway, approximately 1.5 miles south of Soldotna (Figure 27). It is approximately 0.06 km^2 (16 surface acres), and was first stocked with rainbow trout in 1966 (Appendix A1). Rainbow trout stocking ceased in 1973. In 1974, coho salmon were stocked instead, and were stocked annually beginning in 1996 until 2000. Chinook salmon were stocked once in 1983. Arc Lake was sampled only once in 2000, on 20 September.

Both coho salmon and northern pike were captured during sampling in 2000. As a result of the presence of northern pike, stocking of Arc Lake ceased in 2001. Sampling yielded a catch of 60 coho salmon and 5 northern pike. Length-at-age was estimated for 22 of the 60 coho salmon. Fork length ranged from 111 to 235 mm, and age ranged from 1 to 3 (Table 28). Length frequencies were estimated for all coho salmon caught in 2000 (Appendix F1).

Fishing effort on Arc Lake has been detected sporadically by the SWHS since 1983 (Appendix C1). From 1983 through 2007, participation averaged 36 angler days per year. The most recent 10-year average (1998–2007) was 37 angler days per year. It should be noted that since northern pike were detected in 2000 and stocking was curtailed, no participation has been detected from 2003 to present.

Aurora Lake

Aurora Lake is located approximately 16 miles east of Soldotna off of Funny River Road (Figure 28). It is approximately 0.03 km^2 (8 surface acres), and was first stocked with coho salmon in 1987 (Appendix A1). Stocking of coho salmon took place annually from 1997 to 2002, and in 2003, rainbow trout were stocked annually instead. Aurora Lake was sampled in 2002 and 2005 on 1 October, and 7 October, respectively.

Coho salmon were captured during sampling in both years, while rainbow trout were captured in 2005 only. In 2002, 155 coho salmon were caught and length-at-age was estimated for 77. Fork length ranged from 101 to 245 mm, and age ranged from 1 to 4 (Table 29). In 2005, 6 coho salmon were caught and length-at-age was estimated for all 6. Fork length ranged from 247 to 345 mm, and age ranged from 4 to 5. In addition, 47 rainbow trout were caught and length-at-age was estimated for all 47. Fork length ranged from 150 to 364 mm, and age ranged from 1 to 3 (Table 30). Length frequencies were estimated for all coho salmon and rainbow trout caught in 2002 and 2005 (Appendices F2 and F3).

Since initial stocking in 1987, fishing effort on Aurora Lake has been detected only once by the SWHS. In 2002, there were an estimated 57 angler days of effort (Appendix C1). From 1987 through 2007, participation averaged 3 angler days per year. The most recent 10-year average (1998–2007) was 6 angler days per year.

Elephant (Spirit) Lake

Elephant (Spirit) Lake is located approximately 10 miles north of Soldotna from the Kenai Spur Highway (Figure 29). It is approximately 1.38 km^2 (340 surface acres), and was first stocked in 1991 with steelhead trout (Appendix A1). Since that time, it has been stocked with Chinook salmon, coho salmon, and rainbow trout. Coho salmon have been stocked annually from 1996 to present, and rainbow trout have been stocked annually since 2003. Elephant (Spirit) Lake was sampled in 2000, 2003, and 2006, on 4 October, 18 September, and 28 September, respectively.

Coho salmon, rainbow trout, and threespine stickleback were captured during sampling. In 2000, 229 coho salmon were caught and length-at-age was estimated for 17. Fork length ranged from 115 to 256 mm, and age ranged from 2 to 3 (Table 31). In addition, 118 rainbow trout were caught and length-at-age was estimated for 24. Fork length ranged from 124 to 480 mm, and age ranged from 2 to 5 (Table 32). In 2003, 207 coho salmon were caught and length-at-age was estimated for 124. Fork length ranged from 106 to 415 mm, and age ranged from 1 to 5 (Table 31). In addition, 35 rainbow trout were caught and length-at-age was estimated for 29. Fork length ranged from 264 to 433 mm, and age ranged from 3 to 6 (Table 32). In 2006, 180 coho salmon were caught and length-at-age was estimated for 156. Fork length ranged from 101 to 340 mm, and age ranged from 1 to 4 (Table 31). In addition, 217 rainbow trout were caught and length-at-age was estimated for 148. Fork length ranged from 105 to 425 mm, and age ranged from 1 to 5. Length frequencies were estimated for all coho salmon and rainbow trout caught in 2000 and 2003, and for 156 of the 180 coho salmon, and for 155 of the 217 rainbow trout caught in 2006 (Appendices F4 and F5).

Since initial stocking in 1991, fishing effort on Elephant Lake has been detected by the SWHS every year except 1991 and 1992 (Appendix C1). From 1991 through 2007, participation averaged 794 angler days per year. The most recent 10-year average (1998–2007) was 884 angler days per year.

Longmare Lake

Longmare Lake is located approximately 3 miles east of Soldotna off of the Sterling Highway (Figure 30). It is approximately 0.70 km^2 (172 surface acres), and was first stocked in 1952 with rainbow trout (Appendix A1). Since that time, it has been stocked regularly with coho salmon and rainbow trout, and once with Chinook salmon. Since 1997, it has been stocked annually with both coho salmon and rainbow trout. Longmare Lake was sampled in 2000, 2003, and 2006, on 28 September, 25 September, and 27 September, respectively.

Coho salmon, rainbow trout, and threespine stickleback were captured during sampling. In 2000, 171 coho salmon were caught and length-at-age was estimated for 35. Fork length ranged from 103 to 238 mm, and age ranged from 1 to 4 (Table 33). In addition, 50 rainbow trout were caught and length-at-age was estimated for 14. Fork length ranged from 110 to 380 mm, and age ranged from 2 to 4 (Table 34). In 2003, 229 coho salmon were caught and length-at-age was estimated for 122. Fork length ranged from 103 to 240 mm, and age ranged from 1 to 4. In addition, 57 rainbow trout were caught and length-at-age was estimated for 54. Fork length ranged from 103 to 375 mm, and age ranged from 1 to 5. In 2006, 161 coho salmon were caught and length-at-age was estimated for 160. Fork length ranged from 102 to 280 mm, and age ranged from 1 to 4. In addition, 78 rainbow trout were caught and length-at-age was estimated for 75. Fork length ranged from 132 to 440 mm, and age ranged from 1 to 6. Length frequencies were estimated for all coho salmon and rainbow trout caught in 2000, 2003, and 2006 (Appendices F6 and F7).

Fishing effort on Longmare Lake has been detected by the SWHS every year except 1983 through 1985, 1991, and 2007 (Appendix C1). From 1983 through 2007, participation averaged 362 angler days per year. The most recent 10-year average (1998–2007) was 469 angler days per year.

Loon Lake

Loon Lake is located approximately 3 miles north of Soldotna from Kenai Spur Highway (Figure 31). It is approximately 0.07 km^2 (18 surface acres), and was first stocked with coho salmon in 1996 (Appendix A1). Coho salmon were stocked annually until 2002; from 2003 through 2007, rainbow trout were stocked annually instead. Loon Lake was sampled in 2002 and 2005 on 10 September, and 5 October, respectively.

Coho salmon were captured during sampling in both years, while rainbow trout were captured in 2005 only. In 2002, 227 coho salmon were caught and length-at-age was estimated for 108. Fork length ranged from 101 to 220 mm, and age ranged from 1 to 4 (Table 35). In 2005, 9 coho salmon were caught and length-at-age was estimated for all 9. Fork length ranged from 230 to 283 mm, and age 4 was the only age class. In addition, 111 rainbow trout were caught and length-at-age was estimated for 101. Fork length ranged from 135 to 338 mm, and age ranged from 1 to 3 (Table 36). Length frequencies were estimated for all coho salmon and rainbow trout caught in 2002 and 2005 (Appendices F8 and F9).

There are 3 “Loon” lakes on the Kenai Peninsula, and there has never been separation of the three in the SWHS. However, one of the lakes is found on the Swan Lake canoe system which does have its own category in the SWHS. The third Loon Lake is a remote lake found near Bear Cove on Kachemak Bay. Since initial stocking in 1996, fishing effort on “Loon” lakes has been detected by at least 1 respondent only twice on the SWHS. The SWHS estimated 89 angler days in 2000 and 17 angler days in 2006 (Appendix C1). From 1996 through 2007, participation

averaged 9 angler days per year. The most recent 10-year average (1998–2007) was 11 angler days per year.

Scout Lake

Scout Lake is located approximately 3 miles west of Sterling off the Sterling Highway (Figure 32). It is approximately 0.38 km^2 (95 surface acres), and was first stocked with rainbow trout in 1957 (Appendix A1). Since then, it has been stocked with Chinook salmon, coho salmon, and rainbow trout. It has been stocked annually with coho salmon only since 1990, and additionally with rainbow trout starting in 2003. Scout Lake was sampled in 2000, 2003, and 2005, on 2 October, 30 September, and 21 September, respectively.

Coho salmon, northern pike, rainbow trout, slimy sculpin, and threespine stickleback were captured during sampling. In 2000, 466 coho salmon were caught and length-at-age was estimated for 25. Fork length ranged from 113 to 342 mm (Table 37). In 2003, 88 coho salmon were caught and length-at-age was estimated for 66. Fork length ranged from 103 to 312 mm, and age ranged from 1 to 4. Additionally, 5 rainbow trout less than 100 mm were caught. In 2005, 2 coho salmon were caught and length-at-age was estimated for both. Fork length ranged from 115 to 125 mm, and age 1 was the only age. Length frequencies were estimated for 91 of the 466 coho salmon caught in 2000, and for all coho salmon caught in 2003 and 2005 (Appendix F10).

Pike were captured in 2005 along with just two 1-year-old coho salmon. As a result of the presence of pike, ADF&G ceased stocking Scout Lake beginning in 2006. No pike were captured in 2000 or 2003.

Fishing effort on Scout Lake has been detected every year by the SWHS since 1983, except for 4 years: 1985 through 1987 and 2007 (Appendix C1). From 1983 through 2007, participation averaged 274 angler days per year. The most recent 10-year average (1998–2007) was 175 angler days per year.

Sport Lake

Sport Lake is located approximately 3 miles north of Soldotna from the Kenai Spur Highway (Figure 33). It is approximately 0.29 km^2 (72 surface acres), and was first stocked in 1957 with rainbow trout (Appendix A1). It has been stocked periodically with rainbow trout, and annually starting in 2003. In addition, it has been stocked with catchable-sized Chinook salmon as early as 1994 and as recently as 2007. Sport Lake was sampled in 2000, 2003, and 2006, on 5 October, 24 September, and 26 September, respectively.

Chinook salmon and rainbow trout were captured during sampling. In 2000, 74 rainbow trout were caught and length-at-age was estimated for 23. Fork length ranged from 133 to 320 mm, and age ranged from 2 to 4 (Table 38). In 2003, 126 rainbow trout were caught and length-at-age was estimated for 114. Fork length ranged from 108 to 360 mm, and age ranged from 1 to 6. In 2006, 8 Chinook salmon were caught and length-at-age was estimated for all 8. Fork length ranged from 170 to 190 mm, and age 1 was the only age class (Table 39). In addition, 192 rainbow trout were caught and length-at-age was estimated for 188. Fork length ranged from 115 to 467 mm, and age ranged from 1 to 6 (Table 38). Length frequencies were estimated for all Chinook salmon and rainbow trout caught in 2000, 2003, and 2006 (Appendices F11 and F12).

Fishing effort on Sport Lake has been detected every year by the SWHS since 1983, except for 3 years: 1985, 1989, and 2004 (Appendix C1). From 1983 through 2007, participation averaged 368 angler days per year. The most recent 10-year average (1998–2007) was 490 angler days per year.

DISCUSSION

Overall, it was difficult to evaluate Northern Kenai Peninsula Management Area (NKPMA) stocked lakes because several factors that are generally used to evaluate stocking were inconsistent during the study period. For instance, stocking levels decreased for most species on most lakes, which can positively affect the growth and survival of existing stocked fish via reduced competition (Havens and Sonnichsen 1992). Stocking frequency was also inconsistent, sometimes skipping 1 to 3 years, or sometimes switching from biennial to annual stockings. For 6 lakes, stocking was switched during this study from primarily coho salmon to rainbow trout, which caused complete evaluation of rainbow trout stocking to be undeterminable. Catchable-sized rainbow trout were stocked with fingerling rainbow trout in select lakes, which made it difficult to determine how well the fingerlings survived. Some lakes' complete stocking histories were unknown because stockings from school-raised coho salmon from the Salmon in the Classroom program and other opportunistic stockings, such as extra fish from the Soldotna Sportsman's Show, went unrecorded. Other issues such as gabion breaches, the presence of native species, possible spawning of previously stocked diploid fish, problems with scale aging, inconsistent sampling (e.g., fyke nets not used in remote lakes), sampling after annual stockings had occurred, and the presence of northern pike in 2 lakes, also hampered evaluation efforts. In spite of these evaluation issues, we were still able to conclude that stocked fish were surviving stocking events because stocked lakes in the NKPMA contained multiple age and size classes of species that were stocked during and prior to the study.

Only 1 lake had a significant die-off of stocked fish. During the summer of 2005, the Soldotna office received phone calls informing staff that many dead fish were washing up onto the Island Lake beach. Staff observed that the thousands of dead fish were Arctic char. It is possible that water temperatures in the lake were higher than is suitable for Arctic char. The ultimate upper incipient lethal temperature for Arctic char has been estimated between 20.8–22.1 degrees Celsius (Baroudy and Elliott 1994). Another possibility could have been the lack of dissolved oxygen due to high fish density. Island Lake is, at most, 37 feet deep and small in area with a shoreline of 3.8 miles. Because Arctic char are stocked as "catchables" (not fingerlings) in this lake, the die-off did not have a long-lasting effect on the availability of catchable fish. Following this incident, stocking levels were reduced from around 10,000 fish to 5,000 fish and there has not been a die-off since.

Wild, introduced, and stocked species of game fish were captured during this study (2000–2007). Wild populations of Dolly Varden were observed in Jerome and Upper Summit lakes. Introduced northern pike were found in 2 lakes, Arc and Scout, and as a result, stocking was temporarily stopped. Both lakes were treated with Rotenone (a piscicide) to eradicate northern pike (Arc Lake in 2008 and Scout Lake in 2009). Arc Lake was re-stocked with coho salmon in 2009. One lake trout was captured in Quintin Lake, and is believed to have been introduced there. All lakes contained species of game fish that had been stocked during and prior to the study period.

Age and length data collected during the study indicated that stocked fish were surviving to reach multiple age classes. Rainbow trout ages ranged from 1 to 8 years while coho salmon ages

ranged from 1 to 5 years. Carter and Island lakes produced the oldest rainbow trout (age 8), while Rainbow Lake produced rainbow trout with the lowest maximum age (age 4) for lakes stocked with rainbow trout prior to the study (Table 40). Aurora, Loon, and Roque lakes each produced rainbow trout with a maximum age of 3 years, but they were first stocked with rainbow trout in 2005. Aurora and Elephant (Spirit) lakes produced the oldest coho salmon (age 5) while the rest had a maximum age of 4 years old (Table 41).

In the fall of 2004, the Fort Richardson Hatchery lost all hot water from the Ft. Richardson power plant. Cold water rearing began, which resulted in smaller rainbow trout and coho fingerling with later stocking dates. In 2005, the hatchery facility at Elmendorf Air Force Base lost their hot water source from the power plant. As a result, the catchable-sized rainbow trout and Chinook salmon stocked in Johnson Lake and Sport Lake were smaller.

Over the years, there have been many variables which affected the numbers of stocked fish available for Kenai Peninsula Lakes. Variables include problems with rearing fish in cold water to environmental factors such as a poor return of coho salmon adults in 2007, resulting in smaller numbers of fingerling available for stocking.

Stocking densities for most of the Kenai Peninsula lakes were gradually reduced from previous levels as hot water was removed and water temperatures dropped at the Elmendorf and Ft. Richardson hatcheries (Loopstra 2006). As stocking densities of both rainbow trout and coho salmon were reduced over time, results showed that mean length-at-age increased for most age classes and most lakes (Tables 40 and 41), supporting the notion that lower stocking levels typically lead to less competition for limited food resources. Lakes that didn't exhibit this trend include lakes where stocking levels didn't change significantly or were increased, and lakes that were switched from stocking primarily coho salmon to rainbow trout during the study, leaving only 1 year for sampling. For example, Cabin Lake showed a marked increase between mean lengths-at-age for age-3 through age-5 rainbow trout as stocking levels decreased from around 10,000 to 15,000 annually (2001 and prior) to about 1,000 to 3,000 annually (after 2001) (Tables 20 and 40; Appendix A1). However, Jerome Lake, with stocking levels between 1,000 and 4,000 since the 1970s, did not demonstrate this trend.

Given the stocking history prior to this study, several unexpected age classes appeared in our samples from various lakes. Some lakes were stocked on alternating years, and some lakes missed a stocking event in some years, causing a gap of 3 to 4 years between stockings. Given this, and assuming that no spawning took place from stocked fish, we would expect certain age classes not to be present in the sample. However, Rainbow Lake, for example, had been stocked on even years since 1998. It was sampled in 2002, 2004, and 2007. In 2002, there were only even aged fish, as expected. However, age-1 through age-4 fish were identified in the scale aging process in both 2004 (which should have had only age-2 and age-4 fish) and 2007 (which should have had only age-1 and age-3 fish) (Tables 8 and 40). These unanticipated age classes could be explained by one or more of the following: scale-aging error, a possible brood of diploid fish stocked in the past that is still present and successfully spawning, and the illegal transport and introduction of wild rainbow trout to the lake.

Only 1 biologist aged all scales collected during the 2000–2007 study period. The scale ager had extensive experience aging salmon scales and felt confident aging lake-stocked coho salmon scales. The ager had no experience aging rainbow trout scales, but applied salmon scale aging techniques to this task. The rainbow trout egg take occurs in the spring with fingerling stocking

in late summer. When rainbow trout fingerlings are stocked they tend to put on *false* "checks" (optical discontinuities or annuli on a scale) resulting from transfer from a food-rich environment to a warm-water lake where food must be sought. This transition, late in the summer, with small sized fingerlings, makes scale aging difficult for the first couple of annuli. Additionally, rainbow trout are difficult to age because they lay an annulus down for different reasons, such as spawning or growth spurts in the spring or summer (Dan Bosch, Sport Fish Biologist, ADF&G, Anchorage, personal communication). This ager remained consistent throughout the years and felt the accuracy of the assigned age was within a year or two (Patti Berkhahn, Sport Fish Biologist, ADF&G, Soldotna, personal communication).

The purpose of this study was to evaluate the ADF&G lake stocking strategy on the Kenai Peninsula, however, without any clear criteria or objectives. Age and length data were the primary results obtained during this study, and indicate that stocking is and has been successful prior to and over the course of this study as indicated by the wide ranges of both measurements. To evaluate the success of stocking using a metric, the authors chose to use an arbitrary rule recommended by fishery managers. Behr et al. (2005) states a management and stocking strategy is successful when at least 20% of the fish in a sample are at least 300 mm FL. Because most of our sampling took place after lakes were stocked for the year, we only included fish that were at least 100 mm FL in our sample. Of the 22 lakes stocked with rainbow trout prior to our study, only 3 lakes (Quintin, Rainbow, and Tirmore) had sample sizes less than 10 fish. However, these lakes were sampled more than once during the survey and exceeded 10 fish in other years, which indicates that sample sizes were sufficient for all lakes for at least 1 of the years sampled. Of the 22 lakes stocked with rainbow trout prior to our study, 13 had samples from at least 1 year with greater than 20% of the rainbow trout 300 mm FL or larger (Table 42). Eight of the lakes had samples from at least 1 year with 10% to less than 20% of the rainbow trout 300 mm FL or larger.

The only lakes that failed to have at least 10% of a sampled species with FL greater than 300 mm were Jerome Lake, lakes found to have northern pike, and lakes that were switched to stocking new species during the study. Jerome Lake has a moderate amount of effort on it, but not enough to deplete large fish. There are native Dolly Varden present and these could be competing for food with stocked rainbow trout. Another issue is that Jerome Lake is classified by ADF&G as a *Category 3* lake (not landlocked but containing a gabion at the outlet to prevent egress of fish). Visual observations show that the gabion has a substantial amount of water flowing over it during high water events, and may not be preventing passage of stocked fish.

Of the 9 lakes stocked with coho salmon prior to our study, 2 had samples with greater than 20% of the coho salmon 300 mm FL or larger (Table 42). Aurora Lake had 34% sampled coho salmon greater than 300 mm FL in 2005, however the sample size was only 6 fish because stocking of coho salmon ceased in 2003. The other lake was Chugach Estates Lake, which is stocked opportunistically by Nikiski Elementary students who raise juvenile coho salmon in the Salmon in the Classroom program lead by ADF&G. Efforts to quantify how many coho have been stocked in the past by these students have only been successful back to 2005. Prior to that, the number of coho stocked in these lakes by the Salmon in the Classroom program is unknown. It should be noted that 5 out of 9 sampled lakes stocked with coho salmon did not have any salmon over 300 mm FL, which is similar to other lakes around the state with land-locked salmon (Behr et al. 2005; Skaugstad et al. 1994; Tobin III and Palmer 1997).

Sport Lake Chinook salmon were only captured 1 year out of 3, with a maximum length of 190 mm (Appendix G1). Catchable-sized Chinook salmon stocked in landlocked lakes are thought to only survive up to 1 year after being stocked (Jeff Milton, Hatchery Supervisor, ADF&G, Anchorage, personal communication). Sport Lake was stocked annually with Chinook salmon from 2003 through 2007. No Chinook salmon were caught in 2000 and 2003; however, prior to both years, the last time Chinook salmon were stocked was in April 1999, when only 75 fish were put in. The last time Chinook salmon were stocked before that was in 1994 (Appendix A1). In 2006, 8 Chinook salmon were caught and all were age-1 fish despite 4 consecutive years of stocking catchable-sized Chinook salmon. This supports the assumption that Chinook salmon do not survive more than 1 year. In previous years, the ADF&G Soldotna office has been called to investigate reports of fish die-offs in Sport Lake. Investigations by area biologists found that most, if not all fish retrieved, were Chinook salmon. The cause of mortality is unknown.

For both years when Arctic char were present in the Island Lake samples, greater than 20% of the Arctic char samples were 300 mm FL or larger (Table 42). This was expected because Island Lake is stocked with catchable-sized Arctic char (average size approximately 200 to 390 mm; Appendix A1).

Stocking success can also be measured using the ADF&G annual Statewide Harvest Survey (SWHS). Although almost all of the stocked lakes in the NKPMA have produced an acceptable number of fish of preferred size, for many lakes, little or no sport fishing effort is detected by the SWHS. It is not prudent to stock a lake that produces large fish if no one participates in the fishery. Fishing effort from the current 28 stocked lake fisheries was gathered from the SWHS and combined into Appendix C1 (Mills 1982-1994; Howe et al. 1995-1996, 2001a-d; Walker et al. 2003; Jennings et al. 2004, 2006a-b, 2007, 2009a-b, 2010). While accepting the statistical shortcomings of small fisheries like stocked lakes in the SWHS, but acknowledging the fact that each area deals with the same issue, the Kenai Peninsula does not contribute much in the way of fishing effort directed towards stocked lakes compared to other management areas (Table 43; Figures 33–35). The NKPMA only accounts for approximately 5% of the total fishing effort in the Southcentral Alaska region, but receives approximately 13% of the total stocking levels, whereas the Anchorage management area accounts for 36% of the total fishing effort while only receiving 10% of the total stocking levels. In the Kenai Peninsula Stocked Lakes Management Plan, the objective or goal is to generate 10,000 angler days of effort annually. That goal has only been met once since 1986 (Appendix C1).

In the NKPMA, 11 out of the current 28 stocked lakes have either averaged less than 10 angler days per year since 1986, or have been detected in the survey twice or less (Appendix C1). In fact, 7 of the 28 (25%) stocked lakes (Elephant, Island, Johnson, Longmare, Rainbow, Sport, and Upper Summit) account for 78% of the total stocked lakes angler effort since 1997. Within that group, it is unclear what the true angler effort is at Rainbow Lake, because there are 2 "Rainbow" lakes on the Kenai Peninsula (one lake is described here [Figure 10] and the other is a very popular lake with a campground and boat launch off Swanson River Road, which is not stocked). Of the remaining 6 lakes, 4 of them are over 100 surface acres. The other two are 72 and 85 surface acres. Of the 6 lakes, 5 have 2 species present, and the other, Johnson Lake, is stocked annually with larger, catchable-sized rainbow trout. It would seem that larger lakes with multiple species get more angling effort than small lakes with single species, even small lakes with large fish. So regardless of stocking "success" in terms of numbers of large fish, the SWHS indicates that participation in these stocked lake fisheries is low.

During the study period, the project completed many tasks. However, prior to the FY05 Stocked Lakes Evaluation Operational Plan, there were no formalized tasks outlined. The task to maintain public access and signage at stocked lakes was added to the Plan in 2005. All stocked lakes access signs consisted of paper signs stapled to wooden signboards. Metal signs were purchased in 2002 and installed at access points over the next few years. Highway signs were installed at Carter, Jerome, Long, Longmare, Meridian, Roque, Sport, Trout, and Upper Summit Lakes. Longmare Lake boat launch was renovated and the driveway and parking lot were paved during the 2003 field season. Sport Lake shore habitat was revegetated in 2003, after the property was vandalized and trees were removed.

Six more tasks were added to the Operational Plan in FY07. These tasks were ongoing, but never formally noted. Task 1 provided anglers with current information about the species and size of fish in the stocked lakes on the Kenai Peninsula. Two publications were updated annually to provide this information. The *Stocked Lakes on the Kenai Peninsula* brochure lists stocked lakes, stocked species, and directions to each lake. It is available at the Soldotna ADF&G office and on the ADF&G web page located at http://www.adfg.alaska.gov/static-sf/Region2/pdfpubs/kplake.pdf. The *Kenai Peninsula Stocked Lakes Series* consists of 4 brochures, grouped by area—Soldotna-Sterling, Kasilof, North Kenai, and Cooper Landing–Moose Pass—and is available in the Soldotna ADF&G office. The series contains a bathymetric map, directions to public access, stocking numbers, and Statewide Harvest Survey catch and harvest information for each lake. Similar information is posted on the Lake Stocking Information page on the ADF&G web page and is located at http://www.adfg.alaska.gov/index.cfm?adfg=fishingSport.region.

Task 2 documented the presence of northern pike and other invasive species (i.e., Alaska blackfish [*Dallia pectoralis*], yellow perch [*Perca flavescens*]) in stocked lakes on the Kenai Peninsula. Northern pike were discovered and documented in Arc and Scout Lakes in 2000 and 2005, respectively, during stocked lakes evaluation netting events. This information was forwarded to the Invasive Species Program Biologist in the Soldotna ADF&G office. Stocking was temporarily discontinued in both lakes until northern pike were eradicated.

Task 3 was to inspect and repair barrier structures on the lakes that are not landlocked. Stocked lakes are classified into categories and ranked by the possibility of fish escaping the lake. Eight stocked lakes are not landlocked and are classified *Category 3* lakes. *Category 3* lakes have a barrier or weir across outlets to reduce the incidence of escaping fish and lower their impact on wild fish populations. Barriers at these lakes were inspected when lakes were test netted. Barriers were replaced at Carter, Meridian, Rainbow, Troop, and Vagt Lakes during the study period with assistance from Chugach National Forest personnel. The Long Lake barrier was replaced by Chugach National Forest personnel.

Additional tasks included updating the Kenai Peninsula Stocked Lakes Management Plan, preparing and submitting Fish Transport Permits (FTPs), and providing hatchery support by assisting with fish stocking. The Management Plan was updated annually during the study period. FTPs for each species were renewed on schedule and new FTPs were submitted as needed. Soldotna staff assisted with fish stocking on most Kenai Peninsula stocked lakes. These tasks were fulfilled by management staff prior to the Stocked Lakes Evaluation Project and continued throughout the study period by the stocked lakes crew.

RECOMMENDATIONS

- We recommend maintaining Island Lake's current Arctic char stocking level because it was decreased in 2005 due to the risk of a summer die-off. We also recommend finding other lakes for stocking Arctic char because this provides more diversity in fishing opportunities and may be popular, as shown by the increase in angling effort at Island Lake since stocking began in 2003.
- We recommend evaluating the Jerome Lake gabion and its effectiveness and whether or not native fish are present up to the weir. If so, and the gabion is insufficient, we recommend replacing the gabion or cease stocking of this lake as it has not yielded fish of preferred size.
- We recommend a review of stocking the following lakes based on low angler participation: Aurora, Cecille, Chugach Estates, Long, Loon, Meridian, Quintin, Roque, Thetis, Tirmore, and Troop lakes.
- We recommend that multiple species be stocked in lakes when possible, to garner interest and increase participation in NKPMA stocked lakes fisheries. Also, adding diverse species such as grayling and lake trout would most likely help to increase angler participation.

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TABLES

Table 1.–Species list for all species observed in 28 currently stocked lakes on the Kenai Peninsula, 2000–2007.

Common name	Scientific name	Abbreviation
Arctic char	*Salvelinus alpinus*	AC
Chinook salmon	*Oncorhynchus tshawytscha*	KS
Coho salmon	*Oncorhynchus kisutch*	SS
Dolly Varden	*Salvelinus malma*	DV
Lake trout	*Salvelinus namaycush*	LT
Northern pike	*Esox lucius*	NP
Rainbow trout	*Oncorhynchus mykiss*	RB
Slimy sculpin	*Cottus cognatus*	SSC
Threespine stickleback	*Gasterosteus aculeatus*	TS

Note: 28 stocked lakes were observed including Arc, Aurora, Barbara, Carter, Cabin, Cecille, Centennial, Chugach Estates, Douglas, Encelewski, Elephant, Island, Jerome, Johnson, Long, Longmare, Loon, Meridian, Quintin, Rainbow, Roque, Scout, Sport, Thetis, Tirmore, Troop, Upper Summit, and Vagt lakes.

Table 2.–Kenai Peninsula stocked lakes survey schedule, 2000–2007.

2000	2001	2002	2003	2004	2005	2006	2007
Arc	Centennial	Aurora	Carter	Centennial	Aurora	Elephant	Centennial
Elephant	Encelewski	Barbara	Elephant	Encelewski	Barbara	Island	Encelewski
Island	Jerome	Cabin	Island	Jerome	Cabin	Johnson	Jerome
Johnson	Quintin	Cecille	Johnson	Quintin	Carter	Long	Quintin
Longmare	Thetis	Chugach Estates	Long	Rainbow	Cecille	Longmare	Rainbow
Roque	Tirmore	Douglas	Longmare	Thetis	Chugach Estates	Meridian	Thetis
Scout	Upper Summit	Loon	Meridian	Tirmore	Douglas	Roque	Tirmore
Sport		Rainbow	Roque	Upper Summit	Loon	Sport	Upper Summit
		Vagt	Scout	Vagt	Scout	Troop	Vagt
			Sport				
			Troop				

Table 3.–Net sampling criteria used by lake size category, 2001–2007.

Surface area in hectares (acres)	Days	Fyke nets	Variable-mesh gillnets
<40.5 (100)	1	1	1
≥40.5 (100) to 81 (200)	1	2	2
Above 81 (200)	1	3	3
Remote lakes (any size)	1	0	1

Table 4.–Length-at-age for rainbow trout captured in Carter Lake, Kenai Peninsula in 2003 and 2005.

	2003				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	41	146.9	2.0	122 – 175	58	154.5	2.6	124 – 210
2	20	180.3	4.4	136 – 232	16	225.3	4.0	200 – 262
3	10	249.4	10.9	205 – 312	4	302.5	17.0	268 – 340
4	1	312.0	--	312 – 312	3	371.3	14.5	345 – 395
5	3	391.0	2.1	388 – 395	--	--	--	-- – --
6	1	409.0	--	409 – 409	--	--	--	-- – --
7	3	464.3	5.7	453 – 471	2	470.5	10.5	460 – 481
8	--	--	--	-- – --	2	502.5	17.5	485 – 520
Total	79	195.0	9.4	122 – 471	85	198.1	9.3	124 – 520

Table 5.–Length-at-age for rainbow trout captured in Jerome Lake, Kenai Peninsula in 2001, 2004, and 2007.

	2001				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	16	161.2	2.8	144 – 182	63	174.8	2.2	135 – 210	6	171.8	6.3	148 – 186
2	79	190.8	2.9	132 – 266	49	212.1	1.7	185 – 235	15	199.3	3.9	175 – 231
3	19	262.4	7.2	210 – 337	8	262.5	5.5	235 – 285	1	262.0	--	262 – 262
4	--	--	--	-- – --	4	287.5	7.2	270 – 305	2	274.0	40.0	234 – 314
5	--	--	--	-- – --	1	365.0	--	365 – 365	--	--	--	-- – --
Total	114	198.6	3.7	132 – 337	125	200.2	3.3	135 – 365	24	201.3	7.0	148 – 314

Table 6.–Length-at-age for rainbow trout captured in Long Lake, Kenai Peninsula in 2003 and 2006.

	2003				2006[a]			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	33	155.7	3.9	120 – 210
2	8	152.0	6.7	130 – 180	1	195.0	--	195 – 195
3	12	232.1	6.5	186 – 275	15	262.3	3.7	235 – 285
4	5	299.2	22.6	236 – 366	4	288.5	4.8	277 – 300
5	3	371.7	13.5	345 – 388	1	298.0	--	298 – 298
6	3	417.0	30.6	360 – 465	--	--	--	-- – --
Total	31	253.7	16.3	130 – 465	54	198.5	8.0	120 – 300

[a] Variable mesh net ripped in 2006; unknown number of larger fish lost.

Table 7.–Length-at-age for rainbow trout captured in Meridian Lake, Kenai Peninsula in 2003 and 2006.

	2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	47	164.6	3.0	118 – 211
2	27	174.6	4.0	124 – 240	--	--	--	-- – --
3	5	228.0	8.6	206 – 258	3	323.0	26.9	273 – 365
4	7	365.6	16.4	305 – 422	--	--	--	-- – --
5	--	--	--	-- – --	2	448.0	42.0	406 – 490
6	1	483.0	--	483 – 483	--	--	--	-- – --
Total	40	222.4	13.8	124 – 483	52	184.6	9.6	118 – 490

Table 8.–Length-at-age for rainbow trout captured in Rainbow Lake, Kenai Peninsula in 2002, 2004, and 2007.

	2002				2004				2007[a]			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	3	148.7	1.9	145 – 151	3	154.0	4.2	146 – 160
2	37	155.4	2.8	128 – 185	7	180.3	9.7	151 – 225	1	214.0	--	214 – 214
3	--	--	--	-- – --	3	234.0	5.9	225 – 245	2	214.0	8.0	206 – 222
4	10	250.8	3.4	229 – 265	6	297.7	9.7	265 – 325	2	259.5	3.5	256 – 263
Total	47	175.7	6.2	128 – 265	19	220.8	14.3	145 – 325	8	202.9	15.9	146 – 263

[a] Net was disturbed.

Table 9.–Length-at-age for rainbow trout captured in Troop Lake, Kenai Peninsula in 2003 and 2006.

	2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	6	149.5	2.1	143 – 156	30	145.2	3.3	122 – 202
2	9	183.2	6.5	163 – 228	--	--	--	-- – --
3	6	229.2	7.6	205 – 259	17	254.4	7.2	190 – 285
4	6	274.5	7.6	256 – 301	1	305.0	--	305 – 305
5	1	315.0	--	315 – 315	3	343.0	31.1	282 – 384
Total	28	210.1	9.8	143 – 315	51	196.4	9.7	122 – 384

Table 10.–Length-at-age for rainbow trout captured in Upper Summit Lake, Kenai Peninsula in 2001, 2004, and 2007.

	2001				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	3	132.3	2.7	127 – 136	17	170.6	6.8	115 – 210	82	130.6	1.9	104 – 174
2	16	171.6	4.6	140 – 210	6	235.0	9.7	215 – 280	41	180.6	3.0	149 – 227
3	2	237.5	17.5	220 – 255	3	303.3	20.3	270 – 340	9	243.6	10.1	193 – 273
4	6	289.2	13.4	250 – 330	5	354.0	5.3	335 – 365	1	271.0	--	271 – 271
5	--	--	--	-- – --	4	506.3	17.3	460 – 535	3	473.7	34.7	439 – 543
6	--	--	--	-- – --	--	--	--	-- – --	1	454.0	--	454 – 454
7	--	--	--	-- – --	--	--	--	-- – --	1	532.0	--	532 – 532
Total	27	198.2	11.2	127 – 330	35	313.8	11.9	115 – 535	138	166.5	6.2	104 – 543

Table 11.–Length-at-age for rainbow trout captured in Vagt Lake, Kenai Peninsula in 2002, 2004, and 2007.

	2002				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	28	147.3	3.1	120 – 185	61	145.0	1.5	115 – 175
2	31	146.9	2.1	129 – 168	17	190.6	4.0	165 – 220	20	172.7	3.7	151 – 225
3	13	169.1	1.4	158 – 176	4	243.8	16.8	210 – 290	3	260.3	14.3	234 – 283
4	11	239.5	5.4	208 – 258	--	--	--	-- – --	6	351.3	7.7	315 – 365
5	2	295.0	0.0	295 – 295	--	--	--	-- – --	1	395.0	--	395 – 395
6	2	376.0	14.0	362 – 390	--	--	--	-- – --	--	--	--	-- – --
7	1	400.0	--	400 – 400	--	--	--	-- – --	--	--	--	-- – --
Total	60	185.5	8.1	129 – 400	49	170.2	5.0	120 – 290	91	171.2	6.3	115 – 395

Table 12.–Length-at-age for coho salmon captured in Centennial Lake, Kenai Peninsula in 2001, 2004, and 2007.

	2001				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	39	113.7	1.2	100 – 135	8	105.0	1.3	100 – 110	121	127.0	1.5	105 – 194
2	23	153.7	3.2	128 – 175	7	170.7	4.6	155 – 195	37	165.4	4.0	110 – 236
3	3	205.0	15.0	175 – 222	3	195.0	17.6	160 – 215	4	157.3	13.2	119 – 178
4	2	239.5	2.5	237 – 242	7	242.1	6.4	225 – 270	--	--	--	-- – --
Total	67	135.3	4.0	100 – 242	25	172.6	11.3	100 – 270	162	136.5	2.0	105 – 236

Table 13.–Length-at-age for rainbow trout captured in Centennial Lake, Kenai Peninsula in 2004 and 2007.

	2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	33	163.0	2.9	125 – 185	16	147.9	2.1	135 – 160
2	7	207.9	6.9	180 – 230	11	167.1	3.0	155 – 186
3	--	--	--	-- – --	7	267.0	8.5	244 – 310
4	--	--	--	-- – --	5	319.8	13.0	275 – 355
Total	40	170.9	3.8	125 – 230	39	196.7	10.6	135 – 355

Note: Initial stocking of rainbow trout occurred in 2003. Lake was previously stocked with coho salmon.

Table 14.–Length-at-age for rainbow trout captured in Encelewski Lake, Kenai Peninsula in 2001, 2004, and 2007.

	2001				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	34	167.8	2.8	135 – 198	48	150.6	2.0	133 – 180	20	152.2	3.2	125 – 177
2	21	189.1	2.4	168 – 209	36	194.4	4.3	136 – 285	62	181.3	1.8	155 – 222
3	14	214.2	4.4	190 – 244	6	256.3	13.4	233 – 320	15	244.0	8.5	199 – 295
4	1	235.0	--	235 – 235	6	327.2	7.9	305 – 355	17	272.6	6.6	236 – 322
5	10	376.4	9.3	340 – 440	6	369.2	7.2	345 – 385	9	327.6	7.8	300 – 378
6	--	--	--	-- – --	9	435.8	6.7	410 – 470	--	--	--	-- – --
7	2	510.0	2.0	508 – 512	1	480.0	--	480 – 480	--	--	--	-- – --
Total	82	215.8	9.1	135 – 512	112	217.4	8.9	133 – 480	123	207.5	5.0	125 – 378

Table 15.–Length-at-age for rainbow trout captured in Johnson Lake, Kenai Peninsula in 2000, 2003, and 2006.

	2000				2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	--	--	--	-- – --	--	--	--	-- – --
2	17	153.5	4.3	112 – 195	5	254.4	3.8	245 – 264	1	243.0	--	243 – 243
3	5	259.6	7.1	245 – 280	16	284.9	4.6	248 – 324	8	392.6	10.5	347 – 420
4	2	338.5	16.5	322 – 355	4	377.5	22.3	313 – 416	5	427.6	9.5	402 – 455
5	--	--	--	-- – --	3	423.7	11.0	404 – 442	--	--	--	-- – --
Total	24	191.0	13.3	112 – 355	28	307.5	11.2	245 – 442	14	394.4	14.2	243 – 455

Note: Johnson Lake was stocked with both catchable (age = 1–2 y; avg. wt. >70g) and subcatchable (age = 6 months–1 y; avg. wt. = 15–70g) rainbow trout.

Table 16.–Length-at-age for rainbow trout captured in Quintin Lake, Kenai Peninsula in 2001, 2004, and 2007.

	2001				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	39	168.3	2.6	140 – 199	--	--	--	-- – --
2	--	--	--	-- – --	9	182.1	7.7	125 – 199	1	195.0	--	195 – 195
3	--	--	--	-- – --	20	278.0	5.1	240 – 327	1	205.0	--	205 – 205
4	--	--	--	-- – --	--	--	--	-- – --	15	262.0	6.9	232 – 340
5	--	--	--	-- – --	--	--	--	-- – --	--	--	--	-- – --
6	6	443.8	7.1	414 – 465	--	--	--	-- – --	--	--	--	-- – --
Total	6	443.8	7.1	414 – 465	68	202.4	6.4	125 – 327	17	254.7	7.9	195 – 340

Note: Stocking occurred on alternating years starting in 1987. Stocking was missed in 1999.

Table 17.–Length-at-age for coho salmon captured in Roque Lake, Kenai Peninsula in 2000 and 2003.

	2000				2003			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
2	17	149.3	2.7	128 – 171	4	164.3	2.3	158 – 169
3	--	--	--	-- – --	41	176.3	1.0	165 – 196
4	--	--	--	-- – --	8	194.0	2.9	185 – 209
Total	17	149.3	2.7	128 – 171	53	178.1	1.4	158 – 209

Note: Coho salmon stocking was discontinued after 2002.

Table 18.–Length-at-age for rainbow trout captured in Roque Lake, Kenai Peninsula in 2006.

	2006					
Age (y)	*N*	Mean (mm)	SE	Range		
1	2	203.5	3.5	200	–	207
2	14	235.6	3.6	213	–	262
3	2	273.0	35.0	238	–	308
Total	18	236.2	5.6	200	–	308

Table 19.–Length-at-age for rainbow trout captured in Barbara Lake, Kenai Peninsula in 2002 and 2005.

	2002						2005					
Age (y)	*N*	Mean (mm)	SE	Range			*N*	Mean (mm)	SE	Range		
2	6	129.2	5.7	104	–	143	3	215.3	19.9	194	–	255
3	21	160.9	4.0	133	–	192	6	281.5	16.2	236	–	347
4	9	215.0	11.9	154	–	259	6	340.8	4.8	325	–	355
5	8	276.4	8.1	243	–	305	2	389.0	4.0	385	–	393
6	1	410.0	--	410	–	410	--	--	--	--	–	--
Total	45	193.5	9.4	104	–	410	17	303.4	14.9	194	–	393

Table 20.–Length-at-age for rainbow trout captured in Cabin Lake, Kenai Peninsula in 2002 and 2005.

	2002						2005					
Age (y)	*N*	Mean (mm)	SE	Range			*N*	Mean (mm)	SE	Range		
2	--	--	--	--	–	--	6	213.3	10.7	186	–	263
3	39	176.5	3.4	141	–	223	26	262.4	4.2	231	–	326
4	20	226.1	5.1	195	–	296	1	378.0	--	378	–	378
5	7	290.7	9.6	262	–	330	3	417.3	10.7	399	–	436
6	1	358.0	--	358	–	358	--	--	--	--	–	--
Total	67	205.9	5.8	141	–	358	36	270.4	9.5	186	–	436

Table 21.–Length-at-age for rainbow trout captured in Cecille Lake, Kenai Peninsula in 2002 and 2005.

	2002				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
2	--	--	--	-- – --	3	268.0	15.2	238 – 287
3	45	179.9	3.0	140 – 221	14	281.9	5.2	246 – 322
4	--	--	--	-- – --	2	345.0	20.0	325 – 365
5	20	291.5	3.4	264 – 312	--	--	--	-- – --
Total	65	214.3	6.8	140 – 312	19	286.4	6.7	238 – 365

Table 22.–Length-at-age for coho salmon captured in Chugach Estates Lake, Kenai Peninsula in 2002 and 2005.

	2002				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	8	115.6	1.6	110 – 125	--	--	--	-- – --
2	4	133.5	6.2	120 – 150	11	204.3	3.4	184 – 220
3	7	187.0	1.9	179 – 195	14	224.5	2.4	210 – 240
4	10	228.5	5.3	201 – 250	5	307.0	22.4	230 – 370
Total	29	174.2	9.2	110 – 250	30	230.8	7.6	184 – 370

Note: Coho salmon stocked by students with incubation reared fish.

Table 23.–Length-at-age for rainbow trout captured in Chugach Estates Lake, Kenai Peninsula in 2002 and 2005.

	2002				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	2	125.0	5.0	120 – 130	11	176.6	3.2	155 – 193
2	36	146.6	2.0	130 – 195	24	215.2	3.9	180 – 250
3	40	188.3	2.1	170 – 225	7	239.7	1.7	234 – 245
4	17	252.1	8.1	210 – 312	4	365.0	8.4	340 – 375
5	--	--	--	-- – --	1	400.0	--	400 – 400
6	3	327.0	12.9	309 – 352	--	--	--	-- – --
Total	98	187.0	4.9	120 – 352	47	226.5	8.3	155 – 400

Table 24.–Length-at-age for rainbow trout captured in Douglas Lake, Kenai Peninsula in 2002 and 2005.

	2002				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	1	148.0	--	148 – 148
2	4	135.8	4.2	125 – 145	30	191.6	2.5	148 – 218
3	24	174.4	3.9	146 – 221	62	235.4	3.3	196 – 320
4	19	213.5	5.1	170 – 255	21	324.4	6.3	261 – 374
5	1	353.0	--	353 – 353	1	406.0	--	406 – 406
6	4	383.8	19.7	345 – 423	--	--	--	-- – --
Total	52	205.3	9.0	125 – 423	115	241.0	4.9	148 – 406

Table 25.–Length-at-age for rainbow trout captured in Island Lake, Kenai Peninsula in 2000, 2003, and 2006.

	2000				2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	--	--	--	-- – --	17	168.5	6.7	118 – 220
2	10	172.6	6.9	130 – 208	--	--	--	-- – --	11	232.2	9.0	205 – 286
3	1	250.0	--	250 – 250	10	193.7	7.1	165 – 242	3	366.7	16.3	334 – 384
4	5	381.0	16.6	357 – 447	7	322.4	13.0	270 – 365	3	399.3	29.9	343 – 445
5	--	--	--	-- – --	8	373.0	6.7	345 – 395	--	--	--	-- – --
6	--	--	--	-- – --	2	467.5	12.5	455 – 480	1	498.0	--	498 – 498
7	--	--	--	-- – --	2	431.5	8.5	423 – 440	--	--	--	-- – --
8	--	--	--	-- – --	1	458.0	--	458 – 458	--	--	--	-- – --
Total	16	242.6	25.4	130 – 447	30	314.5	18.0	165 – 480	35	234.7	16.0	118 – 498

Table 26.–Length-at-age for rainbow trout captured in Thetis Lake, Kenai Peninsula in 2001, 2004, and 2007.

	2001				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	39	133.1	1.8	111 – 155	--	--	--	-- – --	5	160.0	10.6	125 – 185
2	25	156.6	2.8	143 – 197	--	--	--	-- – --	24	199.0	3.6	178 – 239
3	50	206.8	3.4	160 – 245	1	265.0	--	265 – 265	12	287.1	13.4	215 – 349
4	--	--	--	-- – --	2	360.0	5.0	355 – 365	8	346.0	13.1	300 – 418
5	2	455.0	0.0	455 – 455	5	403.4	16.9	352 – 455	2	433.0	33.0	400 – 466
6	1	423.0	--	423 – 423	2	457.5	22.5	435 – 480	1	486.0	--	486 – 486
7	4	496.8	3.5	488 – 504	--	--	--	-- – --	--	--	--	-- – --
Total	121	188.1	7.3	111 – 504	10	391.7	19.5	265 – 480	52	252.7	11.7	125 – 486

Table 27.–Length-at-age for rainbow trout captured in Tirmore Lake, Kenai Peninsula in 2001, 2004, and 2007.

	2001				2004				2007			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	24	135.0	3.2	105 – 156	--	--	--	-- – --	4	152.8	6.6	134 – 162
2	23	181.7	4.3	140 – 225	--	--	--	-- – --	19	197.3	5.3	157 – 235
3	18	234.1	5.0	199 – 270	--	--	--	-- – --	8	246.0	6.7	222 – 273
4	--	--	--	-- – --	4	421.3	17.4	370 – 445	--	--	--	-- – --
5	--	--	--	-- – --	--	--	--	-- – --	1	412.0	--	412 – 412
6	--	--	--	-- – --	1	510.0	--	510 – 510	8	449.1	14.8	393 – 518
7	--	--	--	-- – --	1	500.0	--	500 – 500	--	--	--	-- – --
Total	65	179.0	5.5	105 – 270	6	449.2	20.8	370 – 510	40	258.3	17.1	134 – 518

Table 28.–Length-at-age for coho salmon captured in Arc Lake, Kenai Peninsula in 2000.

	2000			
Age (y)	*N*	Mean (mm)	SE	Range
1	4	113.5	1.6	111 – 118
2	7	149.3	7.6	124 – 175
3	11	209.7	5.1	185 – 235
Total	22	173.0	9.1	111 – 235

Table 29.–Length-at-age for coho salmon captured in Aurora Lake, Kenai Peninsula in 2002 and 2005.

	2002				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	5	115.0	5.0	101 – 130	--	--	--	-- – --
2	36	136.7	2.5	120 – 184	--	--	--	-- – --
3	28	172.6	1.9	160 – 189	--	--	--	-- – --
4	8	219.3	6.1	201 – 245	5	270.0	8.9	247 – 300
5	--	--	--	-- – --	1	345.0	--	345 – 345
Total	77	156.9	3.6	101 – 245	6	282.5	14.5	247 – 345

Note: Coho salmon stocking was discontinued after 2002.

Table 30.–Length-at-age for rainbow trout captured in Aurora Lake, Kenai Peninsula in 2005.

	2005			
Age (y)	*N*	Mean (mm)	SE	Range
1	16	179.3	3.3	150 – 210
2	29	245.3	7.6	184 – 328
3	2	353.0	11.0	342 – 364
Total	47	227.4	7.7	150 – 364

Note: Initial stocking of rainbow trout in 2003.

Table 31.–Length-at-age for coho salmon captured in Elephant Lake, Kenai Peninsula in 2000, 2003, and 2006.

	2000				2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	4	111.3	1.5	108 – 115	97	116.2	0.8	101 – 134
2	9	131.56	6.9	115 – 185	54	125.8	1.4	106 – 151	32	220.9	3.0	165 – 252
3	8	240.25	5.4	213 – 256	3	188.7	21.4	151 – 225	23	278.0	7.2	230 – 323
4	--	--	--	-- – --	62	264.0	6.0	204 – 415	4	330.8	6.4	313 – 340
5	--	--	--	-- – --	1	380.0	--	380 – 380	--	--	--	-- – --
Total	17	182.71	14.2	115 – 256	124	198.0	7.1	106 – 415	156	167.1	5.7	101 – 340

Table 32.–Length-at-age for rainbow trout captured in Elephant Lake, Kenai Peninsula in 2000, 2003, and 2006.

	2000				2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	--	--	--	-- – --	103	156.7	2.4	105 – 213
2	15	153.5	5.2	124 – 187	--	--	--	-- – --	21	214.2	5.6	178 – 267
3	7	277.7	7.8	245 – 300	5	272.6	4.0	264 – 284	5	285.0	6.5	275 – 310
4	1	390.0	--	390 – 390	16	324.1	12.9	268 – 410	9	349.7	6.6	320 – 385
5	1	480.0	--	480 – 480	4	413.5	6.8	401 – 433	10	381.5	10.4	320 – 425
6	--	--	--	-- – --	4	413.5	4.3	405 – 425	--	--	--	-- – --
Total	24	213.2	18.7	124 – 480	29	339.9	11.7	264 – 433	148	196.1	6.3	105 – 425

Note: Catchable and broodstock rainbow trout reintroduced in 2003.

Table 33.–Length-at-age for coho salmon captured in Longmare Lake, Kenai Peninsula in 2000, 2003, and 2006.

	2000				2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	9	109.6	1.5	103 – 114	7	110.3	1.7	104 – 115	61	118.2	1.6	102 – 163
2	10	169.6	3.1	157 – 186	86	134.5	2.3	103 – 172	80	161.1	1.3	140 – 199
3	14	208.5	4.0	184 – 238	25	167.2	1.8	155 – 196	8	209.1	7.6	176 – 245
4	2	223.0	0.0	223 – 223	4	226.5	7.0	208 – 240	11	249.6	5.0	220 – 280
Total	35	172.8	7.3	103 – 238	122	142.8	2.6	103 – 240	160	153.2	3.0	102 – 280

Table 34.–Length-at-age for rainbow trout captured in Longmare Lake, Kenai Peninsula in 2000, 2003, and 2006.

	2000				2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	12	113.9	2.2	103 – 130	42	171.1	2.6	132 – 210
2	4	137.0	10.3	110 – 160	24	150.8	3.7	122 – 190	12	227.9	7.7	198 – 281
3	6	227.8	3.2	218 – 236	4	191.8	17.4	151 – 232	10	303.1	10.8	247 – 360
4	4	366.8	4.7	358 – 380	9	299.3	14.7	238 – 369	8	359.5	8.0	316 – 388
5	--	--	--	-- – --	5	340.4	13.7	295 – 375	2	427.5	7.5	420 – 435
6	--	--	--	-- – --	--	--	--	-- – --	1	440.0	--	440 – 440
Total	14	241.6	24.5	110 – 380	54	187.9	11.2	103 – 375	75	228.3	9.4	132 – 440

Table 35.–Length-at-age for coho salmon captured in Loon Lake, Kenai Peninsula in 2002 and 2005.

	2002				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	15	111.3	1.4	101 – 119	--	--	--	-- – --
2	41	137.7	2.7	110 – 165	--	--	--	-- – --
3	45	168.2	1.5	150 – 188	--	--	--	-- – --
4	7	196.7	5.7	183 – 220	9	245.2	6.2	230 – 283
Total	108	150.6	2.6	101 – 220	9	245.2	6.2	230 – 283

Note: Coho salmon stocking was discontinued after 2002.

Table 36.–Length-at-age for rainbow trout captured in Loon Lake, Kenai Peninsula in 2005.

	2005			
Age (y)	*N*	Mean (mm)	SE	Range
1	56	181.5	2.0	135 – 210
2	41	253.7	5.3	204 – 322
3	4	318.5	11.2	288 – 338
Total	101	216.2	4.7	135 – 338

Table 37.–Length-at-age for coho salmon captured in Scout Lake, Kenai Peninsula in 2000, 2002, and 2005.

	2000				2003				2005			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	20	109.1	1.2	103 – 121	2	120.0	5.0	115 – 125
2	20	151	4.8	113 – 210	23	127.2	3.1	109 – 161	--	--	--	-- – --
3	4	235.25	11.9	216 – 270	18	178.3	2.3	160 – 198	--	--	--	-- – --
4	1	342.0	--	342 – 342	5	236.2	23.9	175 – 312	--	--	--	-- – --
Total	25	172.1	10.3	113 – 342	66	143.9	5.1	103 – 312	2	120.0	5.0	115 – 125

Table 38.–Length-at-age for rainbow trout captured in Sport Lake, Kenai Peninsula in 2000, 2003, and 2006.

	2000				2003				2006			
Age (y)	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range	*N*	Mean (mm)	SE	Range
1	--	--	--	-- – --	4	113.5	2.3	108 – 119	157	156.4	1.4	115 – 199
2	15	155.7	5.3	133 – 197	42	148.0	2.8	116 – 184	18	219.4	5.5	183 – 275
3	5	249.6	18.3	184 – 286	30	196.1	4.3	163 – 266	10	302.2	10.8	275 – 365
4	3	306.7	6.7	300 – 320	24	269.7	6.6	214 – 360	1	335.0	--	335 – 335
5	--	--	--	-- – --	13	285.0	7.7	244 – 320	--	--	--	-- – --
6	--	--	--	-- – --	1	305.0	--	305 – 305	2	453.5	13.5	440 – 467
Total	23	195.8	13.2	133 – 320	114	202.1	5.8	108 – 360	188	174.3	3.8	115 – 467

Note: Catchable-sized (age=1–2 yrs.; avg. wt. >70g) rainbow trout from the Soldotna Sport Show were stocked in addition to fingerlings.

Table 39.–Length-at-age for Chinook salmon captured in Sport Lake, Kenai Peninsula in 2006.

	2006			
Age (y)	*N*	Mean (mm)	SE	Range
1	8	178.0	2.5	170 – 190
Total	8	178.0	2.5	170 – 190

Table 40.–Summary table of mean length-at-age in millimeters of stocked rainbow trout in 26 lakes on the Kenai Peninsula from 2000 to 2007.

Lake	Year. sampled	Age 1	2	3	4	5	6	7	8
Aurora[a]	2005	179	245	353	--	--	--	--	--
Barbara	2002	--	129	161	215	276	410	--	--
	2005	--	215	282	341	389	--	--	--
Cabin	2002	--	--	177	226	291	358	--	--
	2005	--	213	262	378	417	--	--	--
Carter	2003	147	180	249	312	391	409	464	--
	2005	155	225	303	371	--	--	471	503
Cecille	2002	--	--	180	--	292	--	--	--
	2005	--	--	268	282	345	--	--	--
Centennial[a]	2004	163	207	--	--	--	--	--	--
	2007	148	167	267	320	--	--	--	--
Chugach Estates	2002	125	147	188	252	--	327	--	--
	2005	177	215	240	365	400	--	--	--
Douglas	2002	--	136	174	214	353	384	--	--
	2005	148	192	235	324	406	--	--	--
Elephant/Spirit[a]	2000	--	154	278	390	480	--	--	--
	2003	--	--	273	324	414	414	--	--
	2006	157	214	285	350	382	--	--	--
Encelewski	2001	168	189	214	235	376	--	510	--
	2004	151	194	256	327	369	436	480	--
	2007	152	181	244	273	328	--	--	--
Island	2000	--	173	250	381	--	--	--	--
	2003	--	--	194	322	373	468	432	458
	2006	169	232	367	399	--	498	--	--
Jerome	2001	161	191	262	--	--	--	--	--
	2004	175	212	263	288	365	--	--	--
	2007	172	199	262	274	--	--	--	--
Johnson	2000	--	154	260	339	--	--	--	--
	2003	--	254	285	378	424	--	--	--
	2006	--	243	393	428	--	--	--	--
Long	2003	--	152	232	299	372	417	--	--
	2006	156	195	262	289	298	--	--	--

-continued-

Table 40.–Page 2 of 2.

Lake	Year sampled	Age 1	2	3	4	5	6	7	8
Longmare[a]	2000	--	137	228	367	--	--	--	--
	2003	114	151	192	299	340	--	--	--
	2006	171	228	303	360	428	440	--	--
Loon[a]	2005	182	254	319	--	--	--	--	--
Meridian	2003	--	175	228	366	--	483	--	--
	2006	165	--	323	--	448	--	--	--
Quintin	2001	--	--	--	--	--	444	--	--
	2004	168	182	278	--	--	--	--	--
	2007	--	195	205	262	--	--	--	--
Rainbow	2002	--	155	--	251	--	--	--	--
	2004	149	180	234	298	--	--	--	--
	2007	154	214	214	260	--	--	--	--
Roque	2003	100	--	--	--	--	--	--	--
	2006	204	236	273	--	--	--	--	--
Sport	2000	--	156	250	307	--	--	--	--
	2003	114	148	196	270	285	305	--	--
	2006	156	219	302	335	--	454	--	--
Thetis	2001	133	157	207	--	455	423	497	--
	2004	--	--	265	360	403	458	--	--
	2007	160	199	287	346	433	486	--	--
Tirmore	2001	135	182	234	--	--	--	--	--
	2004	--	--	--	421	--	510	500	--
	2007	153	197	246	--	412	449	--	--
Troop	2003	150	183	229	275	315	--	--	--
	2006	145	--	254	305	343	--	--	--
Upper Summit	2001	132	172	238	289	--	--	--	--
	2004	171	235	303	354	506	--	--	--
	2007	131	181	244	271	474	454	532	--
Vagt	2002	--	147	169	239	295	376	400	--
	2004	147	191	244	--	--	--	--	--
	2007	145	173	260	351	395	--	--	--
Average		153	190	252	316	379	427	476	480

[a] Denotes lakes that did not have a reduction in stocking of rainbow trout or lakes that were stocked for the first time during the study with rainbow trout at a constant level. All other lakes experienced reductions in stocking levels of rainbow trout.

Table 41.–Summary table of mean length-at-age in millimeters of stocked coho salmon in 8 lakes on the Kenai Peninsula from 2001 to 2007.

Lake[a]	Year Sampled	Age 1	2	3	4	5
Arc	2000	114	149	209	--	--
Aurora	2002	115	137	173	219	--
	2005	--	--	--	269	345
Centennial	2001	114	154	205	240	--
	2004	105	171	195	242	--
	2007	127	166	157	--	--
Chugach Estates	2002	116	134	187	229	--
	2005	--	204	225	307	--
Elephant/Spirit	2000	--	132	240	--	--
	2003	111	126	189	264	380
	2006	116	221	278	331	--
Longmare	2000	110	170	209	223	--
	2003	110	135	167	227	--
	2006	118	161	209	250	--
Loon	2002	111	138	168	197	--
	2005	--	--	--	245	--
Roque	2000	--	149	--	--	--
	2003	--	164	176	194	--
Scout	2000	--	151	235	342	--
	2003	109	127	178	236	--
	2005	120	--	--	--	--
Average		114	155	200	251	363

[a] All lakes either had a reduction in stocking numbers of coho salmon, or a complete elimination of stocking coho salmon in favor of rainbow trout.

Table 42.–Summary table of proportion of fish greater than or equal to 300, 400, and 500 mm for all species stocked in 28 lakes from 2000–2007.

			Length (mm)		
Species	Lake	Year	≥300	≥400	≥500
Chinook Salmon	Sport	2006	0	0	0
Arctic Char	Island	2003	0.47	0.15	0
		2006	0.27	0.18	0
Coho Salmon	Arc	2000	0	0	0
	Aurora	2002	0	0	0
		2005	0.34	0	0
	Centennial	2001	0	0	0
		2004	0	0	0
		2007	0	0	0
	Chugach Estates	2002	0	0	0
		2005	0.20	0	0
	Elephant	2000	0	0	0
		2003	0.06	0.01	0
		2006	0.10	0	0
	Longmare	2000	0	0	0
		2003	0	0	0
		2006	0	0	0
	Loon	2002	0	0	0
		2005	0	0	0
	Roque	2000	0	0	0
		2003	0	0	0
	Scout	2000	0.01	0	0
		2003	0.01	0	0
		2005	0	0	0
Rainbow Trout	Aurora	2005	0.19	0	0
	Barbara	2002	0.05	0.02	0
		2005	0.59	0.06	0
	Cabin	2002	0.07	0	0
		2005	0.16	0.08	0
	Carter	2003	0.12	0.05	0
		2005	0.08	0.05	0.01
	Cecille	2002	0.15	0	0
		2005	0.32	0	0
	Centennial	2004	0	0	0
		2007	0.09	0	0
	Chugach Estates	2002	0.04	0	0
		2005	0.10	0.02	0
	Douglas	2002	0.13	0.04	0
		2005	0.19	0.01	0
	Elephant	2000	0.12	0.03	0
		2003	0.63	0.31	0
		2006	0.13	0.03	0

-continued-

Table 42.–Page 2 of 2.

Species	Lake	Year	Length (mm) ≥300	≥400	≥500
Rainbow Trout (cont.)	Encelewski	2001	0.17	0.08	0.02
		2004	0.12	0.05	0
		2007	0.14	0	0
	Island	2000	0.31	0.08	0.04
		2003	0.64	0.23	0
		2006	0.19	0.08	0.03
	Jerome	2001	0.01	0	0
		2004	0.01	0	0
		2007	0.04	0	0
	Johnson	2000	0.14	0.01	0
		2003	0.57	0.23	0
		2006	0.92	0.60	0
	Long	2003	0.29	0.06	0
		2006	0.05	0	0
	Longmare	2000	0.32	0.02	0
		2003	0.18	0	0
		2006	0.24	0.05	0
	Loon	2005	0.09	0	0
	Meridian	2003	0.20	0.10	0
		2006	0.08	0.04	0
	Quintin	2001	1.00	1.00	0
		2004	0.07	0	0
		2007	0.11	0	0
	Rainbow	2002	0	0	0
		2004	0.20	0	0
		2007	0	0	0
	Roque	2006	0.06	0	0
	Sport	2000	0.08	0	0
		2003	0.10	0	0
		2006	0.06	0.01	0
	Thetis	2001	0.05	0.05	0.02
		2004	0.90	0.60	0
		2007	0.33	0.07	0
	Tirmore	2001	0	0	0
		2004	1.00	0.88	0.25
		2007	0.22	0.22	0.04
	Troop	2003	0.11	0	0
		2006	0.06	0	0
	Upper Summit	2001	0.04	0	0
		2004	0.32	0.11	0.08
		2007	0.09	0.07	0.03
	Vagt	2002	0.04	0.01	0
		2004	0.02	0	0
		2007	0.10	0.01	0

Table 43.–Summary table of stocked lake information from Southcentral Alaska management areas.

	Anchorage					Northern Cook Inlet					Northern Kenai Peninsula Area				
	Total Area	Stocked Lakes		Number	Harvest	Total Area	Stocked Lakes		Number	Harvest	Total Area	Stocked Lakes		Number	Harvest
Year	Effort	Effort	(%)	Stocked	Number	Effort	Effort	(%)	Stocked	Number	Effort	Effort	(%)	Stocked	Number
1997	139,549	64,331	46.1	267,796	46,385	242,542	34,181	14.1	609,162	22,483	385,345	6,018	1.6	342,633	9,759
1998	125,513	43,905	35.0	153,109	32,960	222,182	22,196	10.0	530,987	16,760	345,665	6,588	1.9	268,561	8,898
1999	146,789	66,312	45.2	357,015	38,142	334,728	32,526	9.7	613,086	26,046	475,435	5,151	1.1	357,724	4,723
2000	167,499	69,607	41.6	209,107	44,241	370,196	33,399	9.0	776,381	33,297	561,009	7,969	1.4	263,171	8,699
2001	135,359	47,384	35.0	229,268	31,894	320,156	28,796	9.0	684,235	23,083	448,903	6,543	1.5	314,220	4,985
2002	111,694	40,201	36.0	213,890	30,583	322,069	27,695	8.6	689,807	28,368	481,477	7,641	1.6	211,120	10,977
2003	104,004	40,552	39.0	188,310	24,259	299,848	26,486	8.8	1,000,584	22,992	460,599	4,802	1.0	236,893	3,927
2004	101,943	47,539	46.6	171,749	35,695	311,747	27,770	8.9	864,463	21,408	527,776	4,978	0.9	267,168	4,612
2005	101,041	36,833	36.5	129,876	20,925	298,086	26,739	9.0	741,965	20,395	536,524	8,205	1.5	202,482	4,850
2006	103,800	35,741	34.4	188,709	10,015	294,295	22,939	7.8	714,622	14,813	481,197	6,488	1.3	188,060	3,440
2007	91,931	28,883	31.4	157,380	9,013	298,486	18,668	6.3	1,099,735	10,325	565,720	3,079	0.5	297,353	3,158
Mean	120,829	47,390	38.8	206,019	29,465	301,303	27,400	9.2	756,821	21,815	479,059	6,133	1.3	268,126	6,184

	Upper Tanana Area					Lower Tanana Area					Upper Copper/Susitna Area				
	Total Area	Stocked Lakes		Number	Harvest	Total Area	Stocked Lakes		Number	Harvest	Total Area	Stocked Lakes		Number	Harvest
Year	Effort	Effort	(%)	Stocked	Number	Effort	Effort	(%)	Stocked	Number	Effort	Effort	(%)	Stocked	Number
1997	30,536	12,278	40.2	727,790	16,575	89,911	32,808	36.5	295,677	26,827	56,257	3,580	6.4	116,763	2,301
1998	31,412	13,613	43.3	442,427	27,541	81,789	32,357	39.6	234,374	27,468	56,706	4,697	8.3	50,797	5,290
1999	46,809	23,126	49.4	605,461	29,728	114,592	46,191	40.3	332,183	33,644	77,619	3,841	4.9	273,379	3,875
2000	34,956	17,243	49.3	520,145	32,196	87,451	41,807	47.8	274,202	39,884	58,194	3,689	6.3	52,200	3,058
2001	28,150	12,642	44.9	531,682	15,059	63,702	28,262	44.4	245,324	18,688	48,879	4,396	9.0	204,944	2,467
2002	31,145	15,800	50.7	444,800	22,603	78,499	36,435	46.4	362,996	42,365	46,613	2,377	5.1	48,354	2,901
2003	29,036	10,528	36.3	342,149	13,868	71,052	30,624	43.1	290,294	25,507	52,051	3,374	6.5	82,481	2,913
2004	25,523	12,065	47.3	714,985	10,678	90,530	40,174	44.4	221,630	27,525	46,592	1,461	3.1	85,190	1,615
2005	24,141	9,390	38.9	321,700	7,934	64,891	25,725	39.6	225,776	16,592	41,782	2,473	5.9	37,010	1,456
2006	26,271	9,816	37.4	356,504	8,978	53,406	22,877	42.8	160,268	13,571	39,948	2,667	6.7	40,572	1,822
2007	30,454	9,524	31.3	474,922	9,202	70,517	27,806	39.4	325,417	15,508	52,882	1,972	3.7	84,051	583
Mean	30,767	13,275	42.6	498,415	17,669	78,758	33,188	42.2	269,831	26,143	52,502	3,139	6.0	97,795	2,571

Sources: Diane Loopstra, Hatchery Biologist, ADF&G, Anchorage, personal communication; April Behr, Sport Fish Biologist, ADF&G, Fairbanks, personal communication; Samantha Osland, Sport Fish Biologist, ADF&G, Palmer, personal communication; Chuck Brazil, Sport Fish Biologist, ADF&G, Anchorage, personal communication; Mills (1982-1994); Howe et al. (Howe et al. 1995-1996, 2001a-b); Walker et al. (2003); Jennings et al. (2004; 2006a-b); Jennings et al. (2007; 2009a-b; 2010).

FIGURES

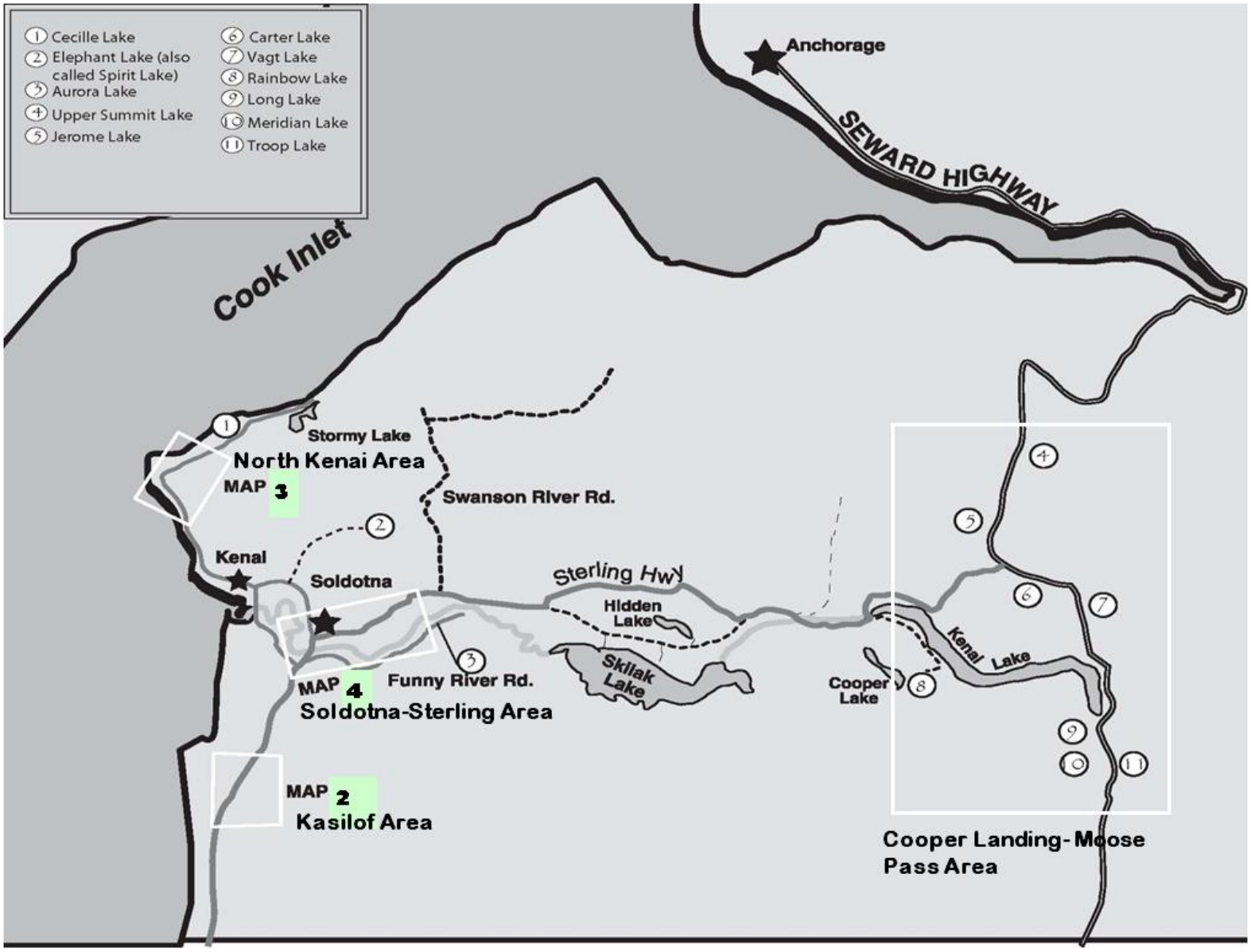

Figure 1.–Map 1 showing the Cooper Landing–Moose Pass Area stocked lakes, other assorted lakes, and Map 2–4 locations.

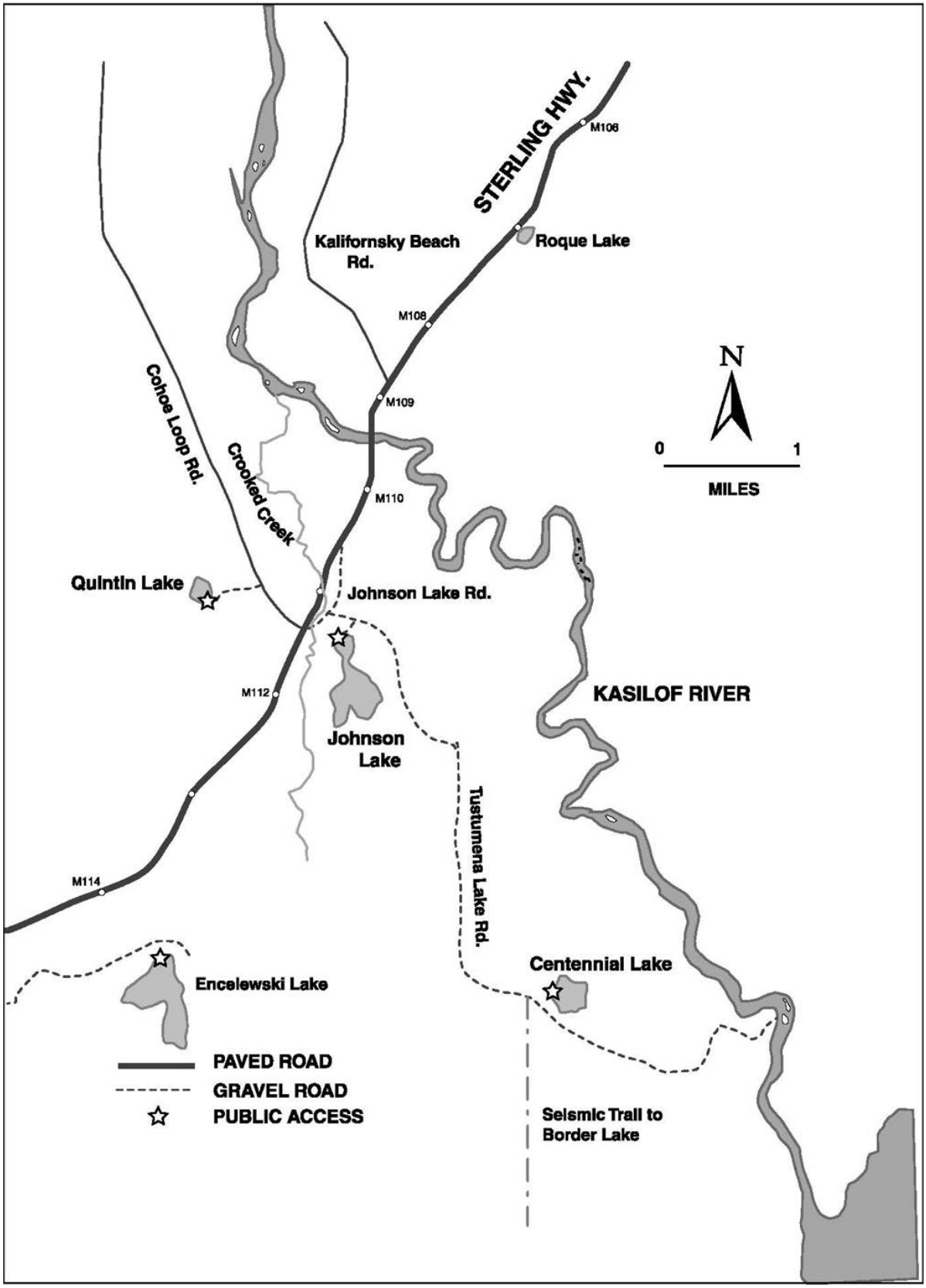

Figure 2.–Map 2 showing all Kasilof Area stocked lakes.

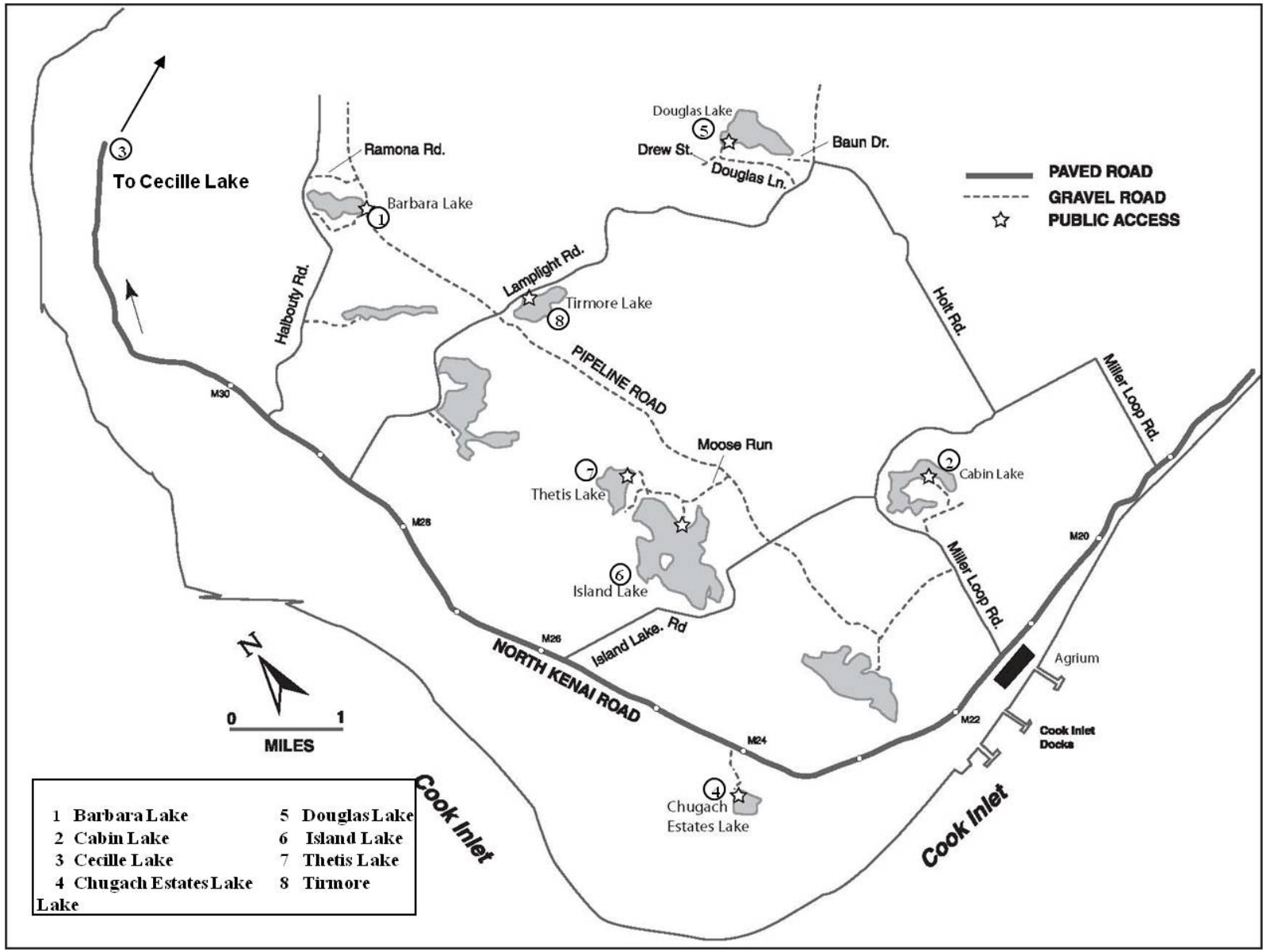

Figure 3.–Map 3 showing all but Cecille Lake (see Figure 1) of the North Kenai Area stocked lakes.

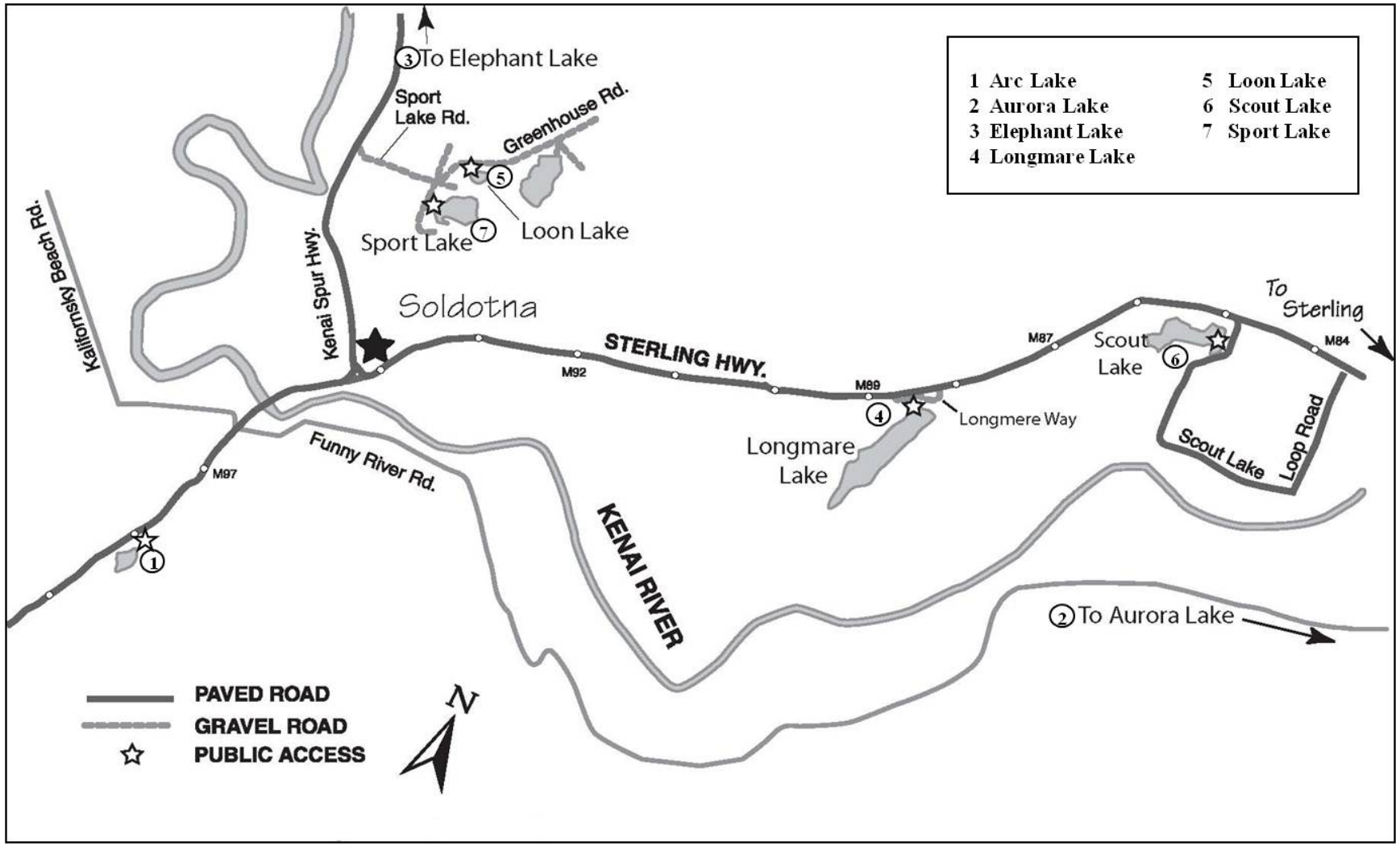

Figure 4.–Map 4 showing all but Aurora and Elephant lakes (see Figure 1) of the Soldotna-Sterling Area stocked lakes.

Size Class	Sampling
<100 mm	count only
100 - 200 mm	Length and Age on a systematic sample of 70
>200 mm	Length and Age on all fish

$k = 1$

- If $n_{ijk} \leq 70$ then sample all fish
- If $n_{ijk} > 70$ then sample every $\left(interger\ value\left(\frac{n_{ijk}}{70} \right) \right)^{th}$ fish

$k > 1$

- If $\sum_{1}^{k-1} n_{ijk} \geq 70$ then sample 0 fish
- If $\sum_{1}^{k-1} n_{ijk} < 70$ then sample every $\left(interger\ value\left(\frac{n_{ijk}}{70 - \sum_{1}^{k-1} n_{ijk}} \right) \right)^{th}$ fish

n_{ijk} = the number of fish caught of species i, by net type j, and net number k.

Figure 5.–Systematic sampling of Chinook salmon, coho salmon, and rainbow trout, 2006–2007.

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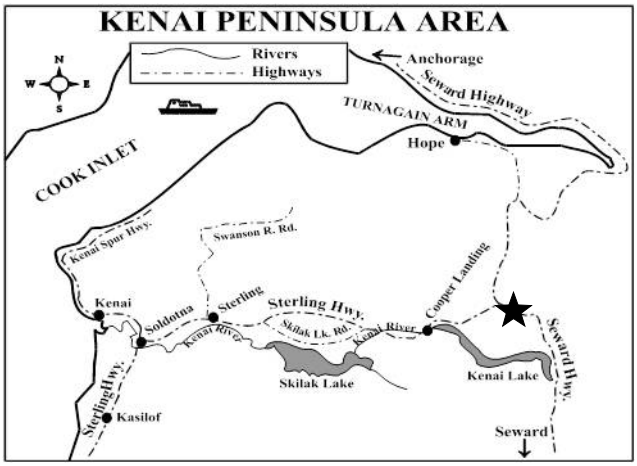

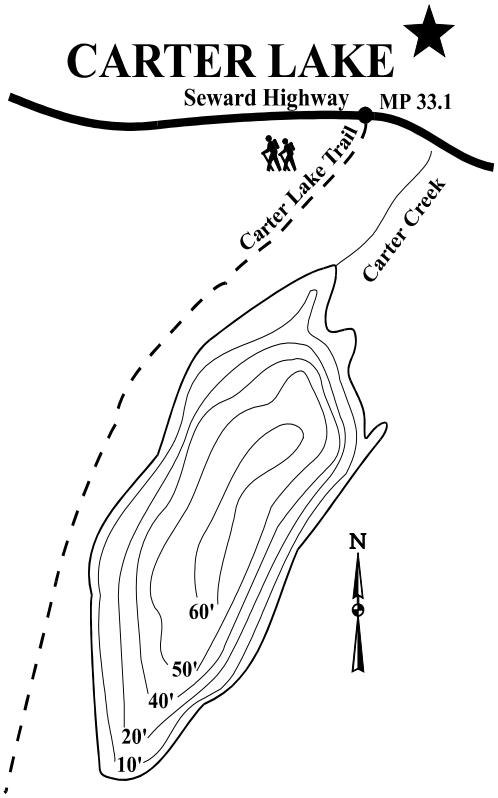

U.S.G.S. Map Ref.	Seward B-7, T5N, R1W, S28, 33	Geographic Location	149°28′02″W, 60°29′06″N
Elevation	1,486 ft	Surface Acres	48
Volume	1,610 acre ft	Maximum Depth	60 ft
Mean Depth	33 ft	Shoreline Length	1.8 mi
Game Fish Present	rainbow trout		

CARTER LAKE PUBLIC ACCESS: Mile 33 Seward Hwy. South side of highway Carter Lake trailhead with parking and toilets. Hike 2.0 miles on a steep trail to lake. Campsites across trail from lake. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 6.–Carter Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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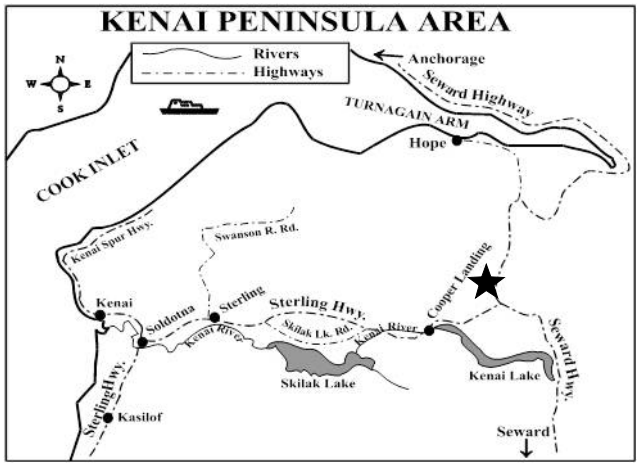
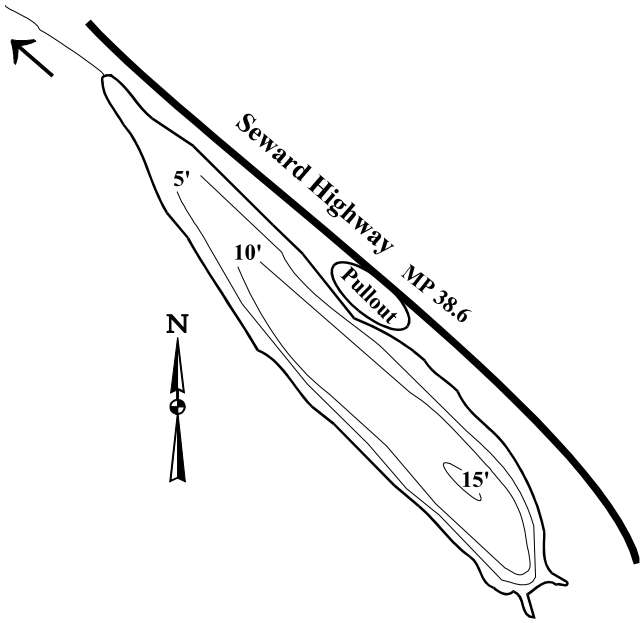


JEROME LAKE ★



U.S.G.S. Map Ref.	Seward C-7, T5N, R2W, S2, 11	Geographic Location	149°35′W, 60°33′N
Elevation	1,000 ft	Surface Acres	16
Volume	138 acre ft	Maximum Depth	15 ft
Mean Depth	8.6 ft	Shoreline Length	0.9 mi
Game Fish Present	rainbow trout, Dolly Varden		

JEROME LAKE PUBLIC ACCESS: Mile 38.6 Seward Hwy. Paved turnout west of highway. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 7.–Jerome Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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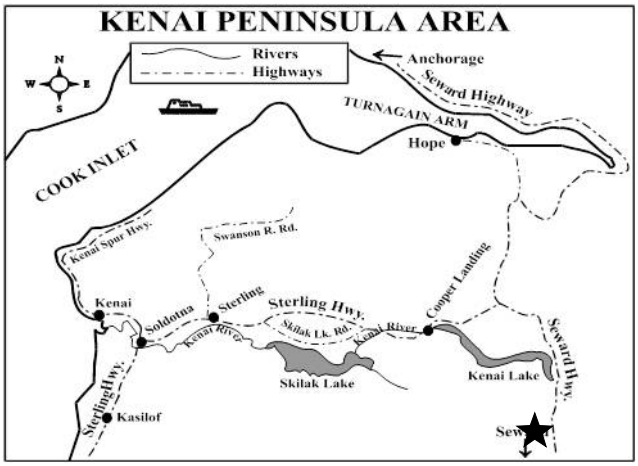
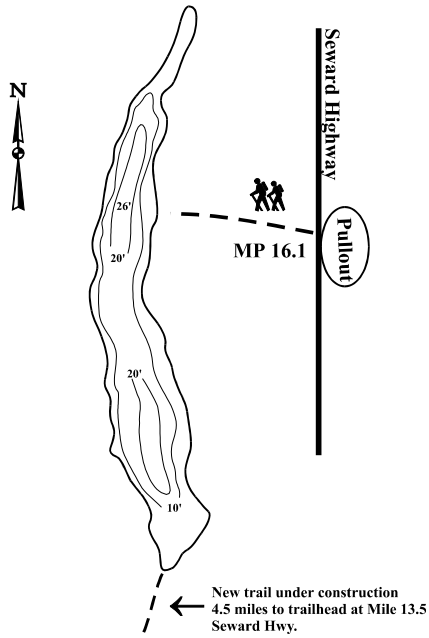


LONG LAKE



U.S.G.S. Map Ref.	Seward B-7, T3N, R1W, S25, 36	Geographic Location	149°23′W, 60°18′N
Elevation	1000 ft	Surface Acres	15
Volume	172 acre ft	Maximum Depth	26 ft
Mean Depth	11.5 ft	Shoreline Length	1.0 mi
Game Fish Present	rainbow trout		

LONG LAKE PUBLIC ACCESS: Mile 16.1 Seward Hwy. Turnout on east side of road. User-established steep trail (¾ mile) begins on west side of highway. New trail (4.5 miles) scheduled for 2006/2007 from Grayling/Meridian Lake trailhead located at Mile 13.5 west side of Seward Highway. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 8.–Long Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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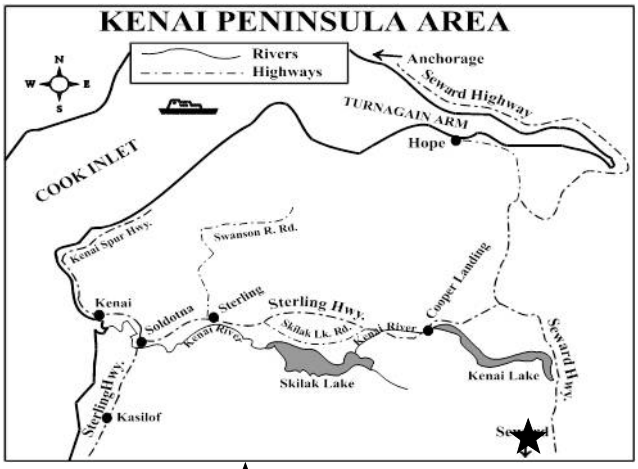
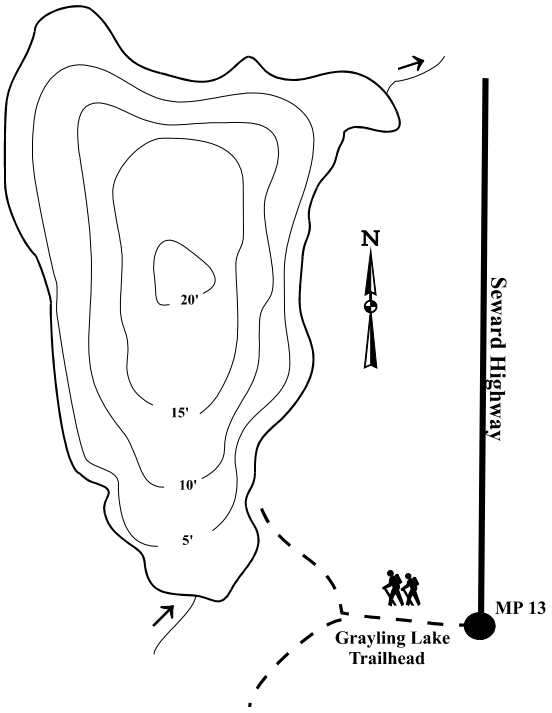


MERIDIAN LAKE ★



U.S.G.S. Map Ref.	Seward B-7, T3N, R1W, S1, 12	Geographic Location	149°22′W, 60°17′N
Elevation	850 ft	Surface Acres	15
Volume	170 acre ft	Maximum Depth	21 ft
Mean Depth	9 ft	Shoreline Length	0.7 mi
Game Fish Present	rainbow trout		

MERIDIAN LAKE PUBLIC ACCESS: Mile 13 Seward Hwy. Grayling Lake Trailhead on west side of highway. 1.0 mile to "Y". Take the right fork ~ 0.5 mi. to Meridian Lake. Trail & parking lot upgraded in 2001. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 9.–Meridian Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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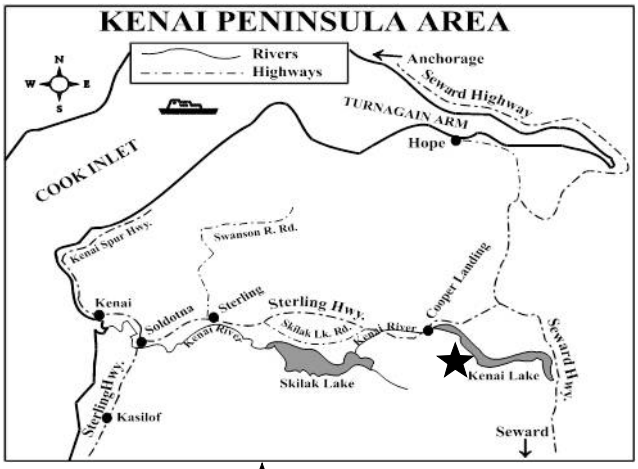
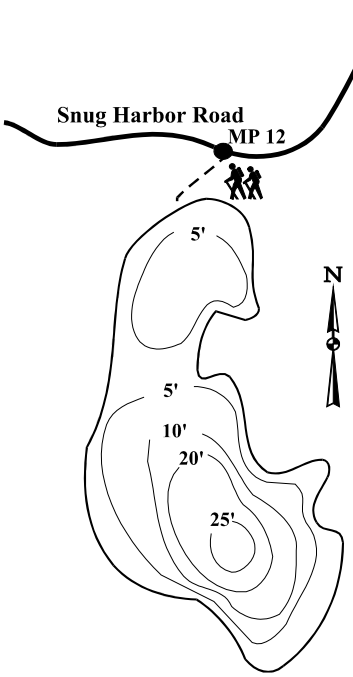


RAINBOW LAKE



U.S.G.S. Map Ref.	Seward B-8, T3N, R3W, S6,7	Geographic Location	149°42′W, 60°23′N
Elevation	1,300 ft	Surface Acres	15
Volume	136 acre ft	Maximum Depth	26 ft
Mean Depth	9 ft	Shoreline Length	0.8 mi
Game Fish Present	rainbow trout		

RAINBOW LAKE PUBLIC ACCESS: Mile 47.9 Seward Hwy. South on Snug Harbor Road 12 miles to access on left side of road. ¼ mile trail to lake. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 10.–Rainbow Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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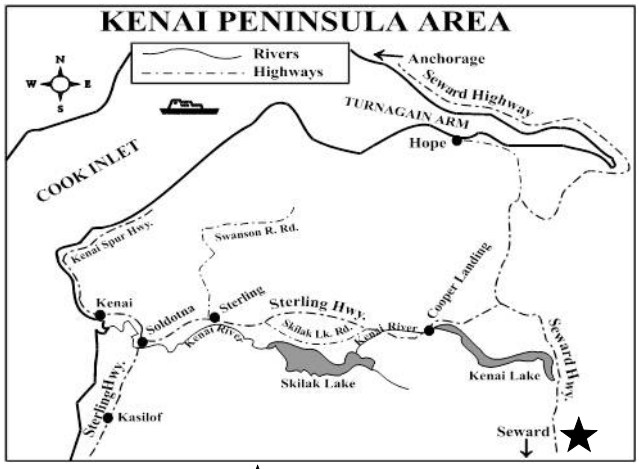
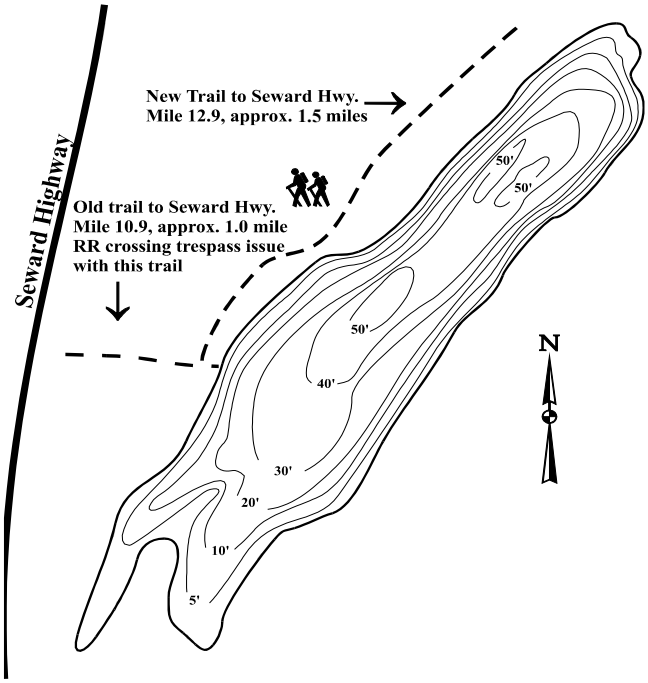


TROOP LAKE



U.S.G.S. Map Ref.	Seward A-7, T3N, R1E	Geographic Location	149°21′01″W, 60°14′14″N
Elevation	865 ft	Surface Acres	27
Volume	579 acre ft	Maximum Depth	53 ft
Mean Depth	22 ft	Shoreline Length	1.3 mi
Game Fish Present	rainbow trout		

TROOP LAKE PUBLIC ACCESS: Mile 12.9 Seward Hwy. Primitive trail leaves turnout east, approx. 1.5 miles to lake. Old trail at Mile 10.9 has trespass issues with RR. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 11.–Troop Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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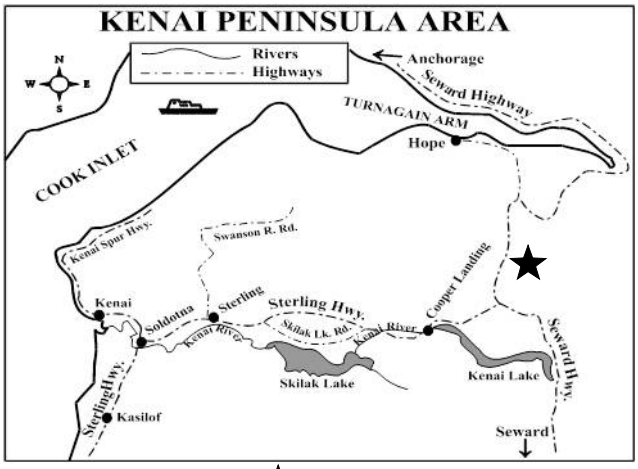
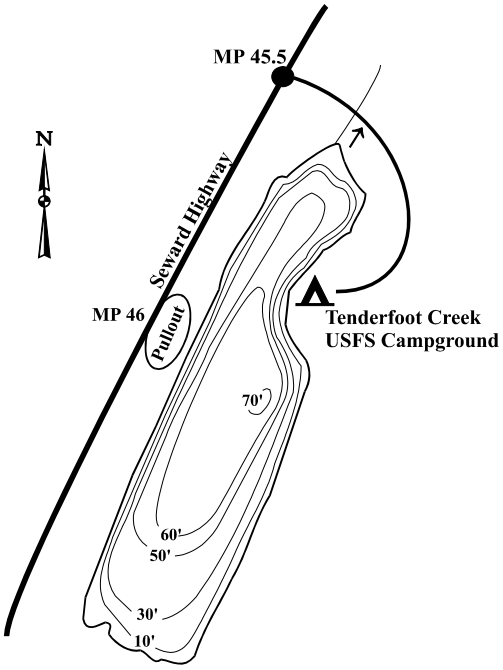


UPPER SUMMIT LAKE



U.S.G.S. Map Ref.	Seward C-7, T6N, R1W, S5, 6, 7, 8	Geographic Location	149°30′W, 60°38′N
Elevation	1,300 ft	Surface Acres	258
Volume	10,729 acre ft	Maximum Depth	70 ft
Mean Depth	41.8 ft	Shoreline Length	3.3 mi
Game Fish Present	rainbow trout, Dolly Varden		

UPPER SUMMIT LAKE PUBLIC ACCESS: Mile 45.5 Seward Hwy. East side of highway paved turnout. **Or** Mile 46 Seward Hwy. East 0.6 mile to Tenderfoot Creek USFS campground with camping, water, toilets, dumpsters, tables, firepits and boat launch. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 12.–Upper Summit Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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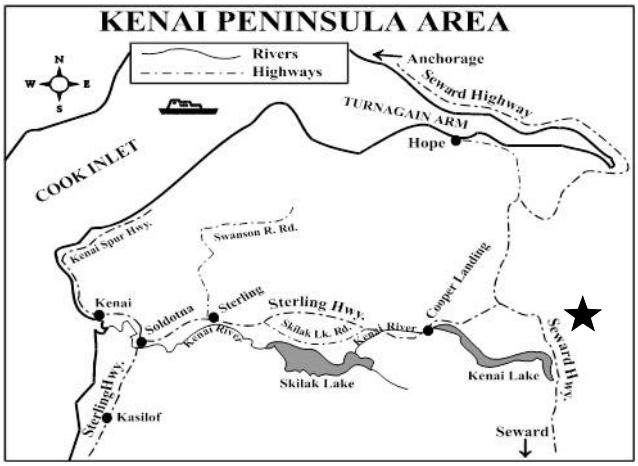

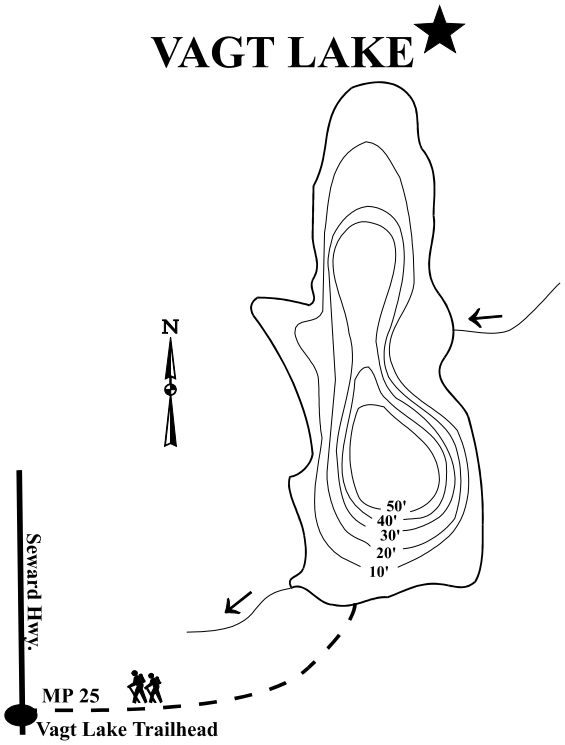

U.S.G.S. Map Ref.	Seward B-7, T4N, R1W, S7	Geographic Location	149°21′W, 60°27′N
Elevation	500 ft	Surface Acres	43
Volume	897 acre ft	Maximum Depth	50 ft
Mean Depth	18.4 ft	Shoreline Length	1.4 mi
Game Fish Present	rainbow trout		

VAGT LAKE PUBLIC ACCESS: Mile 25 Seward Hwy. East side of highway and south end of Lower Trail Lake a small parking area at Vagt Trailhead. 1.5 miles to lake. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 13.–Vagt Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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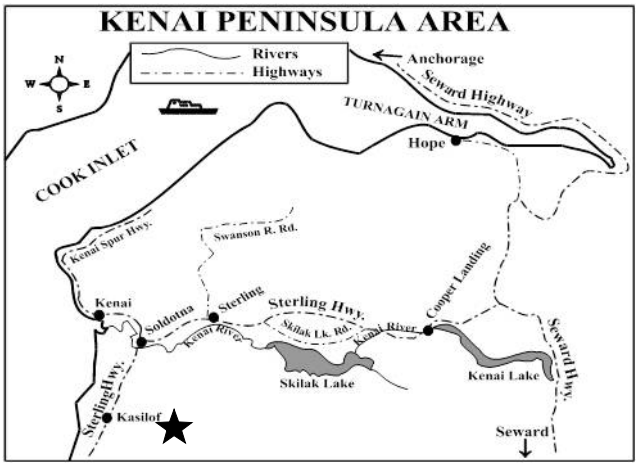
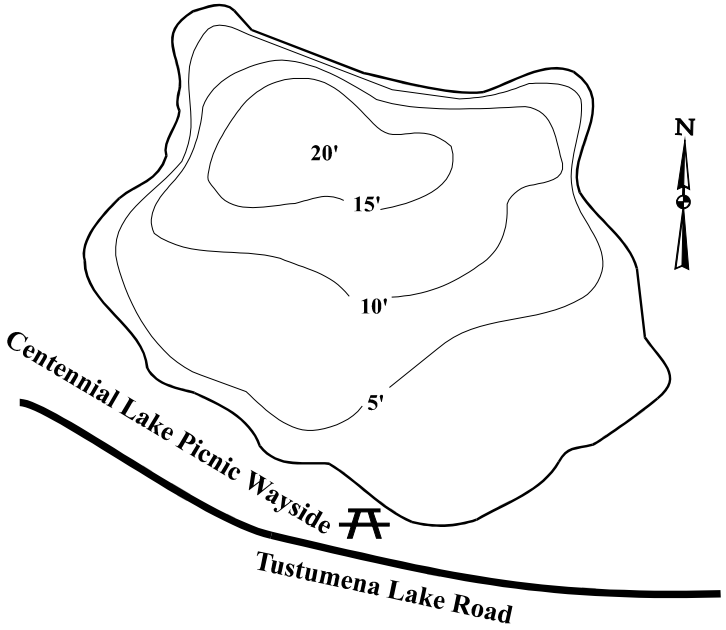


CENTENNIAL LAKE ★



U.S.G.S. Map Ref	Kenai B-4, T2N, R11W, S17, 20	Geographic Location	151°13′40″W, 60°14′58″'N
Elevation	197 ft	Surface Acres	25
Volume	192 acre ft	Maximum Depth	20 ft
Mean Depth	7.7 ft	Shoreline Length	1.0 mi
Game Fish Present	landlocked salmon, rainbow trout (stocked in 2003)		

CENTENNIAL LAKE PUBLIC ACCESS: Mile 110.5 Sterling Hwy. East on Johnson Lake Road. 0.4 mile to Tustumena Lake Road. Left on Tustumena Lake Rd. 3.9 miles to Cenntennial Lake Picnic Wayside on the left with parking and unimproved boat launch. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 14.–Centennial Lake bathymetric map and other information from the Kenai Stocked Lakes Series.

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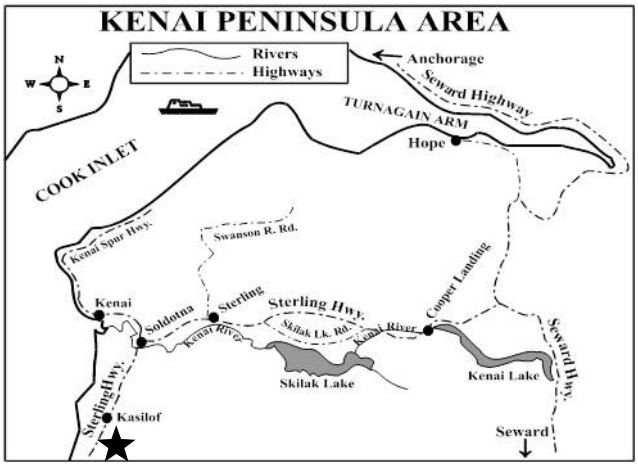
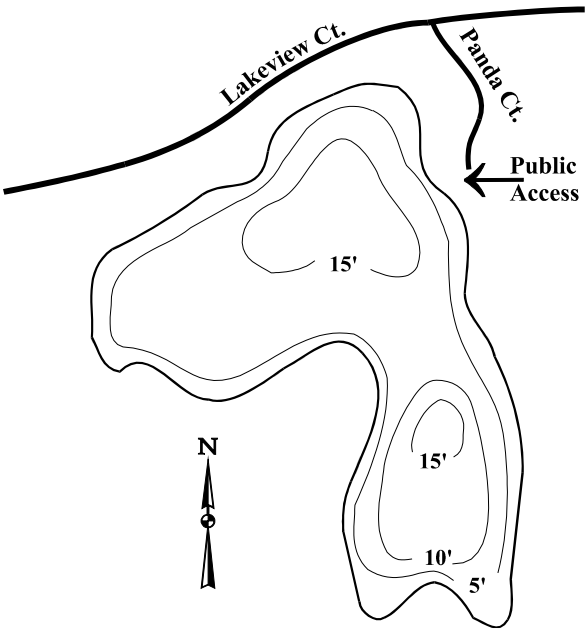


ENCELEWSKI LAKE ★



U.S.G.S. Map Ref.	Kenai B-4, T2N, R12W, S14, 23	Geographic Location	151°18′W, 60°16′N
Elevation	230 ft	Surface Acres	101
Volume	669 acre ft	Maximum Depth	17 ft
Mean Depth	6.6 ft	Shoreline Length	2.0 mi
Game Fish Present	rainbow trout		

ENCELEWSKI LAKE PUBLIC ACCESS: Mile 115 Sterling Hwy. East on Tolum Road 0.4 mile to Lakeview Ct. Left on Lakeview Ct. 0.9 mile to Panda Ct. Right on Panda Ct. 0.1 mile to cul-de-sac and public access. 15 yards to lake, no boat launch. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 15.–Encelewski Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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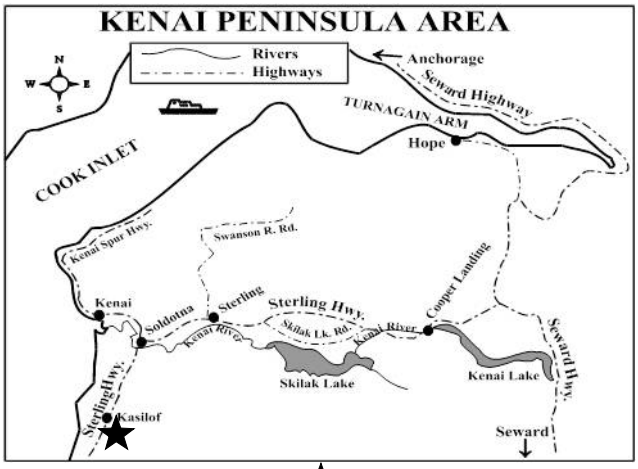
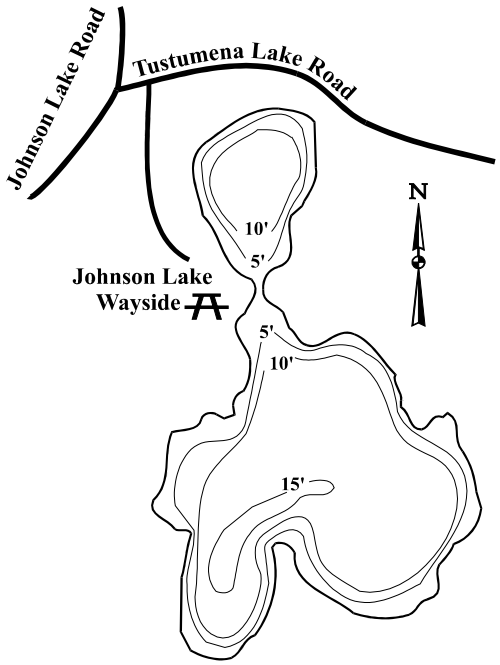


JOHNSON LAKE



U.S.G.S. Map Ref.	Kenai B-4, T2N, R11W, S6	Geographic Location	151°15′26″W, 60°17′14″N
Elevation	150 ft	Surface Acres	85
Volume	861 acre ft.	Maximum Depth	15 ft
Mean Depth	10 ft	Shoreline Length	2.4 mi
Game Fish Present	rainbow trout		

JOHNSON LAKE PUBLIC ACCESS: Mile 110.5 Sterling Hwy. East on Johnson Lake Road 0.5 mile to Tustumena Lake Road. Left on Tustumena Lake Rd. 0.1 mile to campground entrance on the right with camping, toilets, water and boat launch (electric motors only). **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 16.–Johnson Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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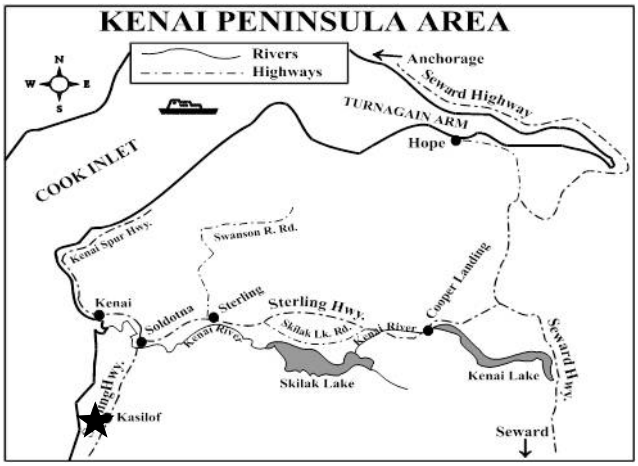
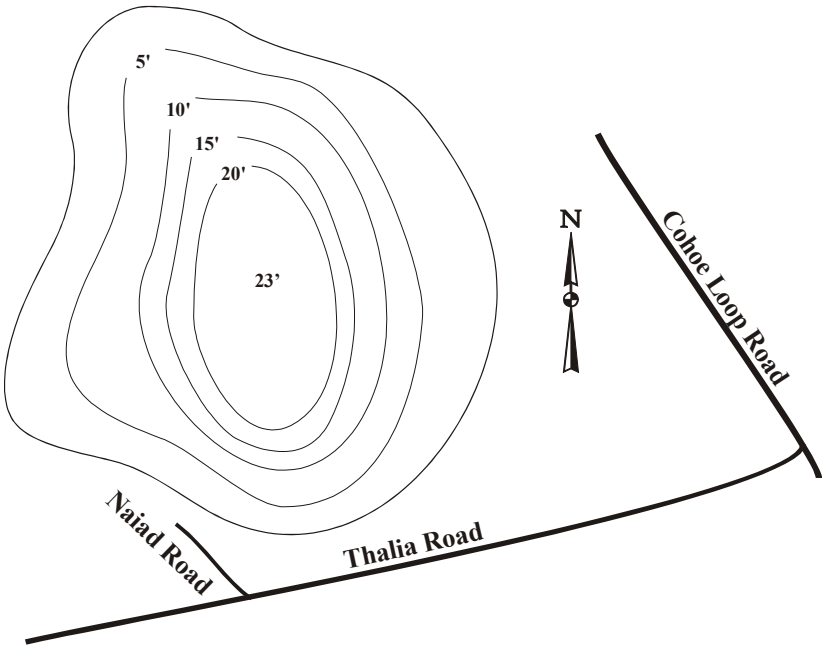


QUINTIN LAKE ★



U.S.G.S. Map Ref.	Kenai B-4, T3N, R12W, S35,36	Geographic Location	151°18′10″W,60°17′34″N
Elevation	150 ft	Surface Acres	14
Volume	143 acre ft	Maximum Depth	23 ft
Mean Depth	10 ft	Shoreline Length	0.6 mi
Game Fish Present	rainbow trout		

QUINTIN LAKE PUBLIC ACCESS: Mile 111.4 Sterling Hwy. West on Cohoe Loop Road 0.5 mile to Thalia Road. Left on Thalia Rd. to Naiad Rd. then left on Naiad 0.3 mile to end of improved road. Follow trail approx. 200 yards through woods, access is where trail is closest to lake. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 17.–Quintin Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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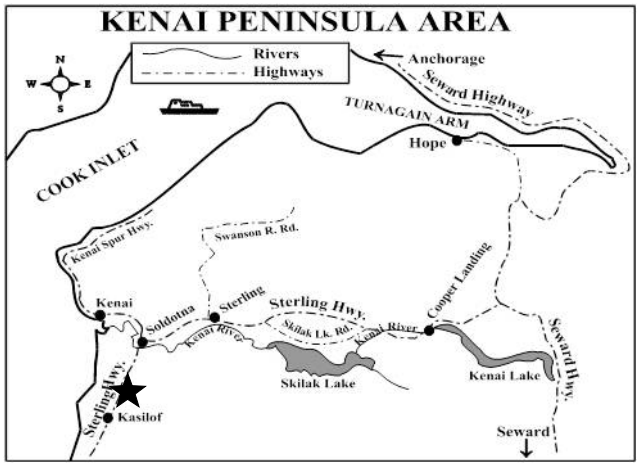
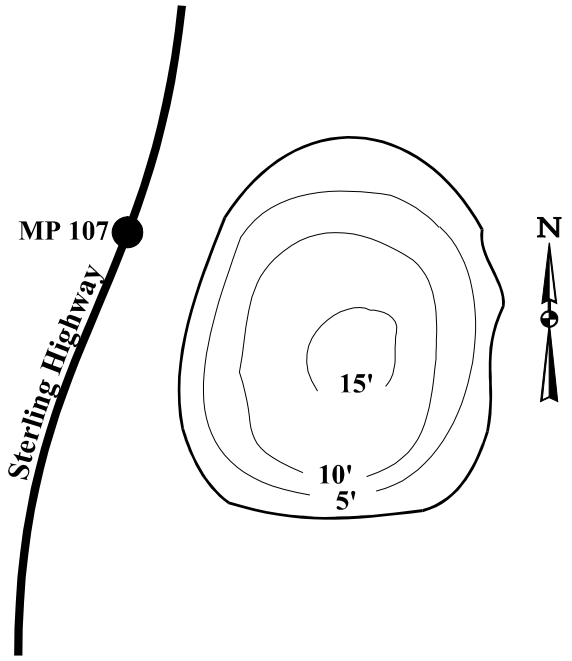


ROQUE LAKE



U.S.G.S. Map Ref.	Kenai B-4, T3N, R11W, S20	Geographic Location	151°13′59″W, 60°19′57″N
Elevation	150 ft	Surface Acres	5
Volume	52 acre ft	Maximum Depth	15 ft
Mean Depth	10.4 ft	Shoreline Length	0.3 mi
Game Fish Present	landlocked salmon, rainbow trout (stocked in 2003)		

ROQUE LAKE PUBLIC ACCESS: Mile 107 Sterling Hwy. East side of road. Decanter Inn is by lake. Parking available at Inn. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 18.–Roque Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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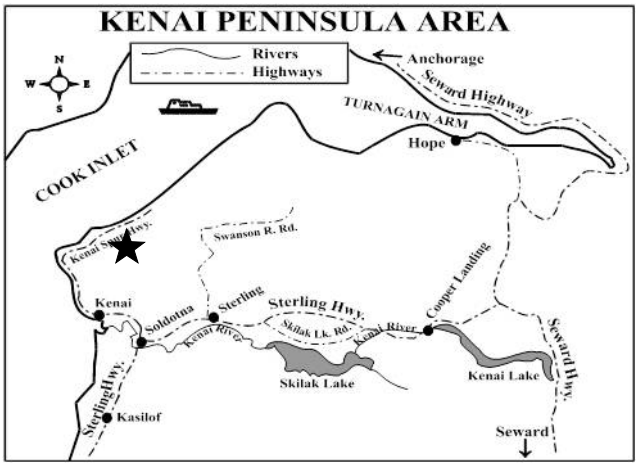
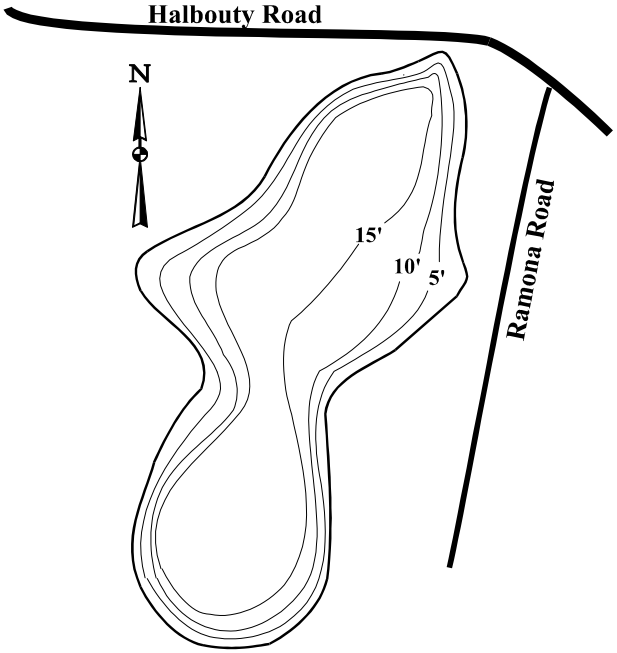


BARBARA LAKE



U.S.G.S. Map Ref.	Kenai C-4, T7N, R11W, S3, 10	Geographic Location	151°12′00″W, 60°42′37″N
Elevation	150 ft	Surface Acres	45
Volume	555 acre ft	Maximum Depth	19 ft
Mean Depth	12.3 ft	Shoreline Length	2.0 mi
Game Fish Present	rainbow trout		

BARBARA LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Hwy. 29.6 miles to Halbouty Road. Right on Halbouty Rd. 2.3 miles to Ramona Road. Right on Ramona Rd. 0.4 mile to Pipeline Rd. Right on Pipeline Rd. 0.4 mile to public access on right. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 19.–Barbara Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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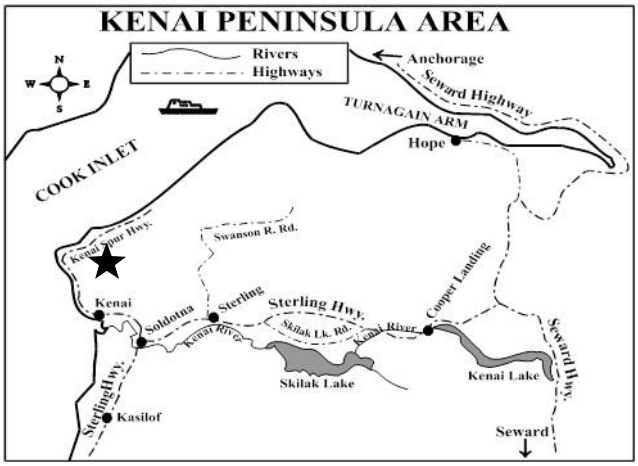

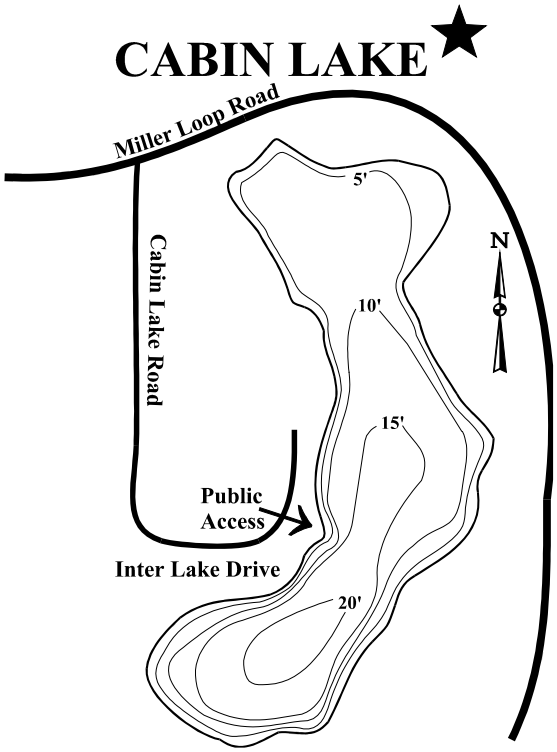

U.S.G.S. Map Ref.	Seward B-7, T7N, R12W, S23, 26	Geographic Location	151°19′02″W, 60°40′52″N
Elevation	115 ft	Surface Acres	52.6
Volume	581 acre ft	Maximum Depth	20 ft
Mean Depth	10.9 ft	Shoreline Length	1.8 mi
Game Fish Present	rainbow trout		

CABIN LAKE PUBLIC ACCESS: Mile 94.3 Sterling Hwy. West on Kenai Spur Hwy. 21.5 miles to Miller Loop Road. Right on Miller Loop Rd. 1.2 mile to Cabin Lake Drive. Right on Cabin Lake Dr. 0.4 mile to Inter Lake Drive. Left on Inter Lake Dr. 0.2 mile to public access on right. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 20.–Cabin Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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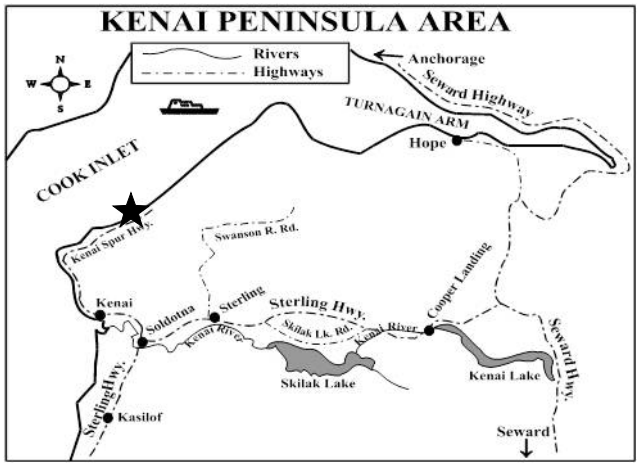
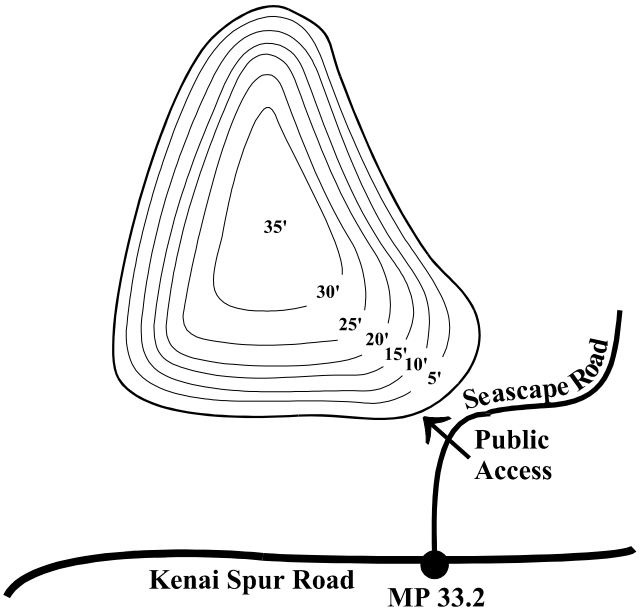


CECILLE LAKE



U.S.G.S. Map Ref.	Kenai D-4 T8N, R11W, S24	Geographic Location	151°20′02″W, 60°39′52″N
Elevation	150 ft	Surface Acres	10
Volume	102 acre ft	Maximum Depth	34.7 ft
Mean Depth	16.7 ft	Shoreline Length	0.6 mi
Game Fish Present	rainbow trout		

CECILLE LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Rd. 33.2 miles to Bohlin Road in Seascape Subdivision. Left on Bohlin Rd. for 0.1 miles to Seascape. Right on Seascape for 0.1 mi. to public access on left where lake is closest to the road. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 21.–Cecille Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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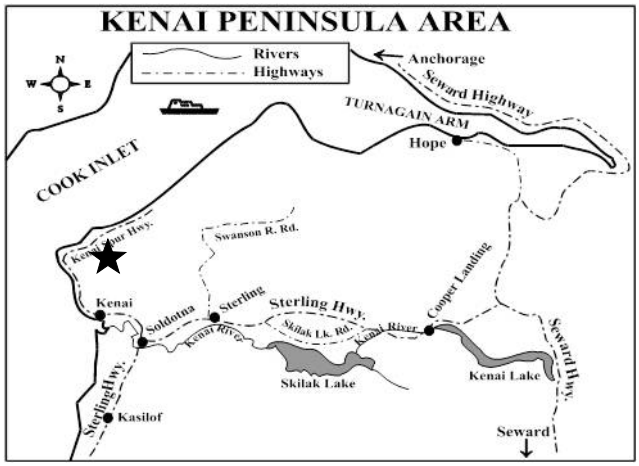
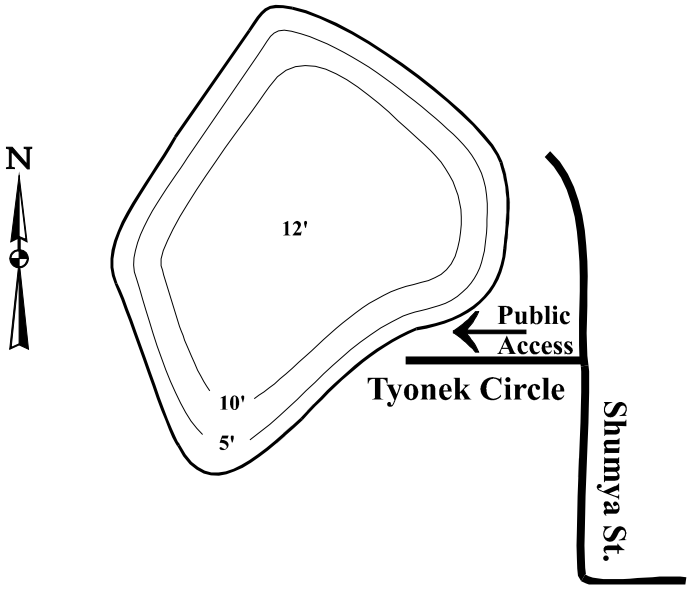


CHUGACH ESTATES LAKE



U.S.G.S. Map Ref.	Kenai C-4, T7N, R12W, S9, 10	Geographic Location	151°22′57″W, 60°42′21″N
Elevation	150 ft	Surface Acres	18
Volume	173 acre ft.	Maximum Depth	12.3 ft
Mean Depth	7.8 ft	Shoreline Length	0.6 mi
Game Fish Present	rainbow trout, coho salmon		

CHUGACH ESTATES LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Highway 24.1 miles to Tustumena Street. Left on Tustumena St. 0.2 mile to McKinley St. Left on Mckinley St. 0.2 mile to Shemya St., then left on Tyonek Circle. Steep road on left to lake. Neighborhood sign says Bailey Lake. No boat launch. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 22.–Chugach Estates Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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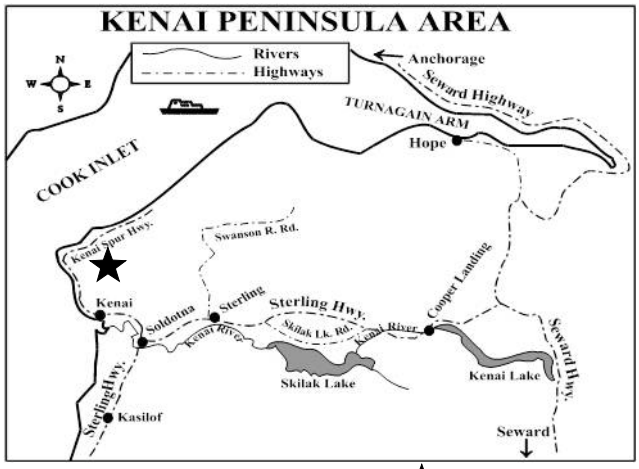
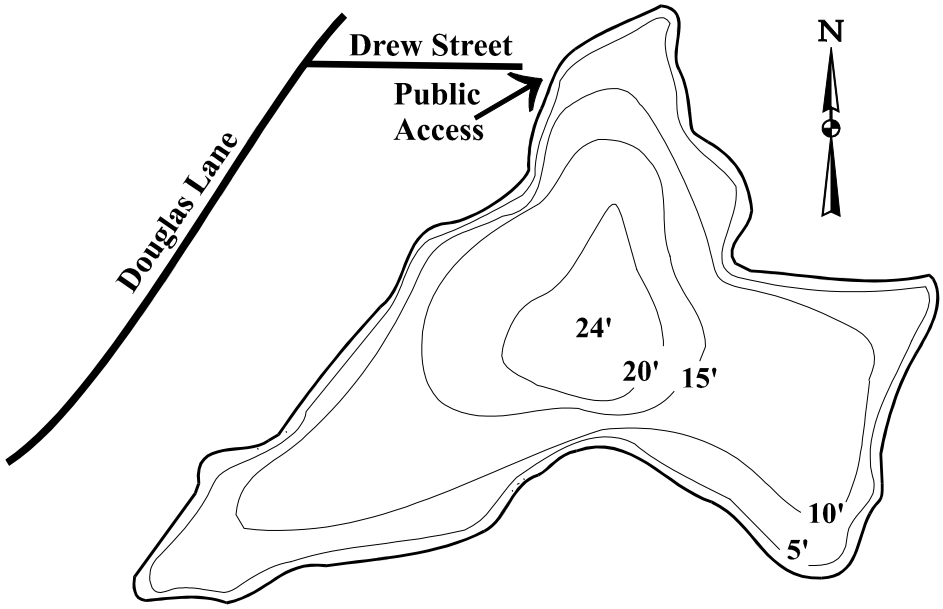


DOUGLAS LAKE



U.S.G.S. Map Ref.	Kenai B-4, T7N, R11W, S28, 29	Geographic Location	151°13′57″W, 60°39′59″N
Elevation	120 ft	Surface Acres	90
Volume	1,008 acre ft	Maximum Depth	24 ft
Mean Depth	11.2 ft	Shoreline Length	1.9 mi
Game Fish Present	rainbow trout		

DOUGLAS LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Hwy. 19.3 miles to Miller Loop Road. Right on Miller Loop Rd. 2.1 miles to Holt Road. Right on Holt Rd. 2.9 miles to Douglas Lane. Right on Douglas Lane 0.7 mile to Drew Street. Right approx. 100 yards to lake with small parking area and boat ramp on northwest edge of lake. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 23.–Douglas Lake bathymetric map and other information found in the Kenai Stocked Lake Series.

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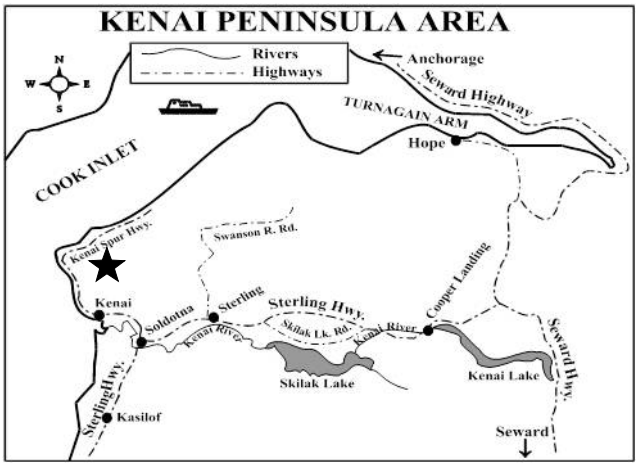

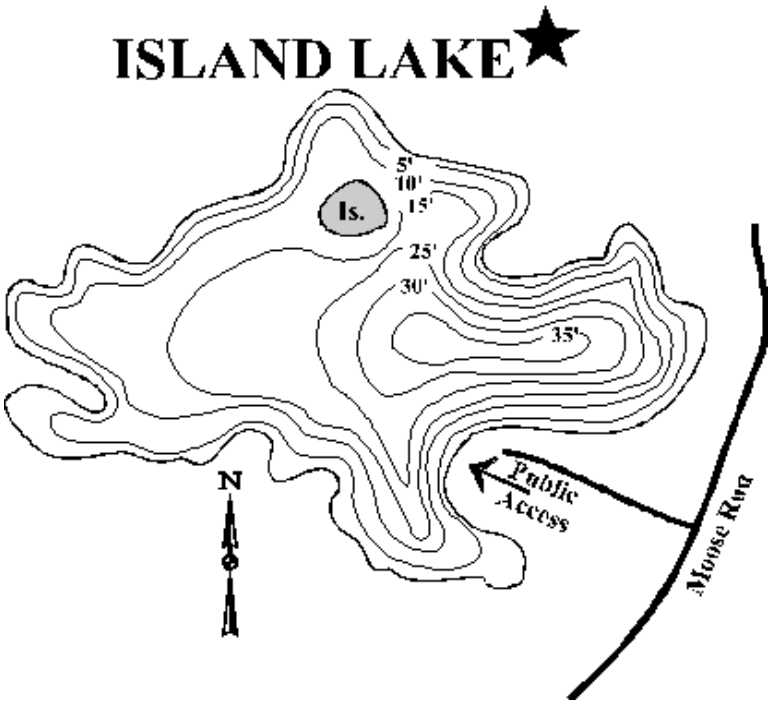

U.S.G.S. Map Ref.	Kenai C-4, T7N, R12W, S11–14	Geographic Location	151°18′04″W, 60°41′51″N
Elevation	140 ft	Surface Acres	268
Volume	3,865 acre ft	Maximum Depth	37 ft
Mean Depth	14.4 ft	Shoreline Length	3.8 mi
Game Fish Present	rainbow trout, Arctic char		

ISLAND LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Hwy. 25.8 miles to Island Lake Road. Right on Island Lake Rd. 2.3 miles to Pipeline Road. Left on Pipeline Rd. 0.7 mile to Moose Run Road. Left on Moose Run Rd. 0.8 mile to public access turn-off on left (Estes Rd.). Limited parking along the road and sandy boat launch area. **NOTE:** Please respect property. Private property extends to waterline. Keep lake and access sites free of litter.

Figure 24.–Island Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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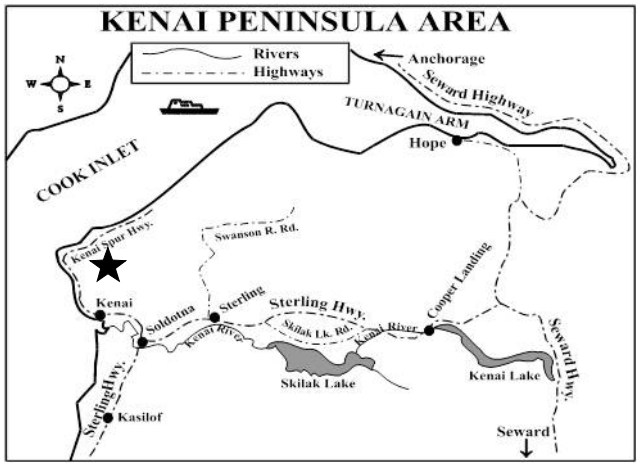
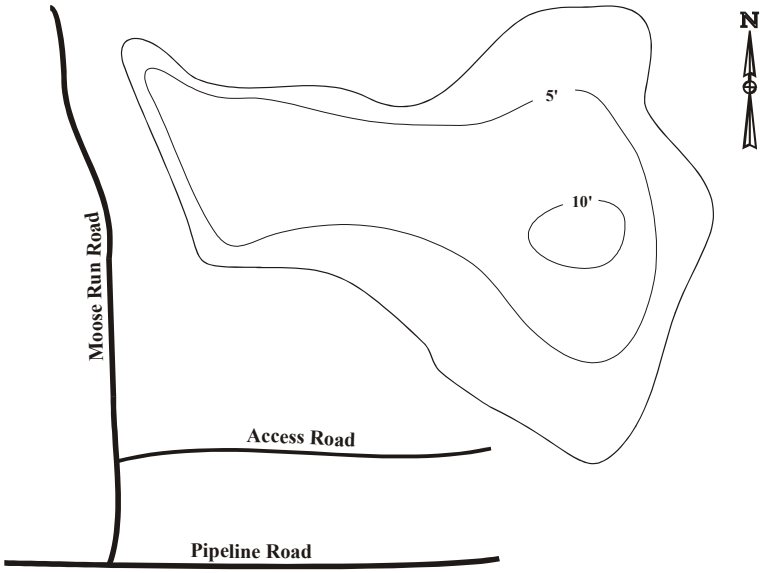


THETIS LAKE ★



U.S.G.S. Map Ref.	Kenai C-4, T7N, R11W, S7, 12	Geographic Location	151°17′38″W, 60°41′50″N
Elevation	150 ft	Surface Acres	38
Volume	178 acre ft	Maximum Depth	11 ft
Mean Depth	4.7 ft	Shoreline Length	1.1 mi
Game Fish Present	rainbow trout		

THETIS LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Hwy. 25.8 miles to Island Lake Road. Right on Island Lake Rd. 2.3 miles to Pipeline Road. Left on Pipeline Rd. 0.7 mile to Moose Run Road. Left on Moose Run Rd. 0.8 mile. Turn right on Wapiti Rd. and continue 0.1 mile to access road on left. Access has small parking area and a 4x4 boat launch site. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 25.–Thetis Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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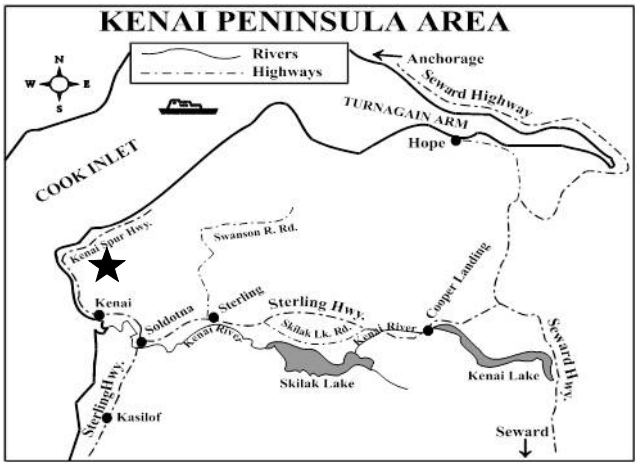
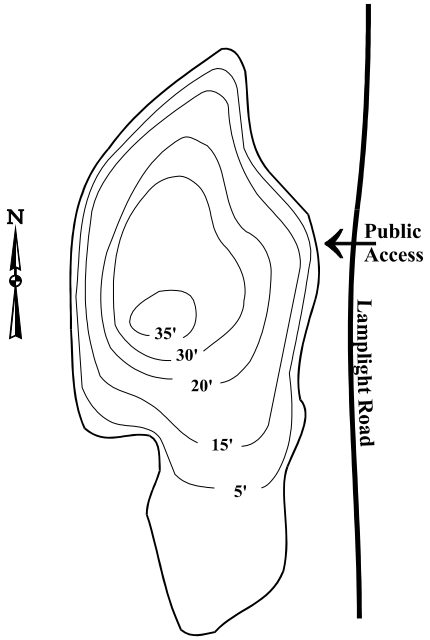


TIRMORE LAKE



U.S.G.S. Map Ref.	Kenai C-4, T7N, R11W, S8, 17	Geographic Location	$151^{0}14'24''$W, $60^{0}41'51''$N
Elevation	150 ft	Surface Acres	52
Volume	890 acre ft	Maximum Depth	36 ft
Mean Depth	17.1 ft	Shoreline Length	1.2 mi
Game Fish Present	rainbow trout		

TIRMORE LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Hwy. 28.6 miles to Lamplight Road. Right on Lamplight Rd. 2.4 miles to public access section line easement on left where lake is closest to road. Very limited parking with no boat ramp. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 26.–Tirmore Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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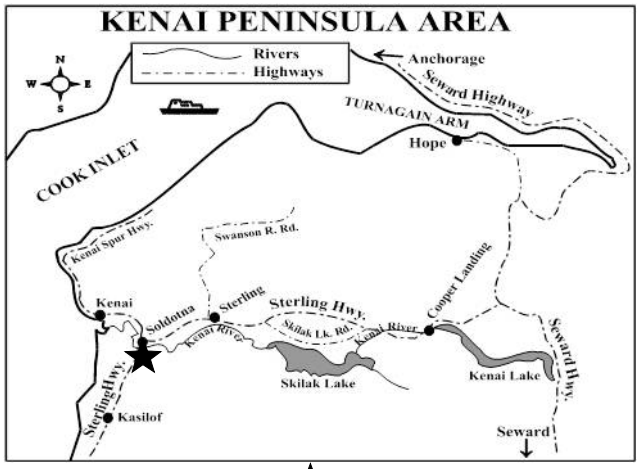

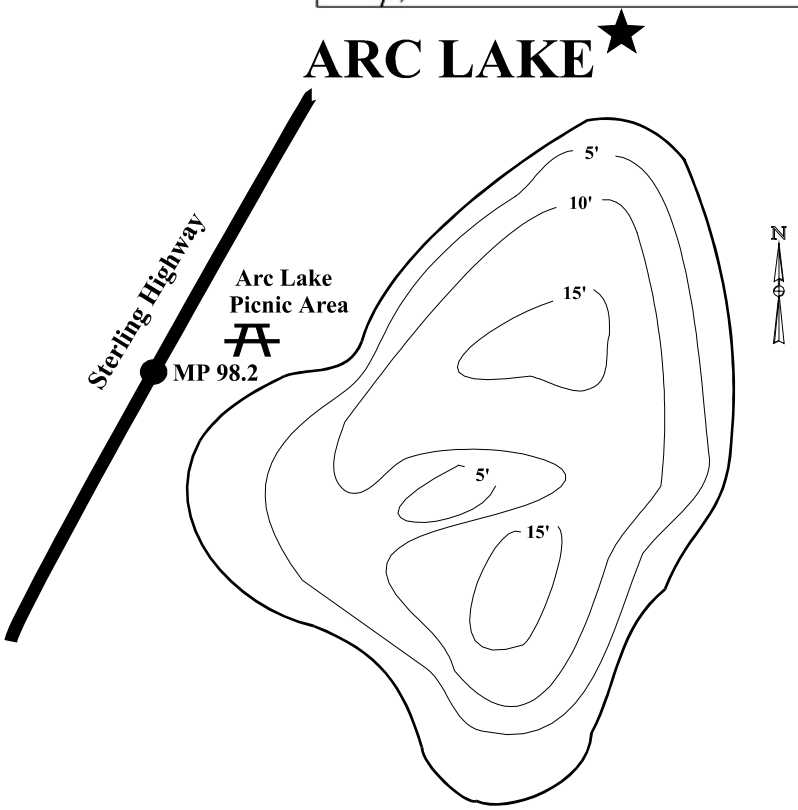

U.S.G.S. Map Ref.	Kenai B-3, T4N, R11W, S12	Geographic Location	151°06′W, 60°27′N
Elevation	150 ft	Surface Acres	16
Volume	137 acre ft	Maximum Depth	15 ft
Mean Depth	8.6 ft	Shoreline Length	0.8 mi
Game Fish Present	landlocked salmon, northern pike (stocking discontinued 2001)		

ARC LAKE PUBLIC ACCESS: Mile 98.2 Sterling Hwy. South side of highway access at Arc Lake Picnic Area with tables and sandy beach. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 27.–Arc Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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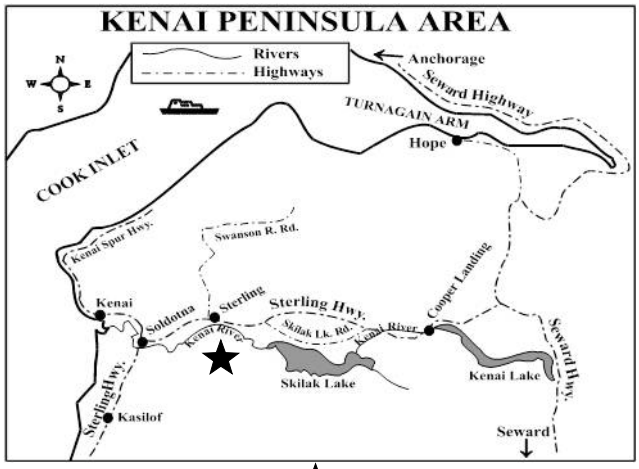
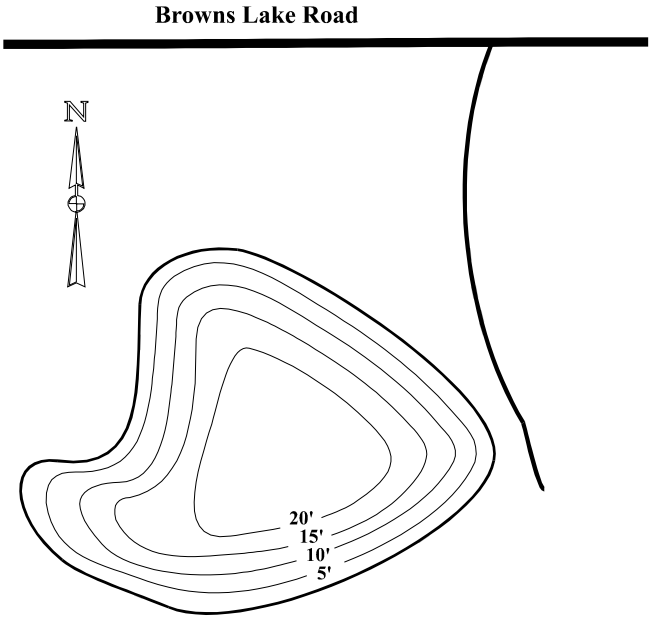


AURORA LAKE



U.S.G.S. Map Ref.	Kenai B-3, T5N, R9W, S31	Geographic Location	150°45′41″W, 60°27′59″N
Elevation	256 ft	Surface Acres	8
Volume	97 acre ft	Maximum Depth	21.6 ft
Mean Depth	12.3 ft	Shoreline Length	0.4 mi
Game Fish Present	landlocked salmon, rainbow trout (stocked in 2003)		

AURORA LAKE PUBLIC ACCESS: Mile 96.2 Sterling Hwy. East on Funny River Rd. for 14.0 miles to Rabbit Run Road. Right on Rabbit Run Rd. 1.0 mile to Browns Lake Road. Left on Browns Lake Rd. for 2.0 miles to Lake Rd.. Right on Lake Rd., go 1.0 mi. to Aurora Ave., go 0.7 mi to unimproved access where lake is next to Rd. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 28.–Aurora Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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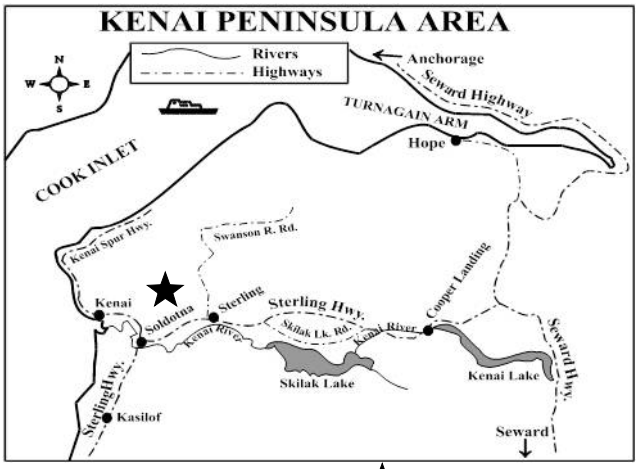

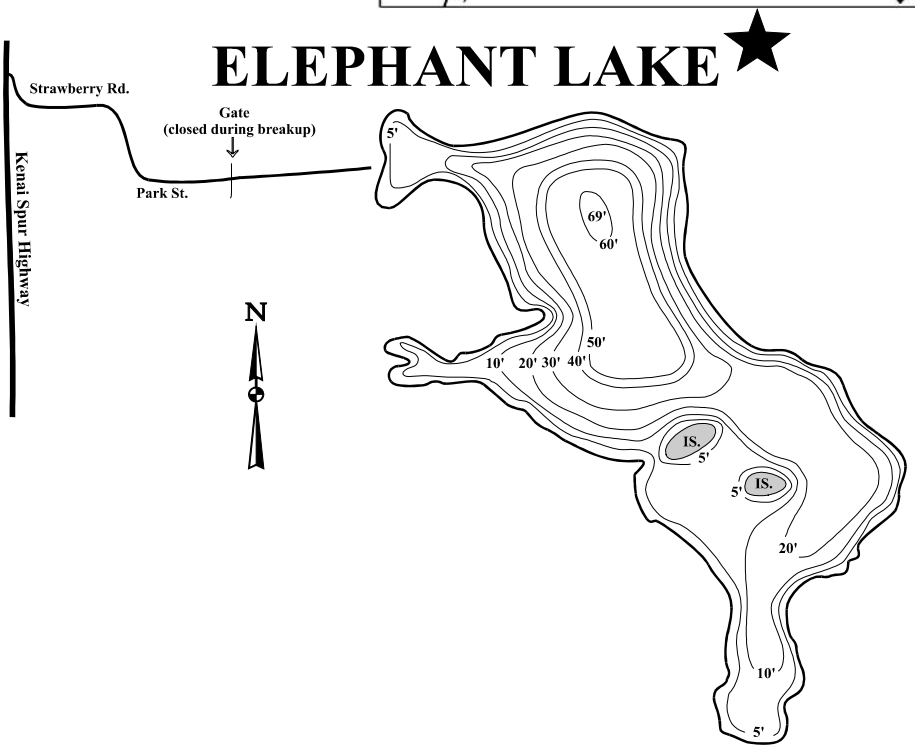

U.S.G.S. Map Ref.	Kenai C-3, T6N, R10W, S22, 23, 26	Geographic Location	151°01′07″W, 60°35′36″N
Elevation	222 ft	Surface Acres	340
Volume	6,976 acre ft	Maximum Depth	69 ft
Mean Depth	19.5 ft	Shoreline Length	4.7 mi
Game Fish Present	rainbow trout, coho salmon		

ELEPHANT (SPIRIT) LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Hwy. 4.7 miles to Strawberry Road. Right on Strawberry Rd. 2.0 miles to Park Street. Left on Park Street 1.0 mile, then right through gate for 2.8 miles following signs to public parking. Snowmachine access during winter months. Keep lake and access sites free of litter.

Figure 29.–Elephant Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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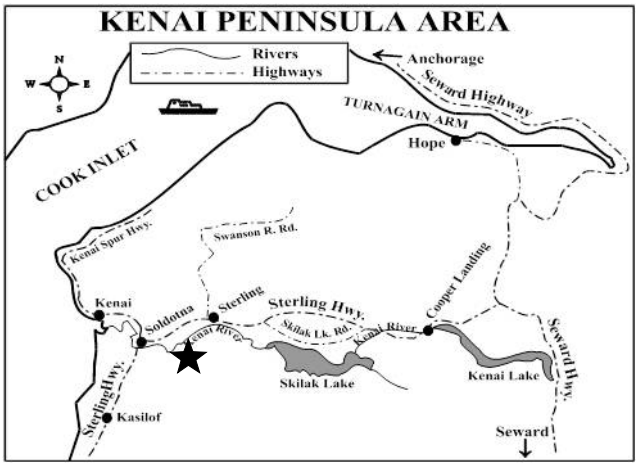

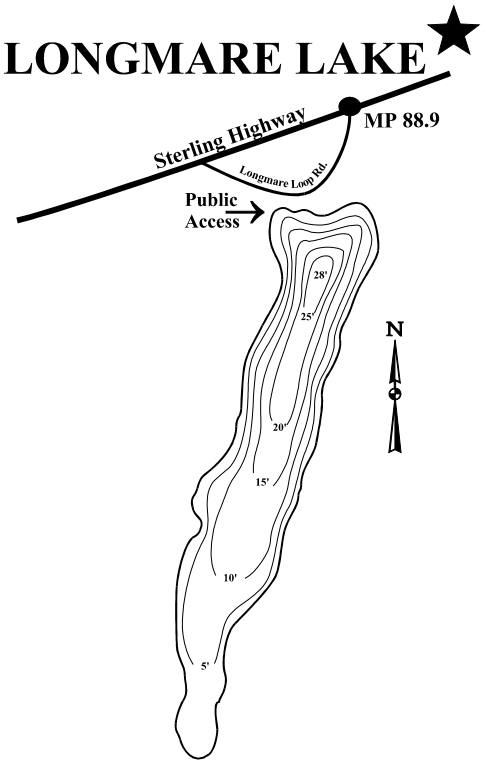

U.S.G.S. Map Ref.	Kenai B-3, C-3, T5N, R9W, S20, 29, 30	Geographic Location	150°54′51″W, 60°30′09″N
Elevation	250 ft	Surface Acres	172
Volume	1,871 acre ft	Maximum Depth	28 ft
Mean Depth	10.4 ft	Shoreline Length	3.3 mi
Game Fish Present	rainbow trout, landlocked salmon		

LONGMARE LAKE PUBLIC ACCESS: Mile 88.9 Sterling Hwy. South on West Drive 0.25 miles to public access on south side of road, with gradient to paved parking area and boat ramp. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 30.–Longmare Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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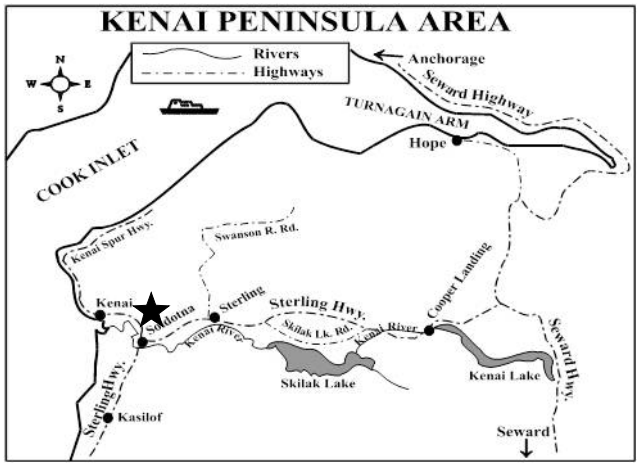
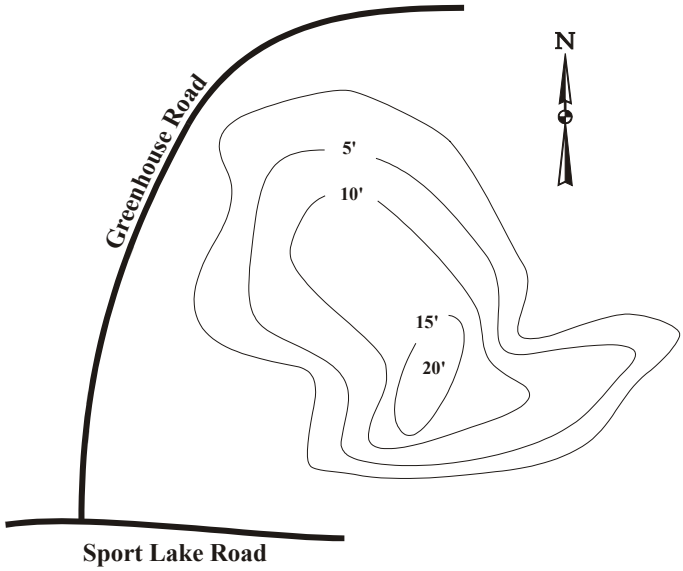


LOON LAKE



U.S.G.S. Map Ref.	Kenai C-3, T5N, R10W, S16	Geographic Location	151°03′31″W 60°30′49″N
Elevation	150 ft	Surface Acres	18
Volume	144 acre ft.	Maximum Depth	20 ft
Mean Depth	7 ft	Shoreline Length	0.8 mi
Game Fish Present	landlocked salmon, rainbow trout		

LOON LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. West on Kenai Spur Hwy. 2.5 miles to Sport Lake Road. Right on Sport Lake Rd. 1.0 mile to Conner Road. Left on Conner Rd. 0.3 mile, just beyond Lodge. Public access is where lake is closest to the road. Limited parking along the road. No boat launch. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 31.–Loon Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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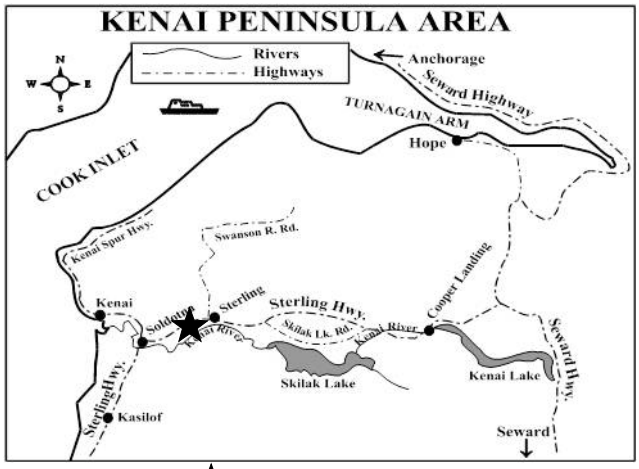

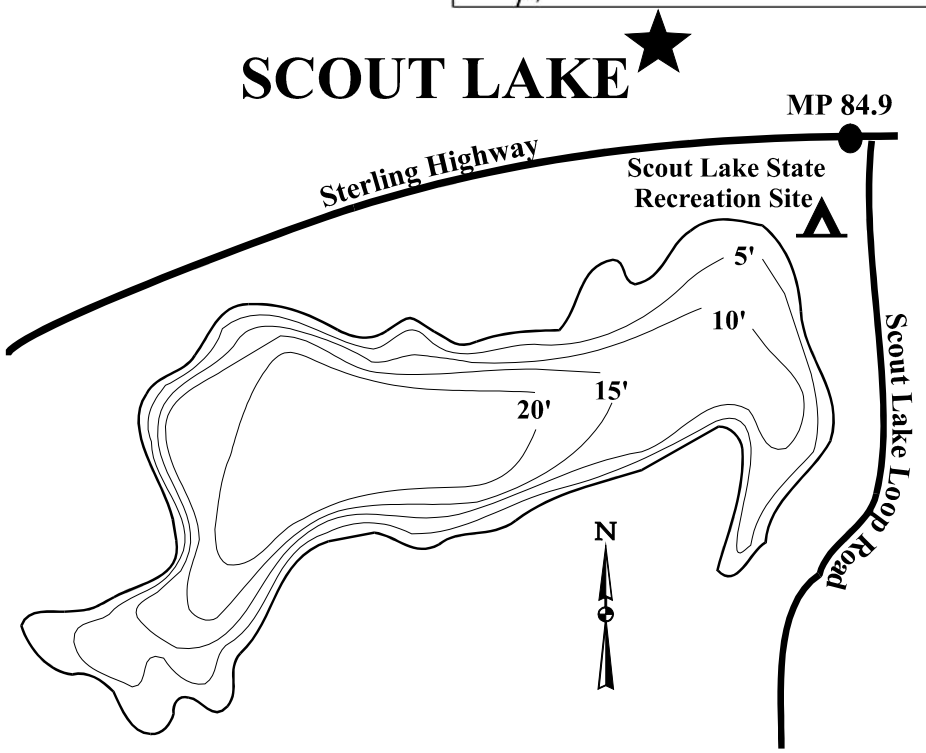

U.S.G.S. Map Ref.	Kenai C-3, T5N, R9W, S10, 15, 16	Geographic Location	150°51′15″W,60°31′40″N
Elevation	245 ft	Surface Acres	95
Volume	1,243 acre ft.	Maximum Depth	20 ft
Mean Depth	13.1 ft	Shoreline Length	2.3 mi
Game Fish Present	landlocked salmon, rainbow trout, northern pike		

SCOUT LAKE PUBLIC ACCESS: Mile 84.9 Sterling Hwy. East on Scout Lake Road 0.1 mile to Scout Lake State Recreation Site with campsites, water, toilets and covered picnic shelter. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 32.–Scout Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

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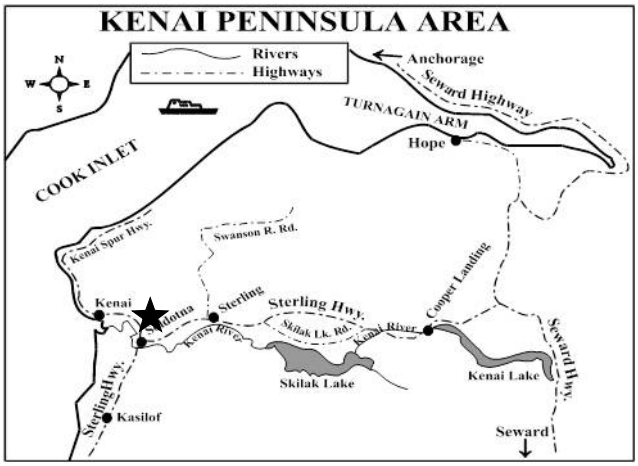
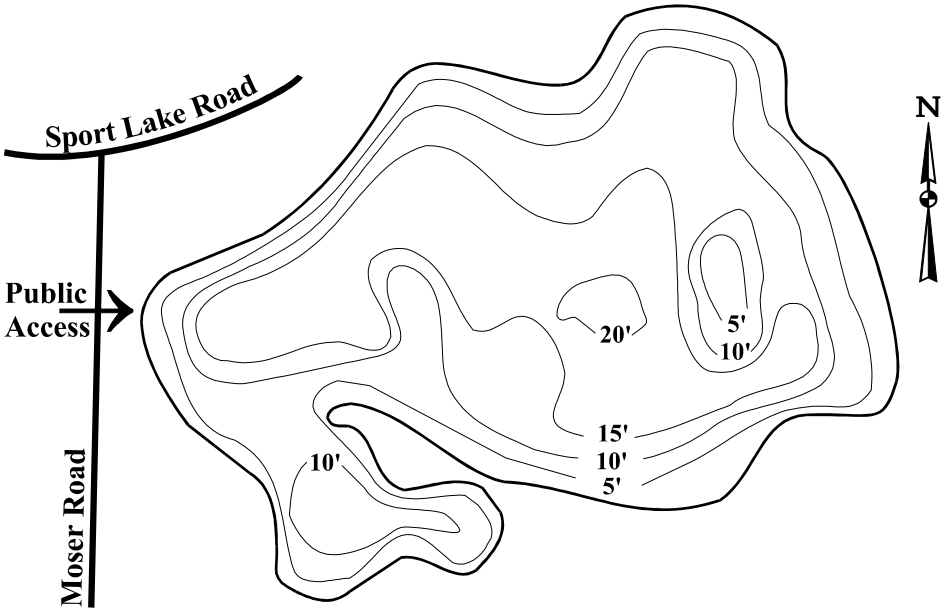


SPORT LAKE ★



U.S.G.S. Map Ref.	Kenai C-3, T5N, R10W, S21	Geographic Location	151^{0}03′47″W, 60^{0}30′24″N
Elevation	225 ft	Surface Acres	72
Volume	788 acre ft	Maximum Depth	20 ft
Mean Depth	11 ft	Shoreline Length	1.7 mi
Game Fish Present	rainbow trout, Chinook salmon		

SPORT LAKE PUBLIC ACCESS: Mile 94.2 Sterling Hwy. North on Kenai Spur Hwy. 2.5 miles to Sport Lake Road. Right on Sport Lake Rd. 1.0 mile to Moser road. Right on Moser Rd. 0.2 mile to public access on left with small parking area and sandy boat launch. **NOTE:** Please respect property. Keep lake and access sites free of litter.

Figure 33.–Sport Lake bathymetric map and other information found in the Kenai Stocked Lakes Series.

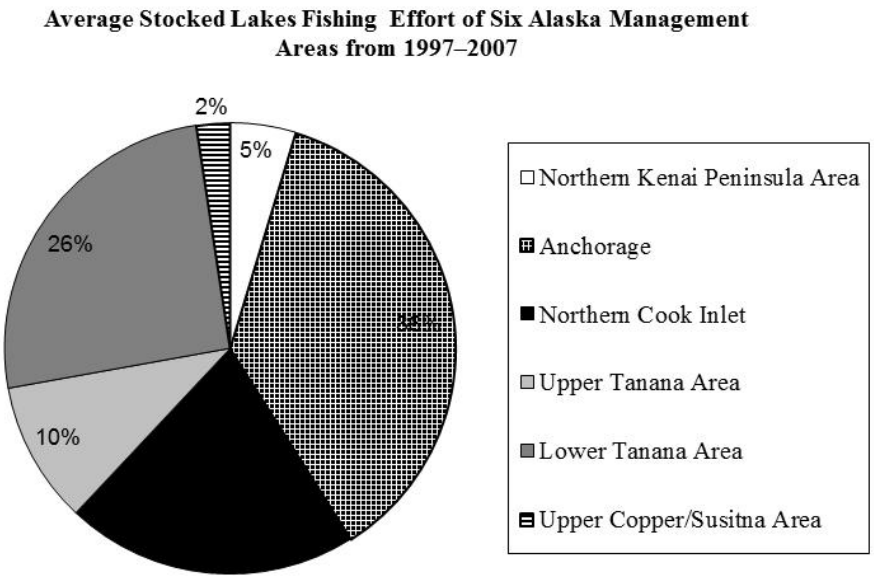


Figure 34.–Stocked lakes fishing effort (angler-days) of 6 Alaska management areas.

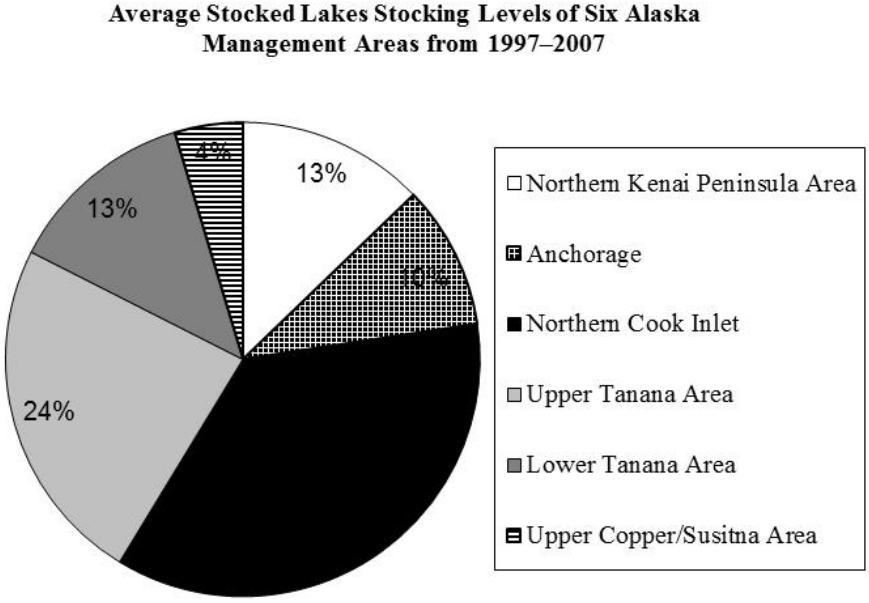


Figure 35.–Stocked lakes stocking levels (number of fish) of 6 Alaska management areas.

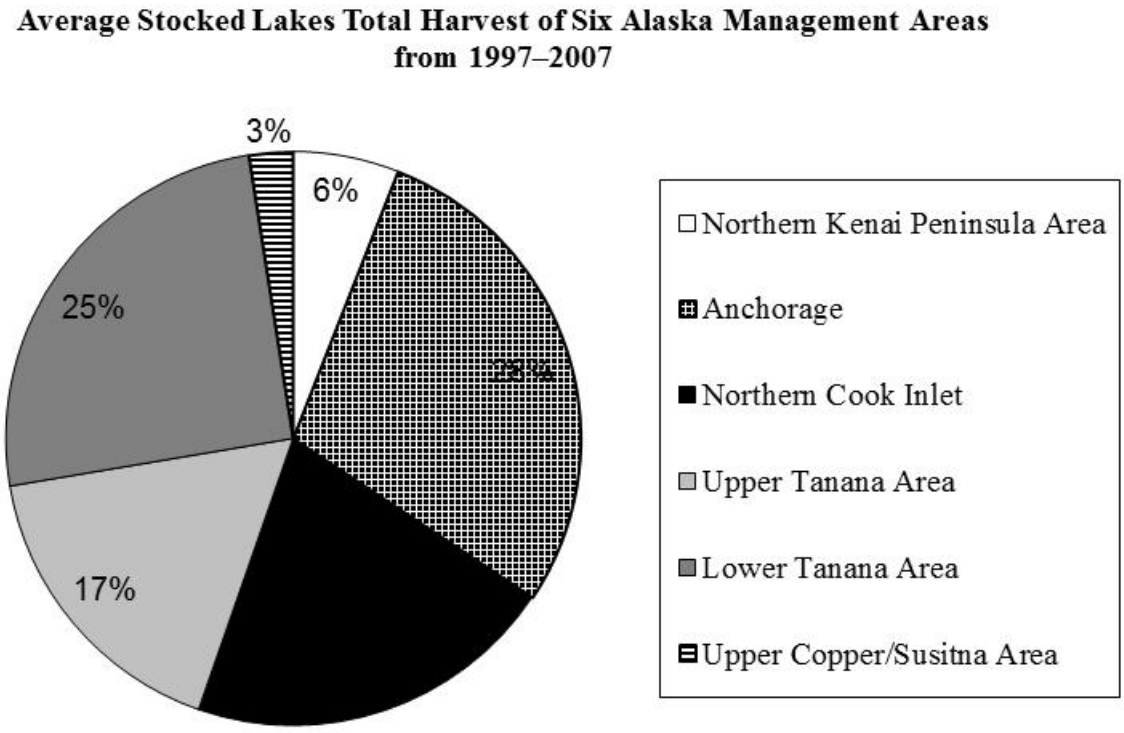


Figure 36.–Stocked lakes total harvest (number of fish) of 6 Alaska management areas.

APPENDIX A: STOCKING HISTORIES OF 28 LAKES ON THE KENAI PENINSULA

Appendix A1.–Stocking history of 28 lakes on the Kenai Peninsula.

Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Arc	1966	Rainbow Trout	7 Jul	6,380	399	0.39	n/d	n/d
	1968	Rainbow Trout	27 Aug	5,000	313	2.16	n/d	n/d
	1969	Rainbow Trout	5 Sep	3,200	200	3.44	n/d	n/d
	1971	Rainbow Trout	11 Jun	4,990	312	2.87	n/d	n/d
	1972	Rainbow Trout	3 Aug	5,000	313	1.01	n/d	n/d
	1973	Rainbow Trout	20 Jun	5,000	313	3.52	n/d	n/d
	1974	Coho Salmon	19 Jul	4,100	256	1.33	n/d	n/d
	1976	Coho Salmon	2 Jun	4,000	250	1.52	n/d	n/d
	1978	Coho Salmon	15 Jun	3,997	250	1.54	n/d	n/d
	1981	Coho Salmon	21 May	3,010	188	1.46	n/d	n/d
	1983	Chinook Salmon	24 May	5,050	316	n/d	n/d	n/d
	1987	Coho Salmon	22 Jun	5,000	313	0.90	n/d	n/d
	1988	Coho Salmon	21 Jun	5,000	313	0.93	n/d	n/d
	1990	Coho Salmon	2 Jul	5,000	313	2.00	n/d	n/d
	1991	Coho Salmon	17 Jul	5,000	313	2.00	n/d	n/d
	1992	Coho Salmon	9 Jul	5,000	313	2.30	n/d	n/d
	1994	Coho Salmon	28 Jun	5,000	313	0.59	n/d	n/d
	1996	Coho Salmon	20 May	5,000	313	6.85	n/d	n/d
	1997	Coho Salmon	29 Sep	5,208	326	3.84	n/d	n/d
	1998	Coho Salmon	15 Sep	3,210	201	6.20	3.30	83.82
	1999	Coho Salmon	9 Jun	3,222	201	3.91	2.80	71.12
	2000	Coho Salmon	5 May	3,200	200	3.15	2.60	66.04
Aurora	1987	Coho Salmon	22 Jun	2,000	250	0.90	n/d	n/d
	1997	Coho Salmon	8 Oct	2,113	264	3.90	n/d	n/d
	1998	Coho Salmon	17 Sep	2,000	250	6.00	3.20	81.28
	1999	Coho Salmon	9 Jun	2,020	253	3.91	2.80	71.12
	2000	Coho Salmon	31 May	2,000	250	n/d	2.70	68.58
	2001	Coho Salmon	30 May	2,000	250	n/d	2.40	60.96
	2002	Coho Salmon	23 May	800	100	n/d	2.60	66.04
	2003	Rainbow Trout	13 Aug	800	100	n/d	1.90	48.26
	2004	Rainbow Trout	12 Aug	830	104	n/d	2.00	50.80
	2005	Rainbow Trout	26 Aug	480	60	n/d	2.10	53.34
	2006	Rainbow Trout	6 Sep	683	85	n/d	2.00	50.80
	2007	Rainbow Trout	28 Aug	800	100	n/d	2.00	50.80
Barbara	1983	Rainbow Trout	30 Aug	9,000	200	1.27	n/d	n/d
	1986	Rainbow Trout	10 Sep	9,000	200	2.34	n/d	n/d
	1988	Rainbow Trout	2 Aug	11,000	244	1.15	n/d	n/d
	1990	Rainbow Trout	11 Jul	11,000	244	1.60	n/d	n/d
	1992	Rainbow Trout	15 Jul	11,000	244	1.45	n/d	n/d
	1993	Steelhead Trout	7 Jun	11,600	258	6.10	n/d	n/d
	1994	Rainbow Trout	7 Jul	10,782	240	1.51	n/d	n/d
	1996	Rainbow Trout	18 Jul	11,000	244	1.10	n/d	n/d
	1998	Rainbow Trout	25 Aug	10,500	233	1.58	2.10	53.34

-continued-

Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Barbara	2000	Rainbow Trout	9 Aug	11,000	244	n/d	2.10	53.34
(cont.)	2001	Rainbow Trout	15 Aug	5,500	122	n/d	1.90	48.26
	2002	Rainbow Trout	16 Aug	1,323	29	n/d	2.00	50.80
	2003	Rainbow Trout	14 Aug	2,250	50	n/d	1.90	48.26
	2004	Rainbow Trout	13 Aug	2,263	50	n/d	2.00	50.80
	2005	Rainbow Trout	30 Aug	1,350	30	n/d	2.20	55.88
	2006	Rainbow Trout	7 Sep	1,910	42	n/d	2.10	53.34
	2007	Rainbow Trout	27 Aug	2,252	50	n/d	2.00	50.80
Cabin	1970	Rainbow Trout	11 Sep	24,000	421	2.75	n/d	n/d
	1971	Rainbow Trout	4 Jun	14,300	251	3.98	n/d	n/d
	1973	Rainbow Trout	20 Jun	13,000	228	3.52	n/d	n/d
	1975	Rainbow Trout	16 Jul	11,400	200	n/d	n/d	n/d
	1977	Rainbow Trout	24 May	7,000	123	3.37	n/d	n/d
	1979	Coho Salmon	24 Jul	15,000	263	3.74	n/d	n/d
	1983	Rainbow Trout	30 Aug	11,500	202	1.27	n/d	n/d
	1986	Rainbow Trout	3 Sep	11,932	209	2.38	n/d	n/d
	1987	Rainbow Trout	7 Aug	11,700	205	2.10	n/d	n/d
	1988	Rainbow Trout	2 Aug	15,000	263	1.15	n/d	n/d
	1989	Rainbow Trout	17 Jul	15,000	263	1.36	n/d	n/d
	1990	Rainbow Trout	11 Jul	15,000	263	1.64	n/d	n/d
	1991	Rainbow Trout	18 Jul	15,000	263	1.50	n/d	n/d
	1992	Rainbow Trout	15 Jul	15,000	263	1.45	n/d	n/d
	1993	Rainbow Trout	13 Jul	14,863	261	1.10	n/d	n/d
	1994	Rainbow Trout	6 Jul	14,916	262	1.28	n/d	n/d
	1995	Rainbow Trout	26 Jul	15,187	266	1.30	n/d	n/d
	1996	Rainbow Trout	23 Jul	15,000	263	1.50	n/d	n/d
	1997	Rainbow Trout	27 Jul	14,974	263	1.20	n/d	n/d
	1998	Rainbow Trout	25 Aug	10,700	188	1.58	2.10	53.34
	1999	Rainbow Trout	3 Aug	11,400	200	2.70	2.50	63.50
	2000	Rainbow Trout	9 Aug	11,400	200	1.87	2.10	53.34
	2001	Rainbow Trout	15 Aug	15,000	263	1.20	1.90	48.26
	2002	Rainbow Trout	16 Aug	2,794	49	n/d	2.00	50.80
	2003	Rainbow Trout	14 Aug	2,850	50	n/d	1.90	48.26
	2004	Rainbow Trout	13 Aug	2,864	50	n/d	2.00	50.80
	2005	Rainbow Trout	30 Aug	1,710	30	n/d	2.20	55.88
	2006	Rainbow Trout	7 Sep	2,423	43	n/d	2.10	53.34
	2007	Rainbow Trout	27 Aug	2,860	50	n/d	2.00	50.80
Carter	1963	Arctic Grayling	4 Aug	105	2	n/d	n/d	n/d
	1976	Rainbow Trout	14 Jul	12,000	250	0.76	n/d	n/d
	1980	Rainbow Trout	30 Jul	9,600	200	1.21	n/d	n/d
	1983	Rainbow Trout	30 Aug	9,500	198	1.27	n/d	n/d
	1986	Rainbow Trout	10 Sep	9,300	194	2.40	n/d	n/d
	1988	Rainbow Trout	28 Jul	9,527	198	1.30	n/d	n/d

-continued-

Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Carter	1990	Rainbow Trout	1 Aug	10,096	210	0.90	n/d	n/d
(cont.)	1992	Rainbow Trout	29 Jul	10,024	209	1.57	n/d	n/d
	1994	Rainbow Trout	22 Jul	10,155	212	1.29	n/d	n/d
	1995	Rainbow Trout	19 Jul	10,015	209	1.30	n/d	n/d
	1996	Rainbow Trout	24 Jul	10,000	208	1.60	n/d	n/d
	1998	Rainbow Trout	11 Aug	10,000	208	1.30	n/d	n/d
	2000	Rainbow Trout	19 Jul	10,000	208	0.74	1.60	40.64
	2001	Rainbow Trout	1 Aug	5,000	104	0.98	1.80	45.72
	2002	Rainbow Trout	14 Aug	5,000	104	n/d	1.90	48.26
	2004	Rainbow Trout	11 Aug	5,023	105	n/d	2.00	50.80
	2006	Rainbow Trout	31 Aug	2,762	58	n/d	1.90	48.26
Cecille	1987	Rainbow Trout	7 Aug	2,000	200	2.10	n/d	n/d
	1989	Rainbow Trout	17 Jul	2,000	200	1.36	n/d	n/d
	1991	Rainbow Trout	18 Jul	2,000	200	1.50	n/d	n/d
	1993	Rainbow Trout	13 Jul	2,000	200	1.20	n/d	n/d
	1995	Rainbow Trout	26 Jul	1,550	155	1.30	n/d	n/d
	1997	Rainbow Trout	27 Jul	2,000	200	1.20	n/d	n/d
	1999	Rainbow Trout	3 Aug	2,000	200	2.30	2.30	58.42
	2001	Rainbow Trout	15 Aug	2,000	200	1.20	1.90	48.26
	2003	Rainbow Trout	14 Aug	1,000	100	n/d	1.90	48.26
	2005	Rainbow Trout	30 Aug	600	60	n/d	2.20	55.88
	2007	Rainbow Trout	27 Aug	1,073	107	n/d	2.00	50.80
Centennial [a]	1969	Coho Salmon	9 Sep	7,900	316	3.15	n/d	n/d
	1971	Coho Salmon	24 Jun	7,800	312	1.16	n/d	n/d
	1972	Coho Salmon	3 Aug	7,200	288	1.41	n/d	n/d
	1975	Coho Salmon	16 Jul	14,400	576	1.13	n/d	n/d
	1977	Coho Salmon	13 Jul	3,127	125	1.09	n/d	n/d
	1979	Coho Salmon	8 Jun	6,090	244	1.27	n/d	n/d
	1981	Coho Salmon	21 May	6,010	240	1.46	n/d	n/d
	1984	Chinook Salmon	3 Jul	7,057	282	2.97	n/d	n/d
	1987	Coho Salmon	22 Jun	5,000	200	0.90	n/d	n/d
	1988	Coho Salmon	21 Jun	5,000	200	0.93	n/d	n/d
	1990	Coho Salmon	2 Jul	5,000	200	2.00	n/d	n/d
	1991	Coho Salmon	17 Jul	5,000	200	2.00	n/d	n/d
	1992	Coho Salmon	9 Jul	5,000	200	2.30	n/d	n/d
	1993	Coho Salmon	22 Jun	5,000	200	1.20	n/d	n/d
	1994	Coho Salmon	28 Jun	5,000	200	0.59	n/d	n/d
	1995	Coho Salmon	16 May	5,000	200	7.79	n/d	n/d
	1996	Chinook Salmon	17 May	5,000	200	5.75	n/d	n/d
	1997	Coho Salmon	29 Sep	5,208	208	3.84	n/d	n/d
	1998	Coho Salmon	17 Sep	5,000	200	6.00	3.20	81.28
	1999	Coho Salmon	9 Jun	5,016	201	3.91	2.80	71.12

-continued-

Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Centennial [a]	2000	Coho Salmon	31 May	5,000	200	3.70	2.70	68.58
(cont.)	2001	Coho Salmon	30 May	5,000	200	2.80	2.40	60.96
	2002	Coho Salmon	23 May	2,500	100	n/d	2.60	66.04
	2003	Rainbow Trout	13 Aug	2,500	100	n/d	1.90	48.26
	2004	Rainbow Trout	12 Aug	2,547	102	n/d	2.00	50.80
	2005	Coho Salmon	13 May	946	38	n/d	n/d	n/d
	2005	Rainbow Trout	26 Aug	1,750	70	n/d	2.10	53.34
	2006	Coho Salmon	13 May	1,197	48	n/d	n/d	n/d
	2006	Coho Salmon	7 Jun	1,000	40	n/d	1.70	43.18
	2006	Rainbow Trout	6 Sep	2,134	85	n/d	2.00	50.80
	2007	Coho Salmon	2 May	1,147	46	n/d	n/d	n/d
	2007	Coho Salmon	17 Mar	422	17	n/d	n/d	n/d
	2007	Coho Salmon	31 May	1,012	40	n/d	2.10	53.34
	2007	Rainbow Trout	28 Aug	2,500	100	n/d	2.00	50.80
Chugach [a]	1984	Rainbow Trout	23 Jul	10,000	556	1.45	n/d	n/d
Estates	1986	Rainbow Trout	3 Sep	10,073	560	2.38	n/d	n/d
	1988	Rainbow Trout	2 Aug	6,000	333	1.15	n/d	n/d
	1990	Rainbow Trout	11 Jul	6,000	333	1.60	n/d	n/d
	1992	Rainbow Trout	15 Jul	6,000	333	1.45	n/d	n/d
	1994	Rainbow Trout	6 Jul	6,083	338	1.28	n/d	n/d
	1996	Rainbow Trout	23 Jul	6,000	333	1.50	n/d	n/d
	1998	Rainbow Trout	12 Aug	3,774	210	1.50	2.00	50.80
	2000	Rainbow Trout	9 Aug	4,000	222	1.87	2.10	53.34
	2001	Rainbow Trout	15 Aug	2,000	111	n/d	1.90	48.26
	2002	Rainbow Trout	16 Aug	588	33	n/d	2.00	50.80
	2003	Rainbow Trout	14 Aug	900	50	n/d	1.90	48.26
	2004	Rainbow Trout	13 Aug	902	50	n/d	2.00	50.80
	2005	Coho Salmon	27 May	490	27	n/d	n/d	n/d
	2005	Rainbow Trout	30 Aug	540	30	n/d	2.20	55.88
	2006	Coho Salmon	25 May	167	9	n/d	n/d	n/d
	2006	Rainbow Trout	7 Sep	770	43	n/d	2.10	53.34
	2007	Coho Salmon	2 May	308	17	n/d	n/d	n/d
	2007	Rainbow Trout	27 Aug	893	50	n/d	2.00	50.80
Douglas	1982	Rainbow Trout	8 Sep	14,925	166	1.40	n/d	n/d
	1985	Rainbow Trout	29 Aug	17,234	191	2.82	n/d	n/d
	1987	Rainbow Trout	7 Aug	18,000	200	2.10	n/d	n/d
	1989	Rainbow Trout	17 Jul	18,000	200	1.36	n/d	n/d
	1991	Rainbow Trout	18 Jul	18,000	200	1.50	n/d	n/d
	1993	Rainbow Trout	13 Jul	19,250	214	1.10	n/d	n/d
	1995	Rainbow Trout	26 Jul	18,263	203	1.30	n/d	n/d
	1997	Rainbow Trout	22 Jul	18,000	200	1.00	n/d	n/d
	1999	Rainbow Trout	3 Aug	18,500	206	2.30	2.30	58.42
	2001	Rainbow Trout	15 Aug	20,000	222	1.20	1.90	48.26

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Douglas	2003	Rainbow Trout	14 Aug	9,000	100	n/d	1.90	48.26
(cont.)	2004	Rainbow Trout	13 Aug	6,608	73	n/d	2.00	50.80
	2005	Rainbow Trout	30 Aug	6,294	70	n/d	2.20	55.88
	2006	Rainbow Trout	7 Sep	5,608	62	n/d	2.10	53.34
	2007	Rainbow Trout	27 Aug	15,022	167	n/d	2.00	50.80
Elephant	1991	Steelhead Trout	25 Jul	45,000	132	14.00	n/d	n/d
	1992	Coho Salmon	9 Jul	50,000	147	2.30	n/d	n/d
	1994	Chinook Salmon	21 Oct	34,000	100	4.00	n/d	n/d
	1994	Coho Salmon	28 Jun	34,000	100	0.59	n/d	n/d
	1995	Rainbow Trout	24 Jul	34,242	101	1.40	n/d	n/d
	1996	Coho Salmon	20 May	10,000	29	6.85	n/d	n/d
	1996	Coho Salmon	3 Jun	20,989	62	10.28	n/d	n/d
	1997	Coho Salmon	21 Oct	33,786	99	3.94	n/d	n/d
	1997	Rainbow Trout	22 Jul	34,000	100	1.00	n/d	n/d
	1998	Coho Salmon	15 Sep	34,082	100	6.20	3.30	83.82
	1999	Coho Salmon	9 Jun	37,678	111	3.91	2.80	71.12
	1999	Rainbow Trout	3 Aug	34,232	101	2.30	2.30	58.42
	2000	Coho Salmon	31 May	33,854	100	3.70	2.70	68.58
	2001	Coho Salmon	30 May	37,200	109	2.80	2.40	60.96
	2002	Coho Salmon	23 May	34,100	100	n/d	2.60	66.04
	2003	Coho Salmon	8 May	28,543	84	n/d	2.40	60.96
	2003	Rainbow Trout	10 Jun	2,176	6	n/d	9.70	246.38
	2003	Rainbow Trout	14 Aug	34,000	100	n/d	1.90	48.26
	2004	Coho Salmon	26 May	28,000	82	n/d	2.30	58.42
	2004	Rainbow Trout	13 Aug	37,022	109	n/d	2.00	50.80
	2005	Coho Salmon	27 May	28,456	84	n/d	2.30	58.42
	2005	Rainbow Trout	26 Aug	27,045	80	n/d	2.10	53.34
	2006	Coho Salmon	7 Jun	35,125	103	n/d	1.70	43.18
	2006	Rainbow Trout	6 Sep	30,687	90	n/d	2.10	53.34
	2007	Coho Salmon	31 May	11,463	34	n/d	2.10	53.34
	2007	Rainbow Trout	28 Aug	45,000	132	n/d	1.80	45.72
Encelewski	1986	Coho Salmon	1 Jul	22,320	221	1.46	n/d	n/d
	1987	Rainbow Trout	7 Aug	20,000	198	2.10	n/d	n/d
	1988	Rainbow Trout	2 Aug	20,000	198	1.18	n/d	n/d
	1990	Rainbow Trout	11 Jul	20,000	198	1.60	n/d	n/d
	1992	Rainbow Trout	15 Jul	24,641	244	1.70	n/d	n/d
	1993	Steelhead Trout	7 Jun	20,000	198	6.10	n/d	n/d
	1994	Chinook Salmon	21 Oct	20,000	198	4.00	n/d	n/d
	1994	Rainbow Trout	6 Jul	19,857	197	1.28	n/d	n/d
	1996	Rainbow Trout	15 Jul	21,714	215	0.87	n/d	n/d
	1998	Rainbow Trout	25 Aug	18,000	178	1.54	2.00	50.80
	2000	Rainbow Trout	9 Aug	26,800	265	1.87	2.10	53.34
	2002	Rainbow Trout	16 Aug	7,352	73	n/d	2.00	50.80

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Encelewski	2003	Rainbow Trout	13 Aug	9,800	97	n/d	1.90	48.26
(cont.)	2004	Rainbow Trout	12 Aug	10,010	99	n/d	2.00	50.80
	2005	Rainbow Trout	26 Aug	6,860	68	n/d	2.10	53.34
	2006	Rainbow Trout	6 Sep	8,500	84	n/d	2.10	53.34
	2007	Rainbow Trout	28 Aug	15,000	149	n/d	2.00	50.80
Island	1968	Sockeye Salmon	10 Jun	17,390	65	n/d	n/d	n/d
	1969	Rainbow Trout	5 Sep	44,600	166	3.44	n/d	n/d
	1969	Rainbow Trout	8 Sep	60,800	227	2.98	n/d	n/d
	1971	Rainbow Trout	7 Jun	33,500	125	3.91	n/d	n/d
	1971	Rainbow Trout	11 Jun	19,800	74	3.81	n/d	n/d
	1976	Coho Salmon	4 Jun	53,500	200	1.64	n/d	n/d
	1977	Sockeye Salmon	9 Jun	187,308	699	0.11	n/d	n/d
	1982	Rainbow Trout	8 Sep	27,900	104	1.40	n/d	n/d
	1983	Rainbow Trout	30 Aug	12,466	47	1.27	n/d	n/d
	1985	Rainbow Trout	29 Aug	40,780	152	2.82	n/d	n/d
	1986	Rainbow Trout	3 Sep	21,064	79	2.38	n/d	n/d
	1993	Steelhead Trout	10 Jun	27,500	103	48.50	n/d	n/d
	1993	Rainbow Trout	13 Jul	48,932	183	1.20	n/d	n/d
	1994	Rainbow Trout	7 Jul	50,000	187	1.43	n/d	n/d
	1995	Rainbow Trout	26 Jul	54,207	202	1.30	n/d	n/d
	1996	Rainbow Trout	18 Jul	54,006	202	1.50	n/d	n/d
	1997	Rainbow Trout	22 Jul	54,218	202	0.86	n/d	n/d
	1998	Rainbow Trout	12 Aug	39,145	146	1.50	2.00	50.80
	1998	Rainbow Trout	25 Aug	9,774	36	1.58	2.10	53.34
	1999	Rainbow Trout	3 Aug	54,000	201	n/d	2.50	63.50
	2000	Rainbow Trout	9 Aug	50,000	187	n/d	2.10	53.34
	2001	Rainbow Trout	15 Aug	64,000	239	n/d	2.00	50.80
	2002	Rainbow Trout	16 Aug	45,591	170	n/d	2.00	50.80
	2003	Arctic Char	22 Jul	3,007	11	n/d	13.40	340.36
	2003	Arctic Char	27 Aug	2,191	8	n/d	15.30	388.62
	2003	Arctic Char	25 Sep	2,480	9	n/d	13.50	342.90
	2003	Rainbow Trout	14 Aug	30,000	112	n/d	1.90	48.26
	2004	Arctic Char	26 May	9,720	36	n/d	8.30	210.82
	2004	Rainbow Trout	13 Aug	30,014	112	n/d	2.00	50.80
	2005	Arctic Char	27 May	5,061	19	n/d	8.50	215.90
	2005	Rainbow Trout	30 Aug	25,000	93	n/d	2.20	55.88
	2006	Arctic Char	13 Jun	5,334	20	n/d	8.80	223.52
	2006	Arctic Char	14 Nov	364	1	n/d	10.70	271.78
	2006	Arctic Char	14 Nov	82	0	n/d	24.70	627.38
	2006	Rainbow Trout	7 Sep	8,334	31	n/d	2.10	53.34
	2007	Arctic Char	12 Jun	4,834	18	n/d	7.80	198.12
	2007	Arctic Char	28 Nov	115	0	n/d	17.10	434.34
	2007	Arctic Char	28 Nov	61	0	n/d	24.30	617.22
	2007	Rainbow Trout	27 Aug	45,010	168	n/d	2.00	50.80

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Jerome	1962	Grayling	26 Jul	283	18	n/d	n/d	n/d
	1968	Rainbow Trout	27 Aug	8,600	538	2.16	n/d	n/d
	1969	Rainbow Trout	5 Sep	3,600	225	3.44	n/d	n/d
	1970	Rainbow Trout	11 Sep	3,200	200	4.28	n/d	n/d
	1971	Rainbow Trout	11 Jun	3,600	225	2.87	n/d	n/d
	1972	Rainbow Trout	3 Aug	3,600	225	1.01	n/d	n/d
	1973	Rainbow Trout	20 Jun	3,600	225	3.52	n/d	n/d
	1974	Rainbow Trout	19 Jul	4,000	250	1.34	n/d	n/d
	1976	Rainbow Trout	14 Jul	4,000	250	1.91	n/d	n/d
	1981	Rainbow Trout	24 Sep	3,000	188	1.76	n/d	n/d
	1983	Rainbow Trout	30 Aug	3,000	188	1.27	n/d	n/d
	1986	Rainbow Trout	10 Sep	6,600	413	2.34	n/d	n/d
	1987	Rainbow Trout	7 Aug	3,000	188	2.10	n/d	n/d
	1988	Rainbow Trout	2 Aug	3,000	188	1.08	n/d	n/d
	1989	Rainbow Trout	26 Jul	3,000	188	1.40	n/d	n/d
	1990	Rainbow Trout	11 Jul	3,000	188	1.60	n/d	n/d
	1991	Rainbow Trout	26 Jul	3,000	188	1.80	n/d	n/d
	1992	Rainbow Trout	15 Jul	3,000	188	1.70	n/d	n/d
	1993	Rainbow Trout	12 Aug	2,500	156	1.90	n/d	n/d
	1994	Rainbow Trout	6 Jul	3,032	190	1.28	n/d	n/d
	1995	Rainbow Trout	19 Jul	2,928	183	1.30	n/d	n/d
	1997	Rainbow Trout	29 Aug	5,165	323	3.10	n/d	n/d
	1998	Rainbow Trout	11 Aug	3,000	188	1.30	n/d	n/d
	1999	Rainbow Trout	26 Jul	3,000	188	1.10	n/d	n/d
	2000	Rainbow Trout	19 Jul	3,108	194	0.74	1.60	40.64
	2001	Rainbow Trout	15 Aug	3,000	188	1.52	2.00	50.80
	2002	Rainbow Trout	15 Aug	2,250	141	n/d	1.90	48.26
	2003	Rainbow Trout	13 Aug	2,100	131	n/d	1.70	43.18
	2004	Rainbow Trout	11 Aug	1,652	103	n/d	2.00	50.80
	2005	Rainbow Trout	23 Aug	1,470	92	n/d	1.90	48.26
	2006	Rainbow Trout	31 Aug	884	55	n/d	1.90	48.26
	2007	Rainbow Trout	14 Aug	2,306	144	n/d	1.70	43.18
Johnson	1962	Rainbow Trout	7 Aug	14,000	165	n/d	n/d	n/d
	1963	Rainbow Trout	30 Jul	6,660	78	n/d	n/d	n/d
	1964	Rainbow Trout	29 Aug	17,000	200	n/d	n/d	n/d
	1967	Coho Salmon	3 Oct	38,250	450	4.32	n/d	n/d
	1968	Coho Salmon	28 Aug	26,000	306	4.88	n/d	n/d
	1973	Rainbow Trout	20 Jun	21,800	256	3.52	n/d	n/d
	1975	Rainbow Trout	16 Jul	17,000	200	2.73	n/d	n/d
	1977	Rainbow Trout	24 May	10,200	120	3.37	n/d	n/d
	1979	Coho Salmon	24 Jul	20,000	235	3.74	n/d	n/d
	1982	Coho Salmon	3 Jun	20,000	235	1.60	n/d	n/d
	1984	Rainbow Trout	5 Jul	19,304	227	43.00	n/d	n/d
	1985	Rainbow Trout	6 Sep	14,411	170	3.40	n/d	n/d

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Johnson	1986	Rainbow Trout	3 Sep	17,000	200	2.38	n/d	n/d
(cont.)	1987	Steelhead Trout	3 Jun	11,950	141	n/d	n/d	n/d
	1987	Steelhead Trout	8 Jun	13,621	160	3.10	n/d	n/d
	1988	Rainbow Trout	2 Aug	17,000	200	1.18	n/d	n/d
	1989	Rainbow Trout	12 Jul	17,027	200	1.48	n/d	n/d
	1989	Rainbow Trout	11 Aug	9,740	115	90.00	n/d	n/d
	1990	Rainbow Trout	13 Jun	9,874	116	101.00	n/d	n/d
	1990	Rainbow Trout	11 Jul	17,000	200	1.60	n/d	n/d
	1991	Rainbow Trout	18 Jul	17,000	200	1.40	n/d	n/d
	1992	Rainbow Trout	8 Jun	2,503	29	88.70	n/d	n/d
	1992	Rainbow Trout	19 Jun	2,074	24	100.00	n/d	n/d
	1992	Rainbow Trout	15 Jul	18,000	212	1.65	n/d	n/d
	1993	Steelhead Trout	10 Jun	8,500	100	48.50	n/d	n/d
	1993	Rainbow Trout	24 Jun	6,894	81	100.00	n/d	n/d
	1993	Rainbow Trout	13 Jul	8,500	100	1.10	n/d	n/d
	1994	Rainbow Trout	9 Jun	8,294	98	102.00	n/d	n/d
	1994	Rainbow Trout	6 Jul	8,603	101	1.28	n/d	n/d
	1995	Rainbow Trout	9 Jun	10,230	120	101.00	n/d	n/d
	1995	Rainbow Trout	20 Jul	6,874	81	1.40	n/d	n/d
	1995	Rainbow Trout	24 Jul	2,301	27	1.40	n/d	n/d
	1996	Rainbow Trout	25 Jun	8,564	101	95.00	n/d	n/d
	1996	Rainbow Trout	15 Jul	9,655	114	0.87	n/d	n/d
	1997	Rainbow Trout	1 Jul	8,454	99	65.60	n/d	n/d
	1997	Rainbow Trout	22 Jul	8,595	101	1.20	n/d	n/d
	1998	Rainbow Trout	4 Jun	3,855	45	61.00	7.00	177.80
	1998	Rainbow Trout	29 Jun	2,706	32	52.50	6.60	167.64
	1998	Rainbow Trout	25 Aug	8,100	95	1.54	2.00	50.80
	1999	Rainbow Trout	18 May	4,586	54	113.90	8.60	218.44
	1999	Rainbow Trout	7 Jul	5,015	59	32.00	5.60	142.24
	1999	Rainbow Trout	7 Jul	3,991	47	100.10	8.20	208.28
	1999	Rainbow Trout	3 Aug	8,500	100	2.20	2.30	58.42
	2000	Rainbow Trout	16 May	5,070	60	n/d	8.20	208.28
	2000	Rainbow Trout	16 May	3,204	38	n/d	9.40	238.76
	2001	Rainbow Trout	8 May	8,520	100	n/d	9.00	228.60
	2002	Rainbow Trout	7 May	9,125	107	n/d	8.30	210.82
	2003	Rainbow Trout	6 May	5,748	68	n/d	8.30	210.82
	2003	Rainbow Trout	10 Jun	3,074	36	n/d	9.70	246.38
	2004	Rainbow Trout	4 May	4,937	58	n/d	8.30	210.82
	2004	Rainbow Trout	22 Jun	6,334	75	n/d	9.10	231.14
	2005	Rainbow Trout	3 May	5,472	64	n/d	8.50	215.90
	2005	Rainbow Trout	8 Jul	3,492	41	n/d	8.90	226.06
	2006	Rainbow Trout	2 May	2,973	35	n/d	9.80	248.92
	2007	Rainbow Trout	1 May	7,031	83	n/d	5.90	149.86
	2007	Rainbow Trout	6 Sep	1,986	23	n/d	8.40	213.36

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Long	1987	Rainbow Trout	20 Aug	4,000	267	n/d	n/d	n/d
	1989	Rainbow Trout	29 Jul	4,000	267	n/d	n/d	n/d
	1993	Rainbow Trout	12 Aug	4,000	267	1.64	n/d	n/d
	1999	Rainbow Trout	26 Jul	4,000	267	1.10	1.80	45.72
	2001	Rainbow Trout	1 Aug	4,000	267	n/d	1.80	45.72
	2003	Rainbow Trout	7 Aug	1,530	102	n/d	1.70	43.18
	2005	Rainbow Trout	23 Aug	900	60	n/d	1.90	48.26
	2007	Rainbow Trout	14 Aug	1,503	100	n/d	1.70	43.18
Longmare [a]	1952	Rainbow Trout	n/d	n/d	0	n/d	n/d	n/d
	1957	Rainbow Trout	n/d	20,000	116	n/d	n/d	n/d
	1973	Rainbow Trout	20 Jun	81,000	471	3.52	n/d	n/d
	1973	Rainbow Trout	24 Aug	46,970	273	7.32	n/d	n/d
	1974	Rainbow Trout	19 Jul	34,400	200	1.33	n/d	n/d
	1976	Rainbow Trout	9 Aug	35,300	205	2.31	n/d	n/d
	1978	Coho Salmon	16 Aug	19,698	115	3.31	n/d	n/d
	1978	Coho Salmon	17 Aug	15,190	88	5.03	n/d	n/d
	1982	Rainbow Trout	8 Sep	25,000	145	1.40	n/d	n/d
	1985	Rainbow Trout	1 Sep	38,412	223	1.37	n/d	n/d
	1986	Rainbow Trout	3 Sep	17,000	99	2.38	n/d	n/d
	1987	Rainbow Trout	7 Aug	34,000	198	2.10	n/d	n/d
	1988	Rainbow Trout	2 Aug	34,071	198	1.15	n/d	n/d
	1989	Rainbow Trout	12 Jul	34,000	198	1.80	n/d	n/d
	1990	Rainbow Trout	11 Jul	34,000	198	1.60	n/d	n/d
	1991	Rainbow Trout	18 Jul	34,000	198	1.50	n/d	n/d
	1992	Rainbow Trout	15 Jul	34,947	203	1.70	n/d	n/d
	1993	Rainbow Trout	13 Jul	33,681	196	1.10	n/d	n/d
	1994	Chinook Salmon	21 Oct	11,000	64	4.00	n/d	n/d
	1994	Rainbow Trout	6 Jul	33,952	197	1.28	n/d	n/d
	1994	Rainbow Trout	7 Jul	10,099	59	1.51	n/d	n/d
	1995	Rainbow Trout	20 Jul	34,009	198	1.40	n/d	n/d
	1996	Rainbow Trout	15 Jul	37,117	216	0.87	n/d	n/d
	1997	Coho Salmon	29 Sep	17,834	104	3.84	n/d	n/d
	1997	Rainbow Trout	22 Jul	17,000	99	1.20	n/d	n/d
	1998	Coho Salmon	29 Jun	17,125	100	2.50	2.40	60.96
	1998	Rainbow Trout	25 Aug	15,300	89	1.54	2.00	50.80
	1999	Coho Salmon	19 May	17,000	99	5.20	3.10	78.74
	1999	Rainbow Trout	3 Aug	17,210	100	2.30	2.30	58.42
	2000	Coho Salmon	5 May	2,028	12	3.15	2.60	66.04
	2000	Coho Salmon	31 May	16,854	98	3.70	2.70	68.58
	2000	Rainbow Trout	9 Aug	17,127	100	1.67	2.10	53.34
	2001	Coho Salmon	27 Apr	17,000	99	3.30	2.60	66.04
	2001	Rainbow Trout	15 Aug	25,000	145	1.20	1.90	48.26
	2002	Coho Salmon	23 May	9,000	52	n/d	2.60	66.04

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Longmare [a]	2002	Rainbow Trout	16 Aug	19,705	115	n/d	2.00	50.80
(cont.)	2003	Coho Salmon	8 May	9,015	52	n/d	2.40	60.96
	2003	Rainbow Trout	13 Aug	20,000	116	n/d	1.90	48.26
	2004	Coho Salmon	26 May	8,650	50	n/d	2.30	58.42
	2004	Rainbow Trout	12 Aug	18,012	105	n/d	2.00	50.80
	2005	Coho Salmon	23 May	325	2	n/d	n/d	n/d
	2005	Coho Salmon	27 May	9,000	52	n/d	2.30	58.42
	2005	Rainbow Trout	30 Aug	14,688	85	n/d	2.00	50.80
	2006	Coho Salmon	4 Mar	270	2	n/d	n/d	n/d
	2006	Coho Salmon	17 May	300	2	n/d	n/d	n/d
	2006	Coho Salmon	7 Jun	10,007	58	n/d	1.70	43.18
	2006	Rainbow Trout	6 Sep	15,300	89	n/d	2.10	53.34
	2007	Coho Salmon	16 May	765	4	n/d	n/d	n/d
	2007	Coho Salmon	31 May	9,939	58	n/d	2.10	53.34
	2007	Rainbow Trout	28 Aug	30,600	178	n/d	1.80	45.72
Loon	1996	Coho Salmon	20 May	4,000	222	6.90	n/d	n/d
	1997	Coho Salmon	8 Oct	4,153	231	3.90	n/d	n/d
	1998	Coho Salmon	17 Sep	4,000	222	6.00	3.20	81.28
	1999	Coho Salmon	9 Jun	4,015	223	3.91	2.80	71.12
	2000	Coho Salmon	5 May	4,000	222	3.15	2.60	66.04
	2001	Coho Salmon	30 May	4,000	222	2.60	2.40	60.96
	2002	Coho Salmon	23 May	1,800	100	n/d	2.60	66.04
	2003	Rainbow Trout	13 Aug	1,800	100	n/d	1.90	48.26
	2004	Rainbow Trout	12 Aug	1,808	100	n/d	2.00	50.80
	2005	Rainbow Trout	26 Aug	1,080	60	n/d	2.10	53.34
	2006	Rainbow Trout	7 Sep	1,532	85	n/d	2.10	53.34
	2007	Rainbow Trout	27 Aug	1,950	108	n/d	2.00	50.80
Meridian	1985	Rainbow Trout	29 Aug	4,000	267	2.40	n/d	n/d
	1987	Rainbow Trout	20 Aug	4,000	267	3.10	n/d	n/d
	1989	Rainbow Trout	26 Jul	4,000	267	1.40	n/d	n/d
	1991	Rainbow Trout	26 Jul	4,000	267	1.80	n/d	n/d
	1993	Rainbow Trout	12 Aug	3,500	233	1.64	n/d	n/d
	1995	Rainbow Trout	19 Jul	5,000	333	1.30	n/d	n/d
	1997	Rainbow Trout	23 Jul	4,000	267	0.92	n/d	n/d
	1999	Rainbow Trout	26 Jul	5,689	379	1.10	n/d	n/d
	2001	Rainbow Trout	1 Aug	9,000	600	1.00	1.80	45.72
	2003	Rainbow Trout	7 Aug	1,530	102	n/d	1.70	43.18
	2005	Rainbow Trout	23 Aug	1,050	70	n/d	1.90	48.26
	2007	Rainbow Trout	14 Aug	1,501	100	n/d	1.70	43.18
								0.00
Quintin	1986	Coho Salmon	1 Jul	4,671	311	1.46	n/d	n/d
	1987	Rainbow Trout	7 Aug	3,000	200	2.10	n/d	n/d

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Quintin	1989	Rainbow Trout	12 Jul	3,000	200	1.48	n/d	n/d
(cont.)	1991	Rainbow Trout	18 Jul	3,000	200	1.40	n/d	n/d
	1993	Rainbow Trout	13 Jul	3,000	200	1.10	n/d	n/d
	1995	Rainbow Trout	24 Jul	2,857	190	1.40	n/d	n/d
	1997	Rainbow Trout	27 Jul	3,041	203	1.20	n/d	n/d
	2001	Rainbow Trout	15 Aug	3,000	200	1.20	1.90	48.26
	2003	Rainbow Trout	13 Aug	1,500	100	n/d	1.90	48.26
	2005	Rainbow Trout	26 Aug	900	60	n/d	2.10	53.34
	2007	Rainbow Trout	28 Aug	900	60	n/d	2.00	50.80
Rainbow	1971	Rainbow Trout	28 Jun	9,000	600	0.15	n/d	n/d
	1974	Rainbow Trout	3 Jul	7,600	507	0.63	n/d	n/d
	1977	Rainbow Trout	13 Jul	3,000	200	0.57	n/d	n/d
	1981	Rainbow Trout	24 Sep	2,995	200	1.76	n/d	n/d
	1984	Rainbow Trout	23 Jul	5,000	333	1.45	n/d	n/d
	1986	Rainbow Trout	3 Sep	3,000	200	2.38	n/d	n/d
	1988	Rainbow Trout	2 Aug	5,000	333	1.08	n/d	n/d
	1990	Rainbow Trout	11 Jul	5,000	333	1.60	n/d	n/d
	1991	Rainbow Trout	18 Jul	5,000	333	1.50	n/d	n/d
	1992	Rainbow Trout	15 Jul	5,000	333	1.70	n/d	n/d
	1993	Rainbow Trout	20 Jul	9,750	650	1.60	n/d	n/d
	1994	Rainbow Trout	6 Jul	5,039	336	1.28	n/d	n/d
	1998	Rainbow Trout	11 Aug	4,758	317	1.50	2.00	50.80
	2000	Rainbow Trout	19 Jul	5,675	378	n/d	1.60	40.64
	2002	Rainbow Trout	16 Aug	2,941	196	n/d	2.00	50.80
	2004	Rainbow Trout	12 Aug	3,012	201	n/d	2.00	50.80
	2006	Rainbow Trout	6 Sep	1,955	130	n/d	2.00	50.80
Roque	1973	Rainbow Trout	20 Jun	2,200	440	3.52	n/d	n/d
	1974	Coho Salmon	19 Jul	1,500	300	1.36	n/d	n/d
	1976	Coho Salmon	2 Jun	1,300	260	1.52	n/d	n/d
	1978	Coho Salmon	15 Jun	1,000	200	1.54	n/d	n/d
	1981	Coho Salmon	21 May	1,500	300	1.46	n/d	n/d
	1984	Chinook Salmon	28 May	2,000	400	2.00	n/d	n/d
	1990	Coho Salmon	2 Jul	2,000	400	2.00	n/d	n/d
	1991	Coho Salmon	17 Jul	2,000	400	2.00	n/d	n/d
	1992	Coho Salmon	9 Jul	2,000	400	2.30	n/d	n/d
	1993	Coho Salmon	22 Jun	2,000	400	1.20	n/d	n/d
	1994	Coho Salmon	28 Jun	2,000	400	0.59	n/d	n/d
	1995	Coho Salmon	16 May	2,000	400	7.79	n/d	n/d
	1996	Chinook Salmon	17 May	2,000	400	5.75	n/d	n/d
	1997	Coho Salmon	29 Sep	2,083	417	3.84	n/d	n/d
	1998	Coho Salmon	17 Sep	2,000	400	6.00	3.20	81.28
	1999	Coho Salmon	9 Jun	2,300	460	3.91	2.80	71.12
	2000	Coho Salmon	5 May	2,000	400	3.10	2.60	66.04

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Roque	2001	Coho Salmon	30 May	2,000	400	2.60	2.40	60.96
(cont.)	2002	Coho Salmon	23 May	500	100	n/d	2.60	66.04
	2003	Rainbow Trout	13 Aug	500	100	n/d	1.90	48.26
	2004	Rainbow Trout	12 Aug	508	102	n/d	2.00	50.80
	2005	Rainbow Trout	26 Aug	350	70	n/d	2.10	53.34
	2006	Rainbow Trout	6 Sep	423	85	n/d	2.00	50.80
	2007	Rainbow Trout	28 Aug	500	100	n/d	2.00	50.80
Scout	1957	Rainbow Trout	n/d	5,000	53	n/d	n/d	n/d
	1959	Rainbow Trout	n/d	15,800	166	n/d	n/d	n/d
	1959	Steelhead Trout	n/d	2,700	28	n/d	n/d	n/d
	1961	Coho Salmon	29 Aug	4,158	44	n/d	n/d	n/d
	1962	Rainbow Trout	20 Sep	7,670	81	n/d	n/d	n/d
	1963	Rainbow Trout	30 Jul	5,180	55	n/d	n/d	n/d
	1966	Rainbow Trout	9 Aug	27,000	284	1.40	n/d	n/d
	1968	Rainbow Trout	27 Aug	22,000	232	2.16	n/d	n/d
	1969	Coho Salmon	9 Sep	28,500	300	3.15	n/d	n/d
	1972	Coho Salmon	3 Aug	23,800	251	1.02	n/d	n/d
	1976	Coho Salmon	2 Jun	33,300	351	1.52	n/d	n/d
	1978	Coho Salmon	15 Jun	18,994	200	1.54	n/d	n/d
	1981	Chinook Salmon	27 May	12,000	126	13.83	n/d	n/d
	1984	Chinook Salmon	22 May	27,945	294	1.84	n/d	n/d
	1987	Coho Salmon	23 Jun	19,000	200	0.90	n/d	n/d
	1988	Coho Salmon	21 Jun	21,000	221	0.93	n/d	n/d
	1990	Coho Salmon	29 Jun	19,000	200	2.00	n/d	n/d
	1991	Coho Salmon	17 Jul	19,000	200	2.00	n/d	n/d
	1992	Coho Salmon	9 Jul	19,000	200	2.30	n/d	n/d
	1993	Coho Salmon	22 Jun	19,000	200	1.20	n/d	n/d
	1994	Coho Salmon	28 Jun	19,000	200	0.59	n/d	n/d
	1995	Coho Salmon	16 May	10,075	106	3.30	n/d	n/d
	1995	Coho Salmon	17 May	9,421	99	3.30	n/d	n/d
	1996	Coho Salmon	17 May	19,000	200	5.75	n/d	n/d
	1997	Coho Salmon	27 Jul	19,073	201	2.10	n/d	n/d
	1998	Coho Salmon	17 Sep	19,015	200	6.00	3.20	81.28
	1999	Coho Salmon	19 May	19,000	200	5.20	3.10	78.74
	2000	Coho Salmon	31 May	18,897	199	3.70	2.70	68.58
	2001	Coho Salmon	30 May	19,000	200	2.60	2.40	60.96
	2002	Coho Salmon	23 May	9,500	100	n/d	2.60	66.04
	2003	Coho Salmon	8 May	9,724	102	n/d	2.40	60.96
	2003	Rainbow Trout	13 Aug	9,500	100	n/d	1.90	48.26
	2004	Coho Salmon	26 May	9,200	97	n/d	2.30	58.42
	2004	Rainbow Trout	12 Aug	9,506	100	n/d	2.00	50.80
	2005	Coho Salmon	27 May	9,500	100	n/d	2.30	58.42
	2005	Rainbow Trout	26 Aug	6,650	70	n/d	2.10	53.34

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Sport	1957	Rainbow Trout	n/d	2,000	28	n/d	n/d	n/d
	1958	Rainbow Trout	n/d	5,000	69	n/d	n/d	n/d
	1966	Rainbow Trout	7 Jul	29,000	403	0.39	n/d	n/d
	1968	Rainbow Trout	27 Aug	29,000	403	2.16	n/d	n/d
	1971	Rainbow Trout	4 Jun	22,800	317	3.98	n/d	n/d
	1971	Rainbow Trout	11 Jun	6,800	94	2.87	n/d	n/d
	1978	Rainbow Trout	15 Sep	8,549	119	3.13	n/d	n/d
	1981	Rainbow Trout	24 Sep	7,000	97	1.76	n/d	n/d
	1984	Rainbow Trout	23 Jul	15,000	208	1.45	n/d	n/d
	1985	Rainbow Trout	6 Sep	11,944	166	3.40	n/d	n/d
	1987	Rainbow Trout	7 Aug	15,000	208	2.10	n/d	n/d
	1988	Rainbow Trout	2 Aug	15,000	208	1.18	n/d	n/d
	1989	Rainbow Trout	12 Jul	15,000	208	1.48	n/d	n/d
	1990	Rainbow Trout	11 Jul	15,000	208	1.60	n/d	n/d
	1991	Rainbow Trout	21 Apr	2	0	900.00	n/d	n/d
	1991	Rainbow Trout	21 Apr	350	5	250.00	n/d	n/d
	1991	Rainbow Trout	18 Jul	15,000	208	1.40	n/d	n/d
	1992	Rainbow Trout	26 Apr	170	2	250.00	n/d	n/d
	1992	Rainbow Trout	26 Apr	180	3	123.00	n/d	n/d
	1992	Rainbow Trout	15 Jul	15,000	208	1.70	n/d	n/d
	1993	Rainbow Trout	13 Jul	15,000	208	1.10	n/d	n/d
	1994	Chinook Salmon	21 Oct	7,500	104	4.00	n/d	n/d
	1994	Rainbow Trout	23 Apr	200	3	350.00	n/d	n/d
	1994	Rainbow Trout	6 Jul	15,015	209	1.28	n/d	n/d
	1995	Rainbow Trout	24 Jul	15,000	208	1.40	n/d	n/d
	1996	Rainbow Trout	23 Jul	15,100	210	1.50	n/d	n/d
	1997	Rainbow Trout	22 Jul	15,000	208	1.20	n/d	n/d
	1998	Rainbow Trout	24 Apr	125	2	200.00	10.30	261.62
	1998	Rainbow Trout	25 Aug	13,244	184	1.54	2.00	50.80
	1999	Chinook Salmon	23 Apr	75	1	100.00	n/d	n/d
	1999	Rainbow Trout	23 Apr	150	2	150.00	n/d	n/d
	1999	Rainbow Trout	3 Aug	14,881	207	2.20	2.30	58.42
	2001	Rainbow Trout	15 Aug	15,000	208	1.20	1.90	48.26
	2002	Rainbow Trout	26 Apr	230	3	n/d	9.60	243.84
	2002	Rainbow Trout	16 Aug	8,602	119	n/d	2.00	50.80
	2003	Chinook Salmon	25 Sep	2,380	33	n/d	7.70	195.58
	2003	Rainbow Trout	2 May	350	5	n/d	10.30	261.62
	2003	Rainbow Trout	13 Aug	10,000	139	n/d	1.90	48.26
	2004	Chinook Salmon	4 Oct	2,056	29	n/d	8.40	213.36
	2004	Rainbow Trout	30 Apr	200	3	n/d	9.80	248.92
	2004	Rainbow Trout	12 Aug	10,008	139	n/d	2.00	50.80
	2005	Chinook Salmon	29 Sep	5,280	73	n/d	8.60	218.44
	2005	Rainbow Trout	17 Apr	300	4	n/d	8.50	215.90
	2005	Rainbow Trout	26 Aug	7,000	97	n/d	2.10	53.34

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Sport	2006	Chinook Salmon	7 Jun	10,198	142	n/d	4.00	101.60
(cont.)	2006	Rainbow Trout	28 Apr	250	3	n/d	11.20	284.48
	2006	Rainbow Trout	7 Sep	10,577	147	n/d	2.10	53.34
	2007	Chinook Salmon	6 Sep	3,939	55	n/d	7.00	177.80
	2007	Rainbow Trout	29 Apr	300	4	n/d	6.80	172.72
	2007	Rainbow Trout	27 Aug	20,153	280	n/d	2.00	50.80
Thetis	1984	Rainbow Trout	23 Jul	15,000	333	1.45	n/d	n/d
	1986	Rainbow Trout	10 Sep	11,400	253	2.34	n/d	n/d
	1988	Rainbow Trout	2 Aug	15,000	333	1.15	n/d	n/d
	1990	Rainbow Trout	11 Jul	15,000	333	1.60	n/d	n/d
	1992	Rainbow Trout	15 Jul	15,000	333	1.45	n/d	n/d
	1993	Steelhead Trout	7 Jun	15,000	333	6.10	n/d	n/d
	1994	Rainbow Trout	7 Jul	15,231	338	1.51	n/d	n/d
	1996	Rainbow Trout	18 Jul	15,000	333	1.10	n/d	n/d
	1998	Rainbow Trout	25 Aug	8,600	191	1.58	2.10	53.34
	2000	Rainbow Trout	9 Aug	9,000	200	1.79	2.10	53.34
	2002	Rainbow Trout	16 Aug	7,352	163	n/d	2.00	50.80
	2003	Rainbow Trout	14 Aug	4,600	102	n/d	1.90	48.26
	2004	Rainbow Trout	13 Aug	4,566	101	n/d	2.00	50.80
	2005	Rainbow Trout	30 Aug	2,760	61	n/d	2.20	55.88
	2006	Rainbow Trout	7 Sep	3,821	85	n/d	2.10	53.34
	2007	Rainbow Trout	27 Aug	4,979	111	n/d	2.00	50.80
Tirmore	1973	Rainbow Trout	26 Jul	15,600	300	3.84	n/d	n/d
	1975	Rainbow Trout	16 Jul	10,400	200	2.73	n/d	n/d
	1977	Rainbow Trout	24 May	6,500	125	3.37	n/d	n/d
	1983	Rainbow Trout	30 Aug	10,500	202	1.27	n/d	n/d
	1986	Rainbow Trout	10 Sep	10,000	192	2.34	n/d	n/d
	1988	Rainbow Trout	2 Aug	12,000	231	1.15	n/d	n/d
	1990	Rainbow Trout	11 Jul	12,000	231	1.60	n/d	n/d
	1992	Rainbow Trout	15 Jul	12,000	231	1.45	n/d	n/d
	1994	Rainbow Trout	7 Jul	11,887	229	1.51	n/d	n/d
	1996	Rainbow Trout	18 Jul	12,000	231	1.10	n/d	n/d
	1998	Rainbow Trout	25 Aug	11,400	219	1.58	2.10	53.34
	2000	Rainbow Trout	9 Aug	9,200	177	1.79	2.10	53.34
	2002	Rainbow Trout	16 Aug	5,222	100	n/d	2.00	50.80
	2004	Rainbow Trout	13 Aug	5,000	96	n/d	2.00	50.80
	2006	Rainbow Trout	7 Sep	4,250	82	n/d	2.10	53.34
Troop	1977	Coho Salmon	13 Jul	11,500	426	1.09	n/d	n/d
	1993	Rainbow Trout	12 Aug	5,013	186	1.64	n/d	n/d
	1995	Rainbow Trout	19 Jul	5,000	185	1.30	n/d	n/d
	1997	Rainbow Trout	23 Jul	5,000	185	0.92	n/d	n/d

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Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Troop	1999	Rainbow Trout	26 Jul	5,000	185	1.10	n/d	n/d
(cont.)	2001	Rainbow Trout	1 Aug	5,000	185	1.00	1.80	45.72
	2003	Rainbow Trout	7 Aug	2,721	101	n/d	1.70	43.18
	2005	Rainbow Trout	23 Aug	1,620	60	n/d	1.90	48.26
	2007	Rainbow Trout	14 Aug	2,706	100	n/d	1.70	43.18
Upper	1962	Rainbow Trout	26 Sep	35,640	138	n/d	n/d	n/d
Summit	1969	Lake Trout	1 Nov	204	1	n/d	12.33	313.18
	1984	Chinook Salmon	26 Jun	50,988	198	2.70	n/d	n/d
	1985	Chinook Salmon	19 Jun	114,793	445	2.79	n/d	n/d
	1986	Chinook Salmon	17 Jun	84,143	326	3.30	n/d	n/d
	1986	Coho Salmon	17 Jun	89,968	349	1.09	n/d	n/d
	1987	Chinook Salmon	24 May	118,400	459	2.45	n/d	n/d
	1987	Coho Salmon	1 Jul	110,000	426	0.89	n/d	n/d
	1987	Rainbow Trout	20 Aug	63,950	248	3.10	n/d	n/d
	1988	Rainbow Trout	27 Jun	250,000	969	0.17	n/d	n/d
	1989	Rainbow Trout	12 Jul	63,888	248	1.80	n/d	n/d
	1991	Rainbow Trout	17 Jul	64,043	248	1.40	n/d	n/d
	1993	Rainbow Trout	12 Aug	29,078	113	1.90	n/d	n/d
	1995	Rainbow Trout	16 Jul	64,677	251	0.90	n/d	n/d
	1997	Rainbow Trout	22 Jul	50,546	196	0.92	n/d	n/d
	1999	Rainbow Trout	27 Jul	64,274	249	1.50	n/d	n/d
	2001	Rainbow Trout	15 Aug	37,000	143	1.50	2.00	50.80
	2002	Rainbow Trout	15 Aug	29,375	114	n/d	1.90	48.26
	2003	Rainbow Trout	13 Aug	15,000	58	n/d	1.70	43.18
	2004	Rainbow Trout	11 Aug	38,102	148	n/d	2.00	50.80
	2005	Rainbow Trout	23 Aug	22,409	87	n/d	1.90	48.26
	2006	Rainbow Trout	31 Aug	17,127	66	n/d	1.90	48.26
	2007	Rainbow Trout	14 Aug	30,454	118	n/d	1.70	43.18
Vagt	1963	Grayling	6 Aug	49	1	n/d	9.00	228.60
	1965	Grayling	4 Aug	170	4	n/d	9.00	228.60
	1974	Rainbow Trout	3 Jul	26,200	609	0.62	n/d	n/d
	1977	Rainbow Trout	13 Jul	8,600	200	0.57	n/d	n/d
	1980	Rainbow Trout	30 Jul	8,600	200	1.21	n/d	n/d
	1983	Rainbow Trout	30 Aug	9,150	213	1.27	n/d	n/d
	1986	Rainbow Trout	10 Sep	8,800	205	2.40	n/d	n/d
	1988	Rainbow Trout	2 Aug	9,000	209	1.08	n/d	n/d
	1989	Rainbow Trout	26 Jul	9,000	209	1.40	n/d	n/d
	1990	Rainbow Trout	1 Aug	9,000	209	0.90	n/d	n/d
	1991	Rainbow Trout	26 Jul	9,000	209	1.80	n/d	n/d
	1992	Rainbow Trout	29 Jul	9,019	210	1.57	n/d	n/d
	1993	Rainbow Trout	12 Aug	9,000	209	1.64	n/d	n/d

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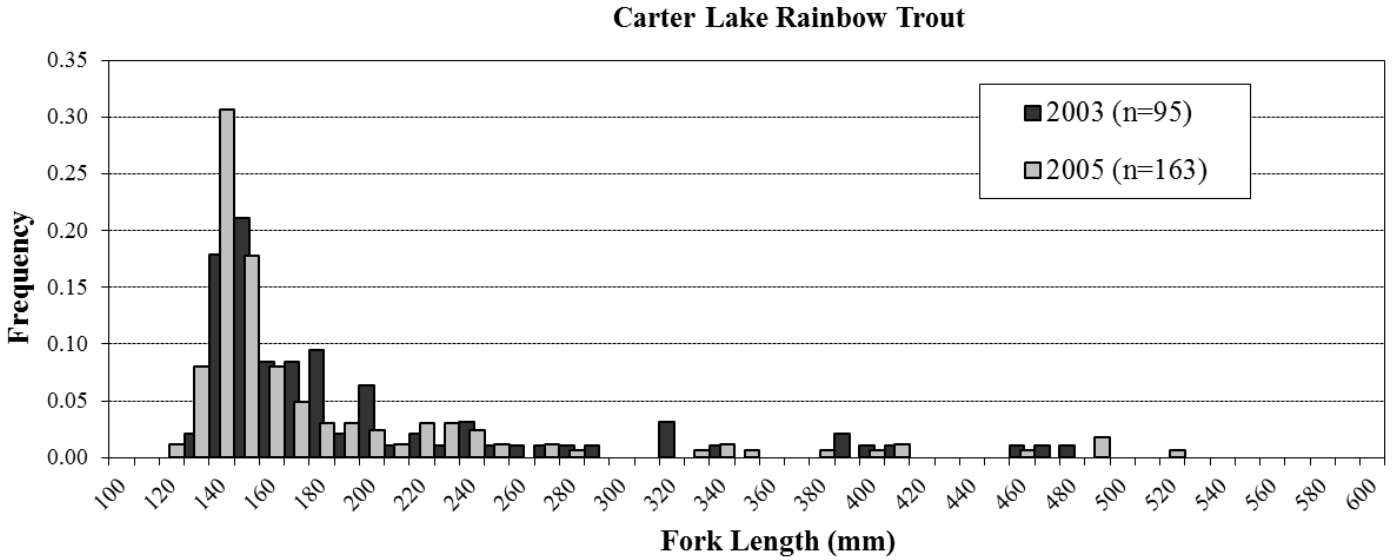
Lake	Year	Species	Release date	Number released	Density (fish per acre)	Avg. weight (g)	Avg. length (in)	Avg. length (mm)
Vagt	1994	Rainbow Trout	22 Jul	8,915	207	1.29	n/d	n/d
(cont.)	1995	Rainbow Trout	19 Jul	9,000	209	1.30	n/d	n/d
	1996	Rainbow Trout	24 Jul	9,014	210	1.60	n/d	n/d
	1997	Rainbow Trout	23 Jul	9,000	209	0.92	n/d	n/d
	1998	Rainbow Trout	11 Aug	9,000	209	1.30	n/d	n/d
	1999	Rainbow Trout	26 Jul	9,000	209	1.12	n/d	n/d
	2000	Rainbow Trout	19 Jul	9,054	211	0.74	1.60	40.64
	2001	Rainbow Trout	1 Aug	9,000	209	1.00	1.80	45.72
	2002	Rainbow Trout	15 Aug	5,000	116	n/d	1.90	48.26
	2003	Rainbow Trout	7 Aug	4,324	101	n/d	1.70	43.18
	2004	Rainbow Trout	11 Aug	4,305	100	n/d	2.00	50.80
	2005	Rainbow Trout	23 Aug	3,010	70	n/d	1.90	48.26
	2006	Rainbow Trout	31 Aug	2,375	55	n/d	1.90	48.26
	2007	Rainbow Trout	14 Aug	4,302	100	n/d	1.70	43.18

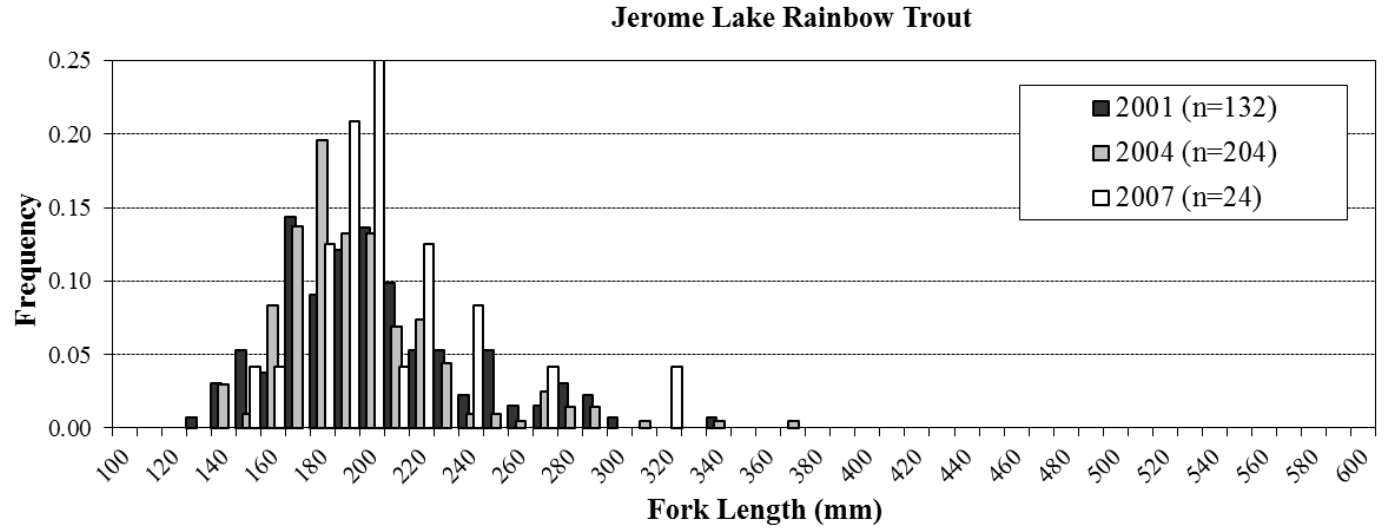
Sources: Soldotna ADF&G Office Lake Files; Diane Loopstra, Hatchery Biologist, ADF&G, Anchorage, personal communication; ADF&G Stocked Lakes website.

[a] Missing complete stocking history of coho salmon stocked from the Salmon in the Classroom program.

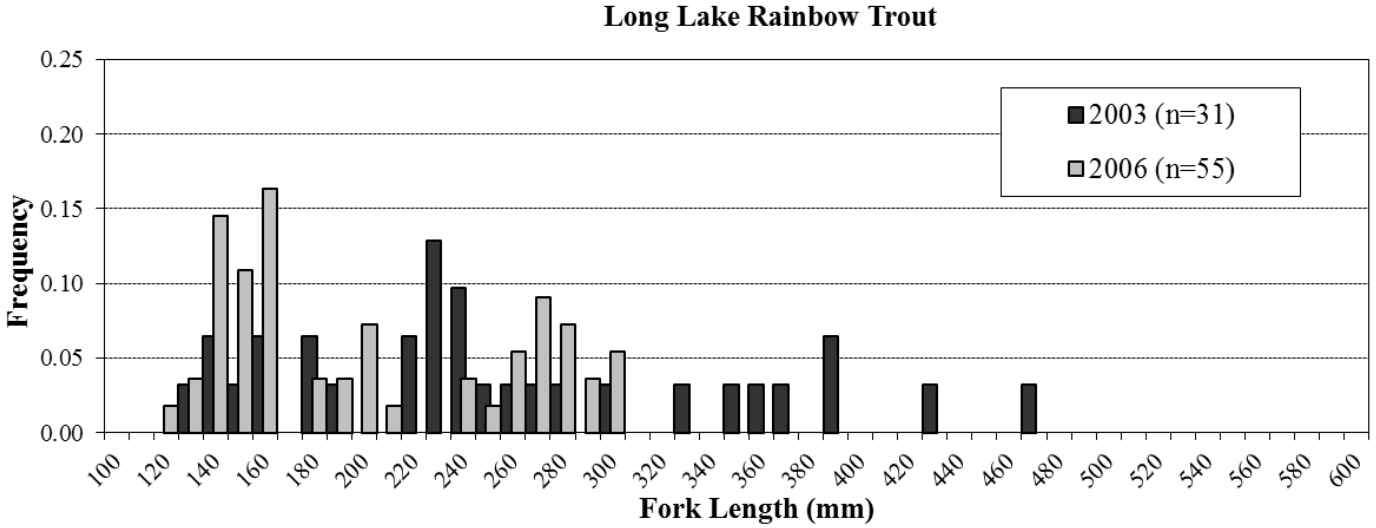
APPENDIX B: LENGTH FREQUENCY DISTRIBUTION OF FISH POPULATIONS FOUND IN COOPER LANDING–MOOSE PASS AREA STOCKED LAKES



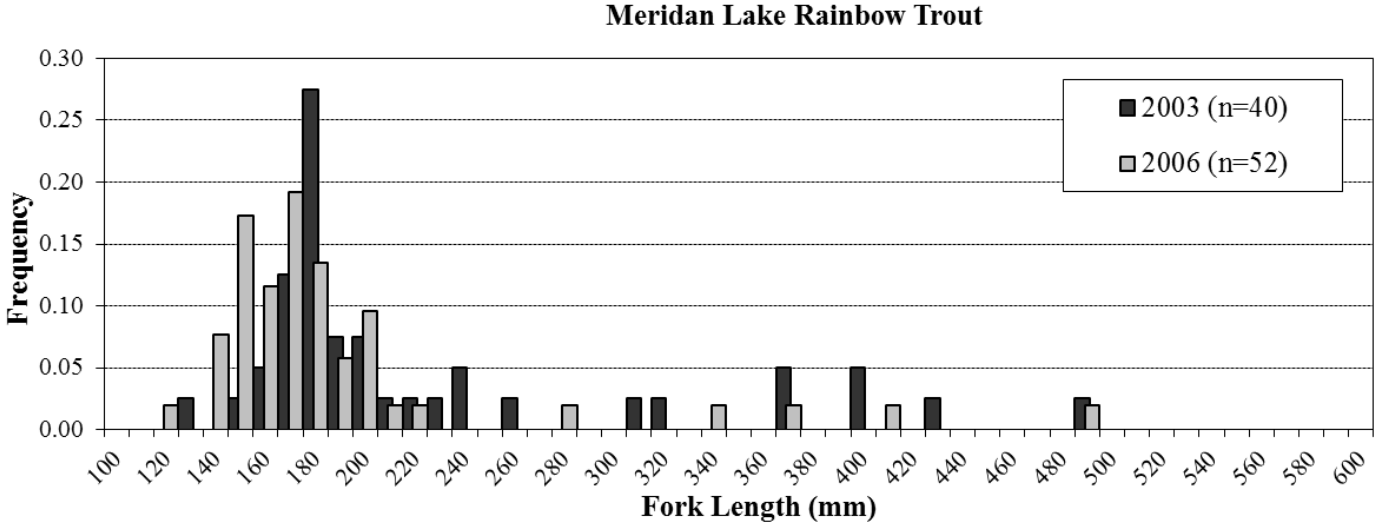
Appendix B1.–Length frequency distribution of rainbow trout in Carter Lake sampled in 2003 and 2005.



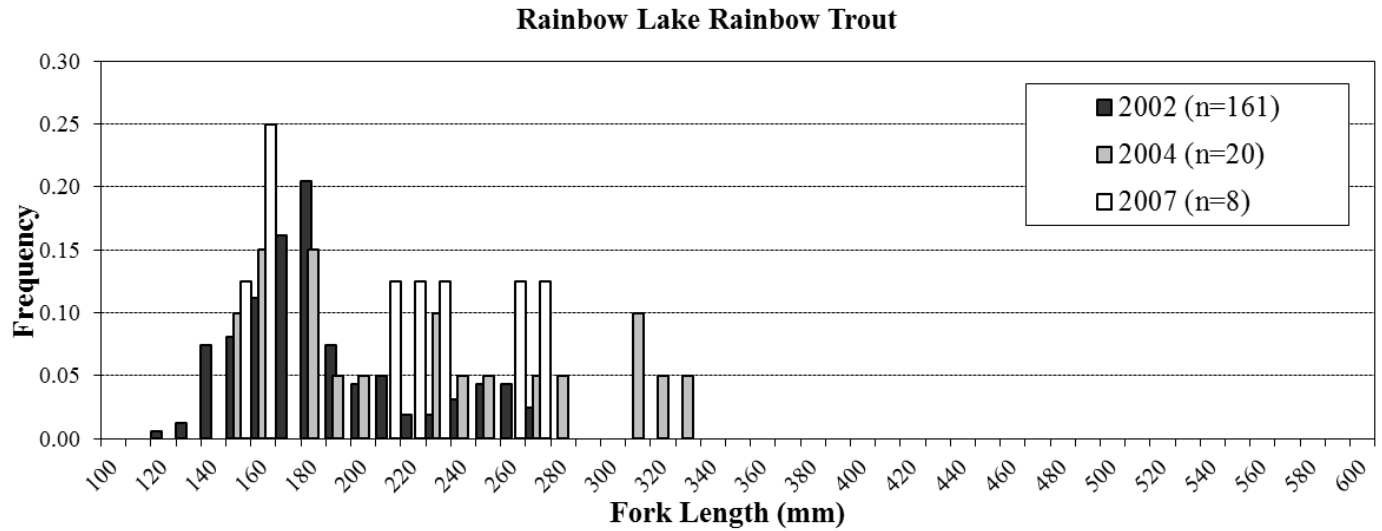
Appendix B2.–Length frequency distribution of rainbow trout in Jerome Lake sampled in 2001, 2004, and 2007.



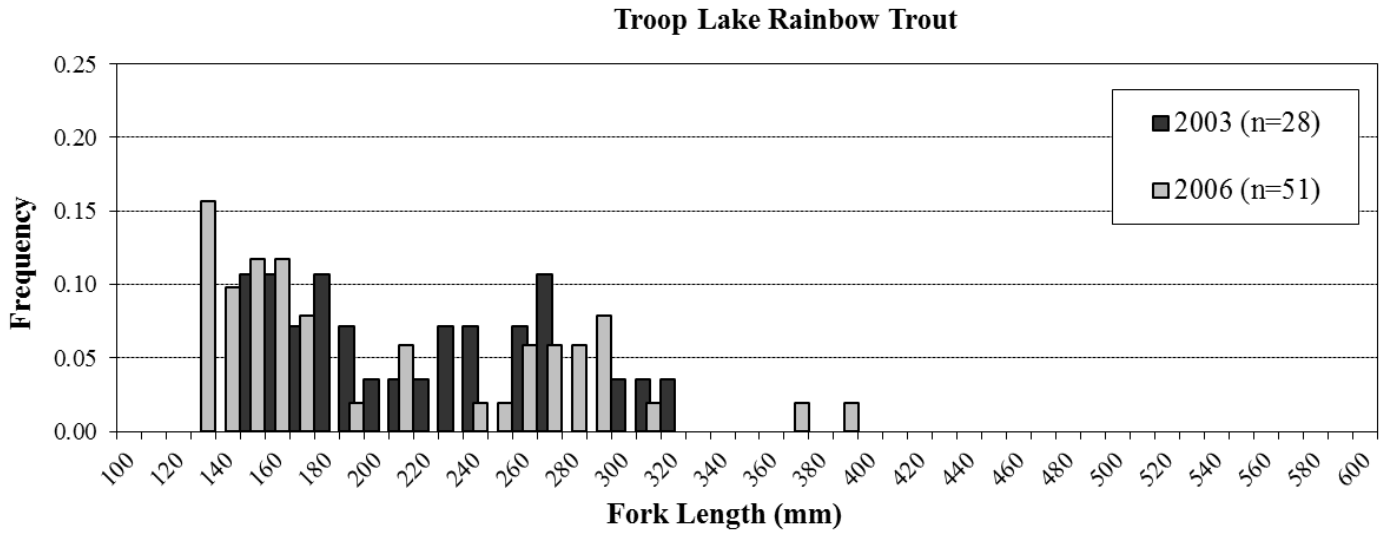
Appendix B3.–Length frequency distribution of rainbow trout in Long Lake sampled in 2003 and 2006.



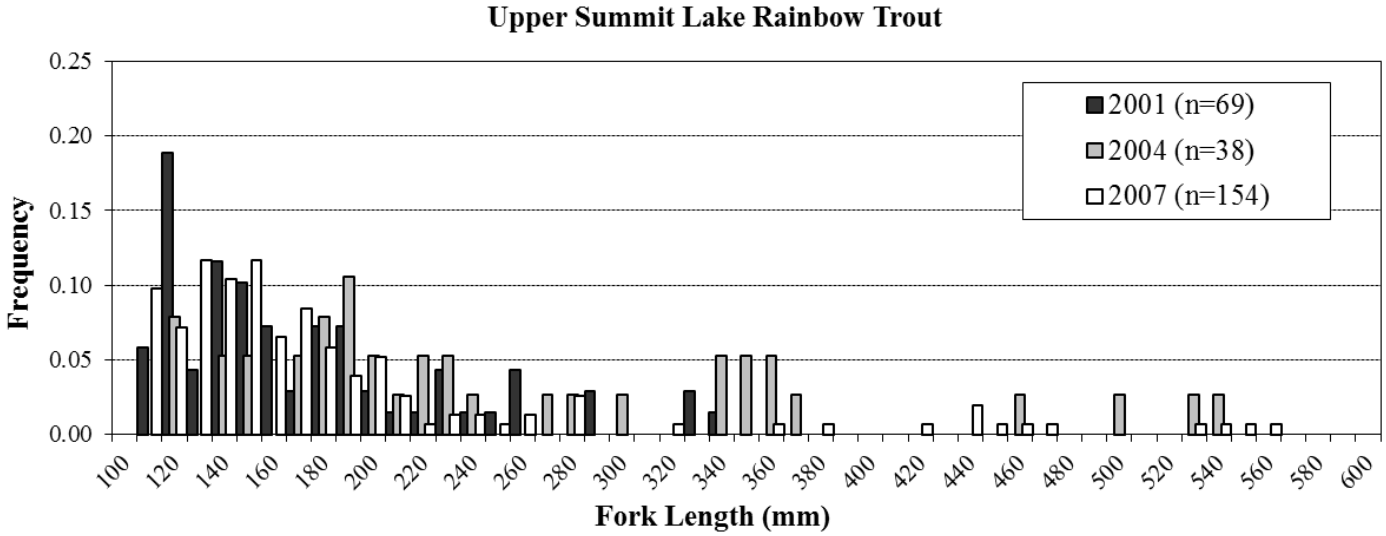
Appendix B4.–Length frequency distribution of rainbow trout in Meridian Lake sampled in 2003 and 2006.



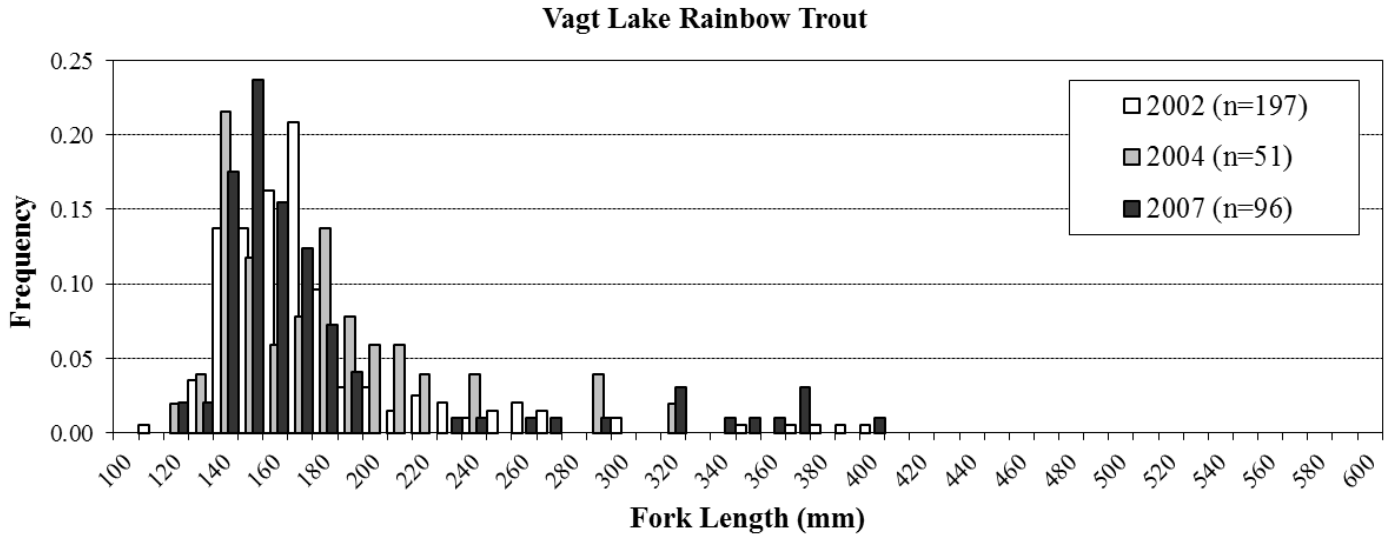
Appendix B5.–Length frequency distribution of rainbow trout in Rainbow Lake sampled in 2002, 2004, and 2007.



Appendix B6.–Length frequency distribution of rainbow trout in Troop Lake sampled in 2003 and 2006.



Appendix B7.–Length frequency distribution of rainbow trout in Upper Summit Lake sampled in 2001, 2004, and 2007.



Appendix B8.–Length frequency distribution of rainbow trout in Vagt Lake sampled in 2002, 2004, and 2007.

APPENDIX C: FISHING EFFORT (ANGLER DAYS) OF 28 KENAI PENINSULA STOCKED LAKES AS ESTIMATED BY THE STATEWIDE HARVEST SURVEY, 1983–2007.

Appendix C1.–Fishing effort (angler days) of 28 Kenai Peninsula stocked lakes as estimated by the Statewide Harvest Survey, 1983–2007.

Year	Arc	Aurora	Barbara	Cabin	Carter	Cecille	Cen-tennial	Chugach Estates	Douglas	Elephant	Encelew-ski	Island	Jerome	John-son [a]
1983	51	n/s	0	0	118	n/s	17	n/s	0	n/s	n/s	337	169	1,399
1984	0	n/s	0	0	151	n/s	0	0	0	n/s	n/s	0	117	167
1985	0	n/s	0	121	104	n/s	17	0	0	n/s	n/s	0	0	711
1986	0	n/s	0	0	61	n/s	122	0	0	n/s	0	183	0	496
1987	0	0	0	54	36	0	0	0	0	n/s	0	91	471	677
1988	0	0	0	31	31	0	0	0	0	n/s	0	291	93	2,729
1989	16	0	0	190	0	0	219	0	0	n/s	0	209	48	314
1990	0	0	0	0	181	0	0	0	0	n/s	0	181	234	1,786
1991	0	0	0	0	147	0	0	0	0	0	0	238	98	1,573
1992	0	0	0	117	310	0	245	0	416	0	0	0	181	1,152
1993	368	0	0	83	218	0	318	0	36	13	0	390	93	1,505
1994	25	0	0	548	374	0	158	0	757	847	0	303	467	2,564
1995	43	0	0	43	153	0	101	0	210	1,303	0	69	198	3,033
1996	0	0	0	46	182	0	182	0	45	931	0	540	13	1,822
1997	35	0	0	60	167	0	47	0	70	1,559	0	120	70	1,672
1998	0	0	0	0	159	0	28	0	154	1,013	0	851	354	1,264
1999	15	0	0	0	275	0	91	0	259	674	15	75	149	1,712
2000	145[b]	0	0	22	78	0	0	0	559	750	0	279	168	2,607
2001	122[b]	0	128	813	71	0	14	0	0	1,231	160	140	107	1,425
2002	89[b]	57	0	0	92	0	35	0	11	1,032	86	502	80	3,178
2003	0[b]	0	0	17	81	0	33	0	38	872	0	0	178	1,938
2004	0[b]	0	96	0	267	0	15	0	28	653	55	234	226	935
2005	0[b]	0	219	0	216	0	43	0	18	1,352	140	402	297	3,100
2006	0[b]		114	620	225	0	823	0	267	760	0	555	177	879
2007	0[b]	0	361	0	221	0	108	0	305	505	0	539	87	488
Avg. (1998–2007)	37	6	92	147	169	0	119	0	164	884	46	358	182	1,753
(1st stocking–2007)	36	3	37	111	157	0	105	0	127	794	21	261	163	1,565

-continued-

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Year	Long	Long-mare	Loon	Meridian	Quintin	Rain-bow	Roque	Scout	Sport	Thetis	Tirmore	Troop	Upper Summit	Vagt	**Total**
1983	n/s	0	n/s	n/s	n/s	84[c]	0	34	84	n/s	0	n/s	422	303	**2,934**
1984	n/s	0	n/s	n/s	n/s	84[c]	0	100	17	0	0	n/s	134	100	**786**
1985	n/s	0	n/s	0	n/s	52[c]	0	0	0	0	0	n/s	87	381	**1,421**
1986	n/s	153	n/s	0	0	146[c]	0	0	428	0	0	n/s	292	657	**2,392**
1987	0	199	n/s	0	0	0[c]	0	0	217	0	0	n/s	217	92	**2,054**
1988	0	309	n/s	0	0	546[c]	0	55	91	0	0	n/s	164	93	**3,887**
1989	0	114	n/s	0	0	63[c]	0	724	0	0	0	n/s	0	171	**2,005**
1990	0	66	n/s	0	0	33[c]	0	164	33	0	0	n/s	659	393	**3,697**
1991	0	0	n/s	0	0	49[c]	0	181	272	0	0	n/s	344	521	**3,374**
1992	0	597	n/s	0	0	373[c]	0	523	758	0	0	n/s	619	299	**5,217**
1993	0	127	n/s	0	0	593[c]	0	728	330	0	0	0	446	232	**4,887**
1994	0	851	n/s	0	0	519[c]	0	1,250	959	0	0	0	537	356	**9,996**
1995	0	1,445	n/s	0	0	447[c]	0	261	412	0	0	0	445	41	**7,757**
1996	0	153	0	0	0	272[c]	0	436	330	0	0	0	360	68	**5,108**
1997	0	343	0	0	0	90[c]	0	637	381	0	0	0	673	94	**5,928**
1998	0	725	0	9	0	184[c]	0	285	420	0	0	41	991	110	**6,404**
1999	0	298	0	0	0	172[c]	0	100	674	272	0	0	124	246	**4,979**
2000	0	769	89	21	0	519[c]	0	661	559	0	0	0	628	115	**7,450**
2001	0	578	0	0	0	441[c]	0	107	760	43	0	0	360	43	**6,102**
2002	91	262	0	86	0	557[c]	0	271	302	0	22	0	731	157	**7,084**
2003	0	230	0	17	0	424[c]	0	38	288	0	0	0	503	145	**4,378**
2004	0	895	0	0	0	330[c]	15	42	0	0	17	0	1,153	17	**4,648**
2005	0	104	0	18	18	117	170	176[b]	1,334	0	19	0	393	69	**8,029**
2006	0	832	17	52	0	34	0	70[b]	353	0	0	86	460	164	**6,418**
2007	0	0	0	0	0	0	0	0[b]	206	0	0	0	259	0	**3,079**
Avg. (1998–2007)	9	469	11	20	2	50	19	215	490	32	6	13	560	107	**5,857**
(1st stocking–2007)	6	362	9	9	1	50	7	300	368	13	2	8	440	195	**4,801**

Note: n/s = not stocked.

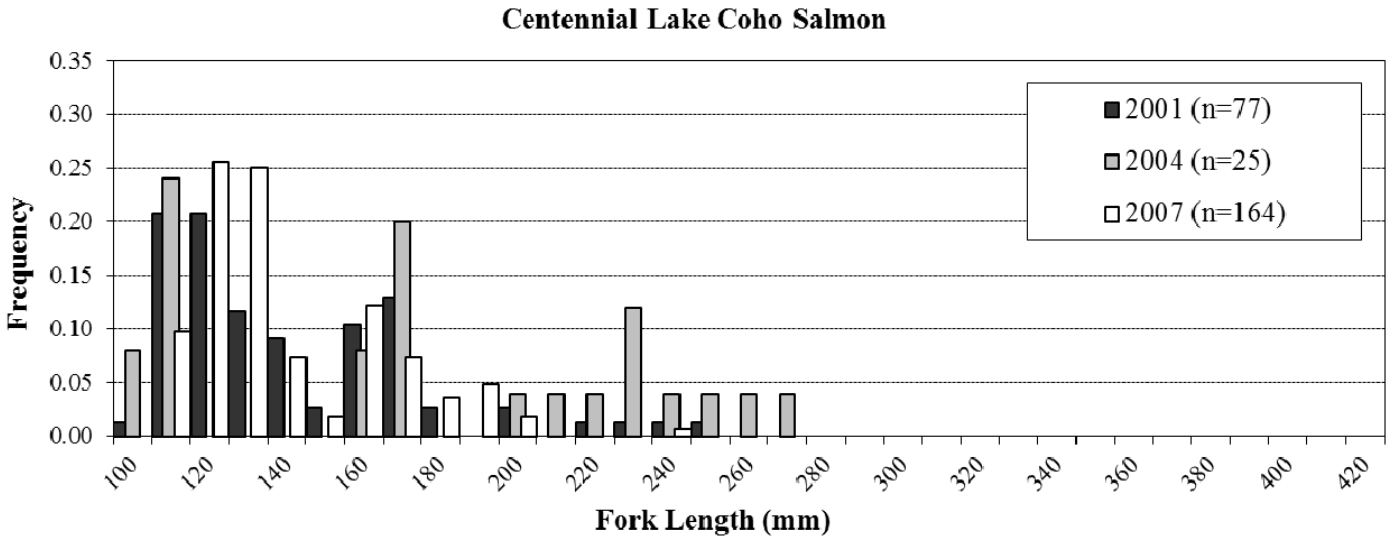
Sources: Mills (1982-1994); Howe et al. (1995-1996, 2001a-d); Walker et al. (2003); Jennings et al. (2004; 2006a-b); Jennings et al. (2007; 2009a-b; 2010).

[a] Assuming some combined total effort of 2 "Johnson" lakes; one is a very popular stocked lake in Kasilof, the other is not currently stocked and found remotely off of Johnson Pass Trail near Moose Pass.

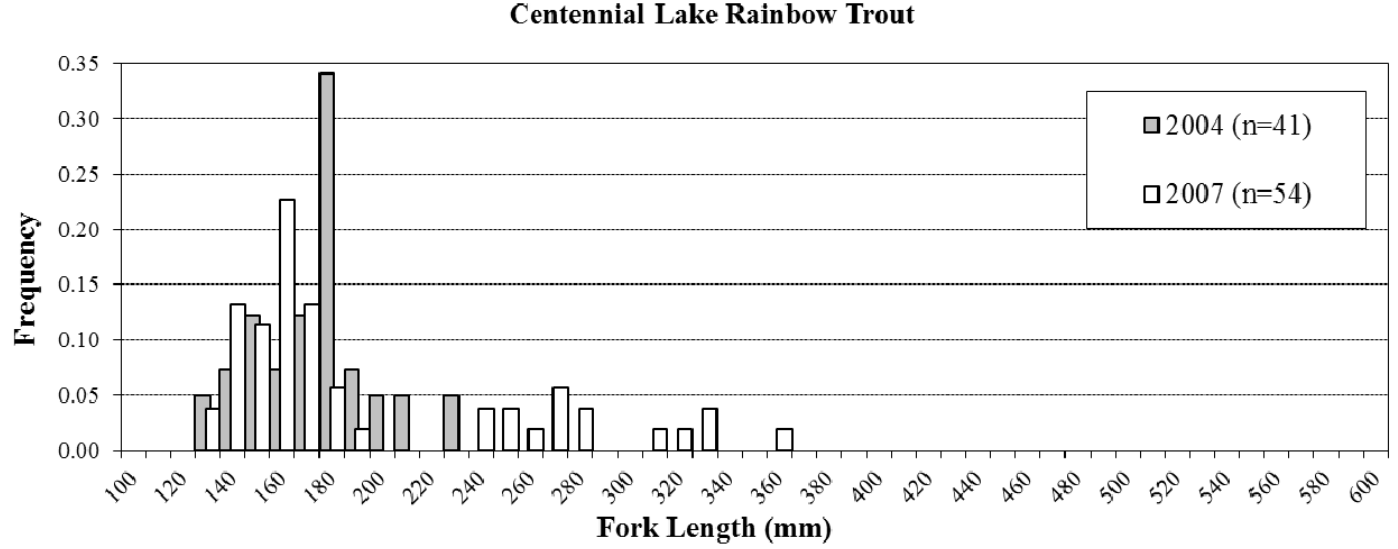
[b] Northern pike present; stocking ceased.

[c] Combined total effort of 2 "Rainbow" lakes; one is a stocked lake in Cooper Landing off Snug Harbor Road, the other is a very popular non-stocked lake found north of Sterling off Swanson River Road.

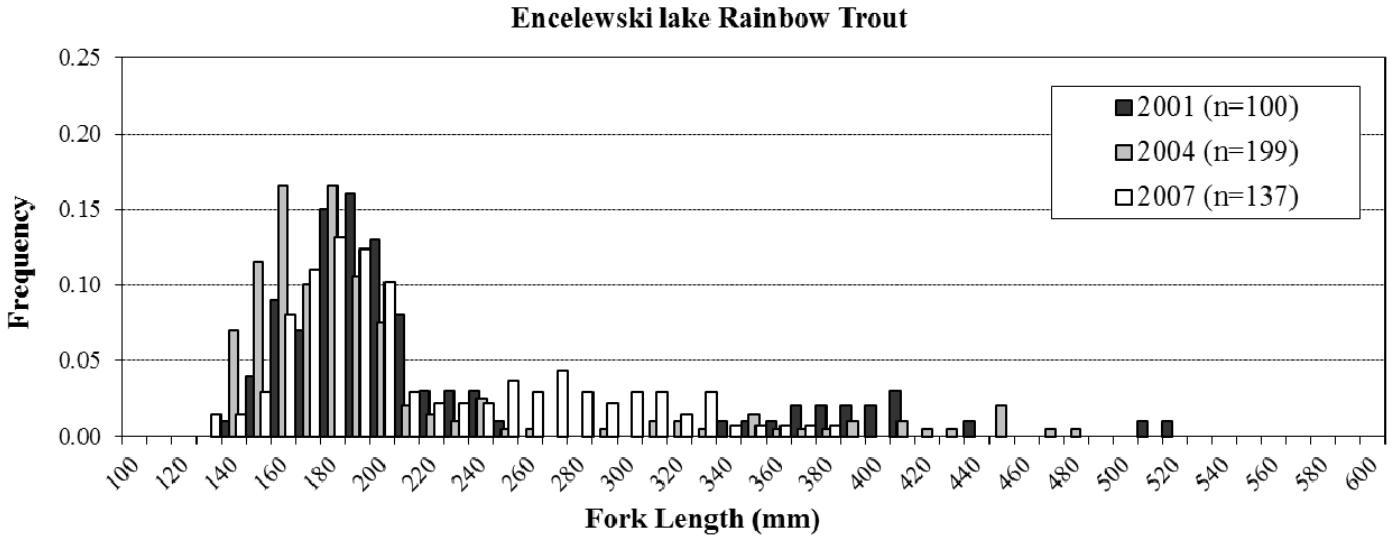
APPENDIX D: LENGTH FREQUENCY DISTRIBUTION OF FISH POPULATIONS FOUND IN KASILOF AREA STOCKED LAKES



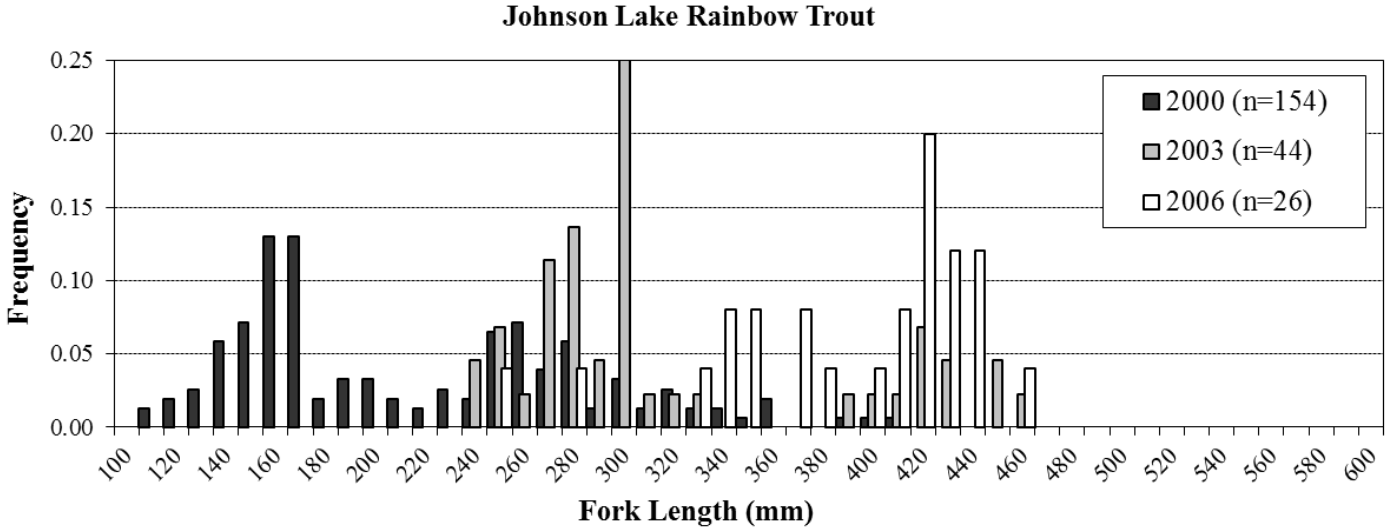
Appendix D1.–Length frequency distribution of coho salmon in Centennial Lake sampled in 2001, 2004, and 2007.



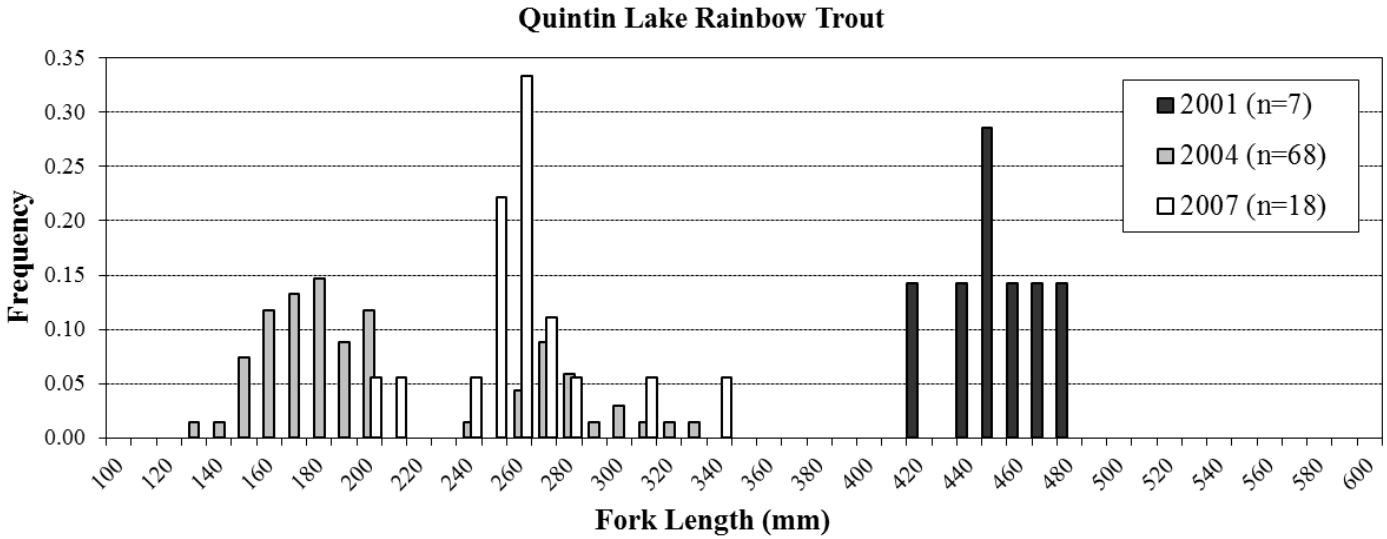
Appendix D2.–Length frequency distribution of rainbow trout in Centennial Lake sampled in 2004 and 2007.



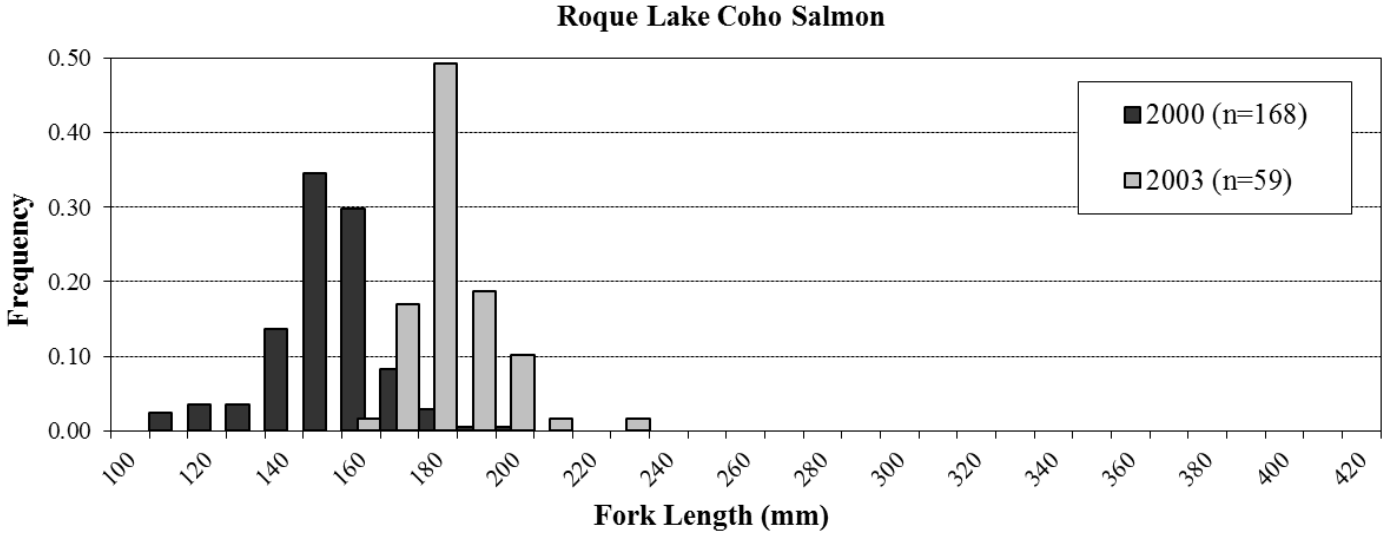
Appendix D3.–Length frequency distribution of rainbow trout in Encelewski Lake sampled in 2001, 2004, and 2007.



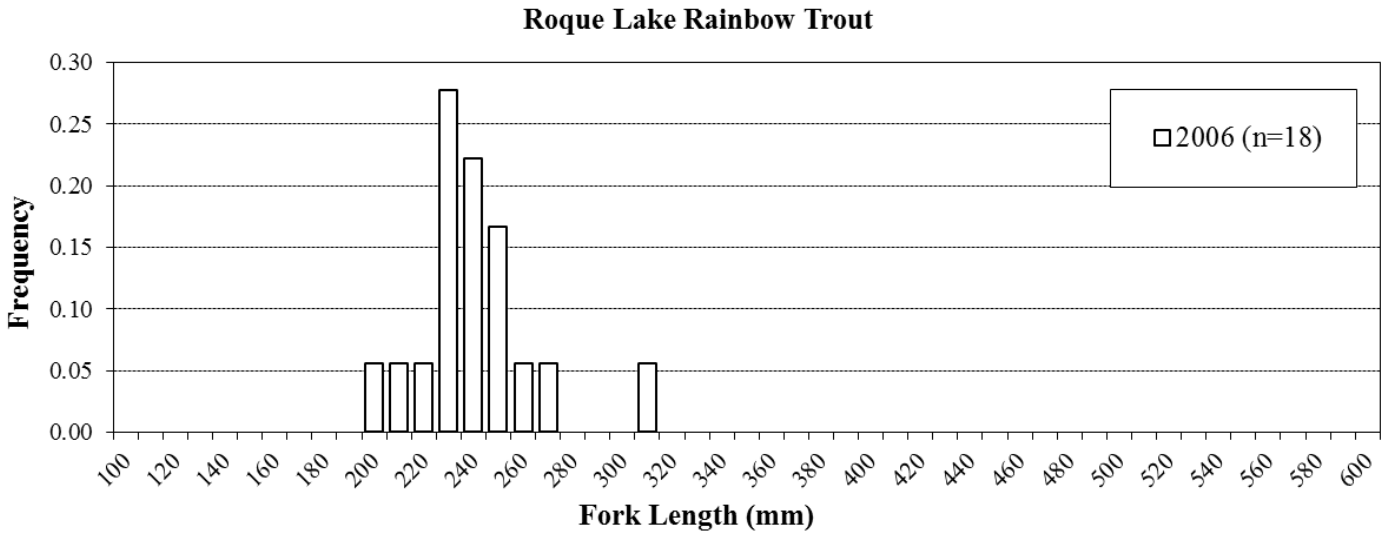
Appendix D4.–Length frequency distribution of rainbow trout in Johnson Lake sampled in 2000, 2003, and 2006.



Appendix D5.–Length frequency distribution of rainbow trout in Quintin Lake sampled in 2001, 2004, and 2007.

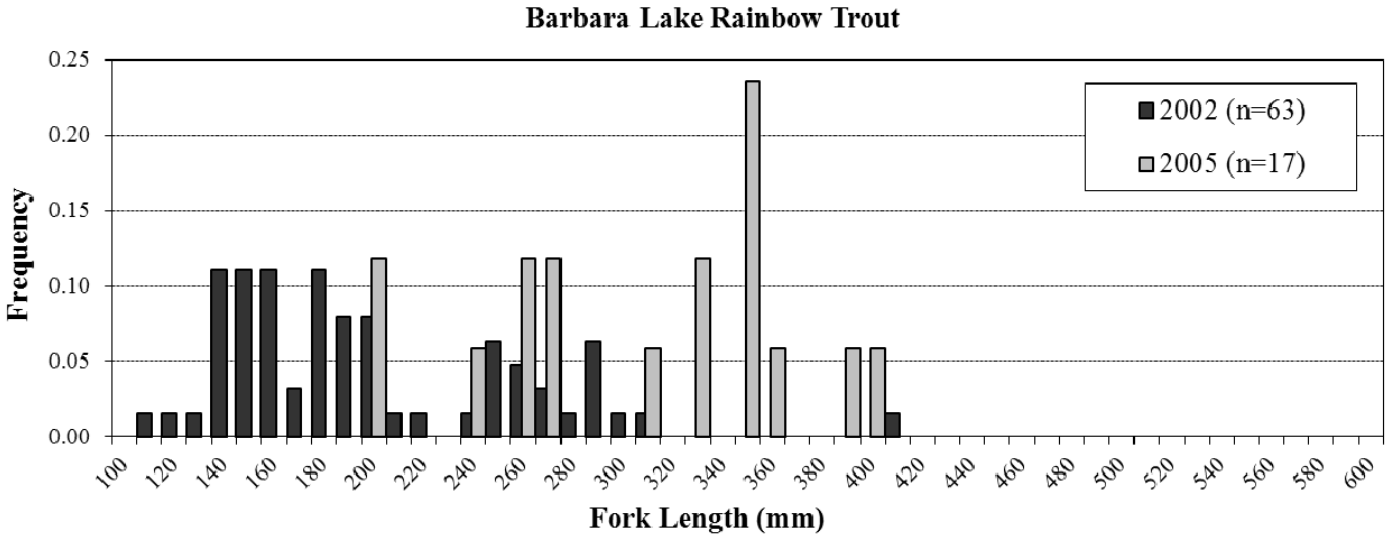


Appendix D6.–Length frequency distribution of coho salmon in Roque Lake sampled in 2000 and 2003.

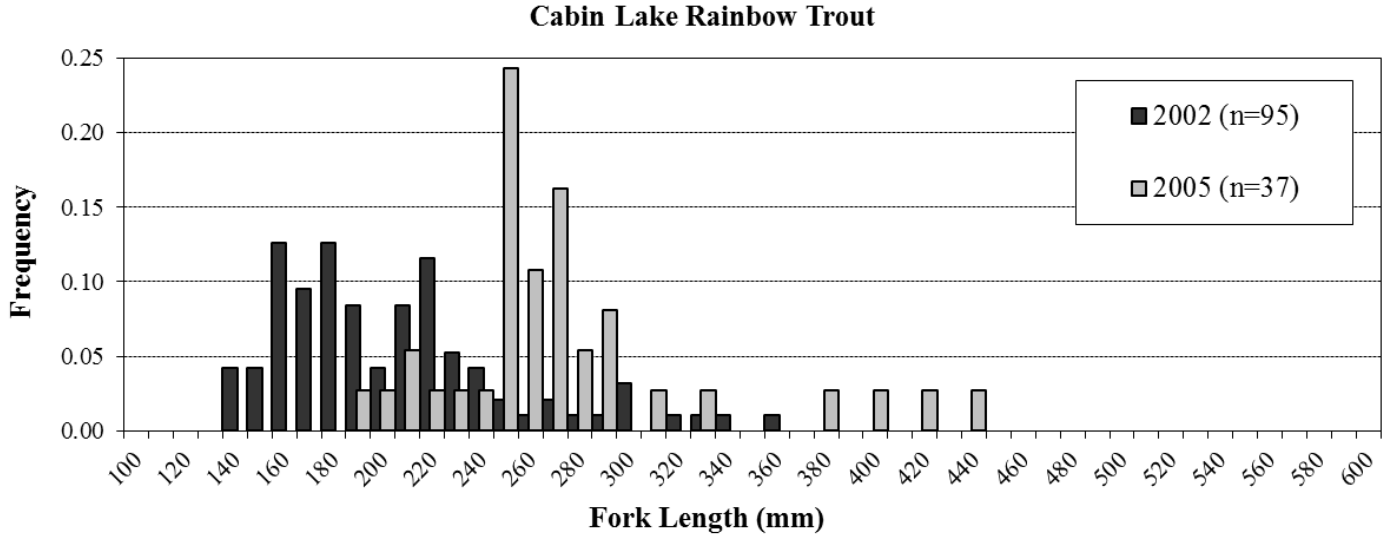


Appendix D7.–Length frequency distribution of rainbow trout in Roque Lake sampled in 2006.

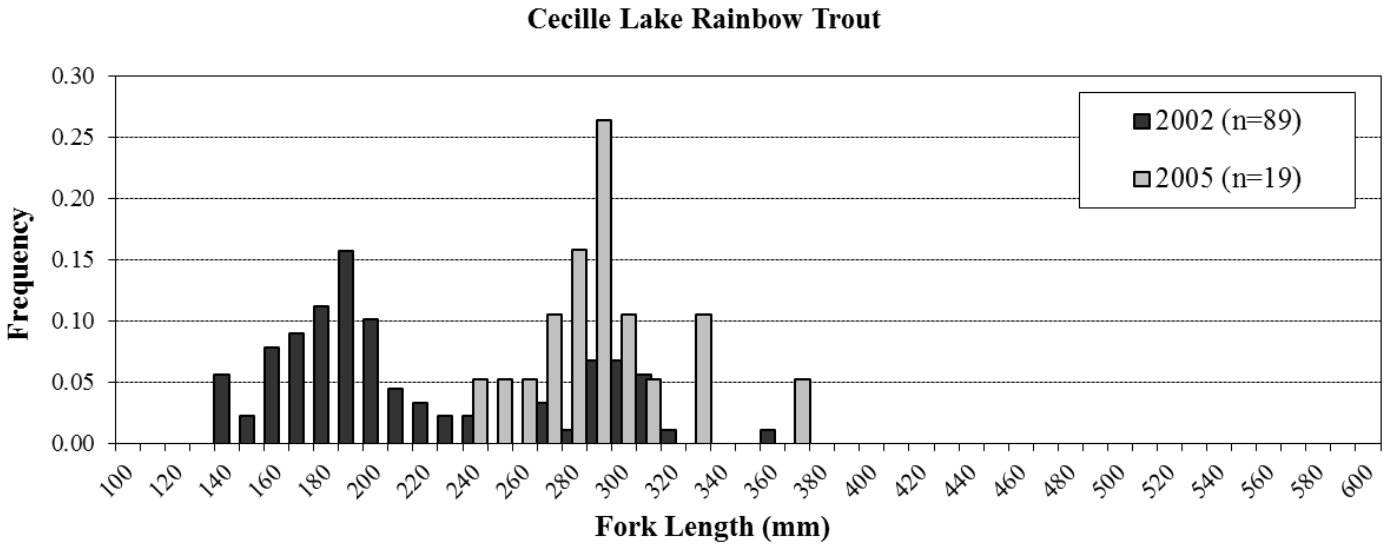
APPENDIX E: LENGTH FREQUENCY DISTRIBUTION OF FISH POPULATIONS FOUND IN NORTH KENAI AREA STOCKED LAKES



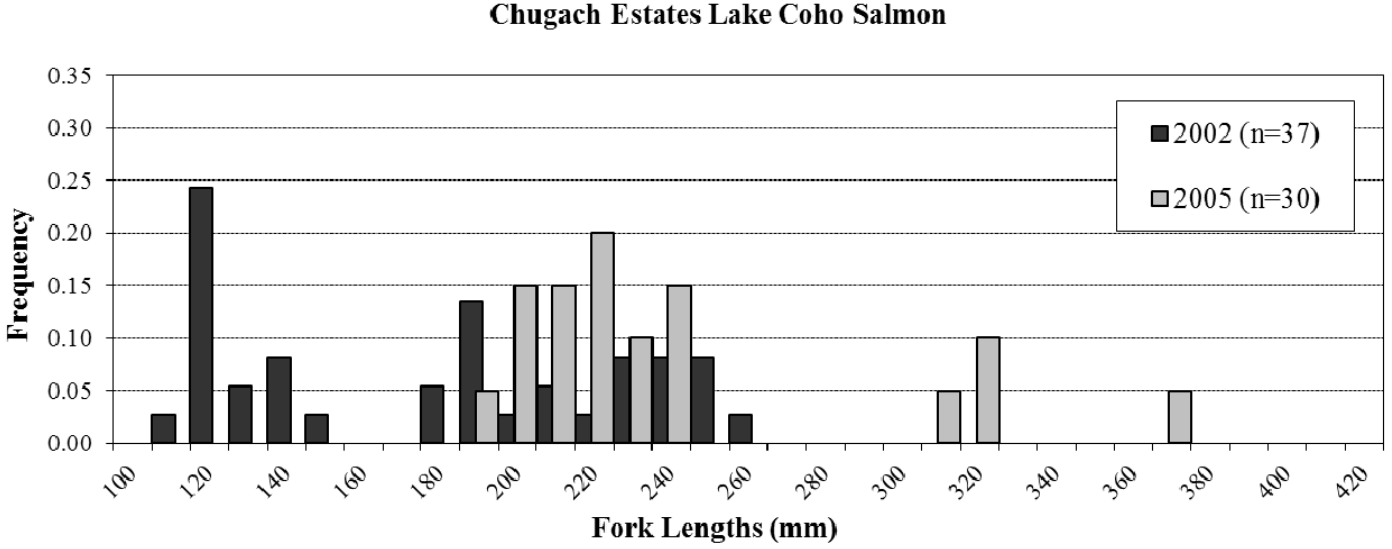
Appendix E1.–Length frequency distribution of rainbow trout in Barbara Lake sampled in 2002 and 2005.



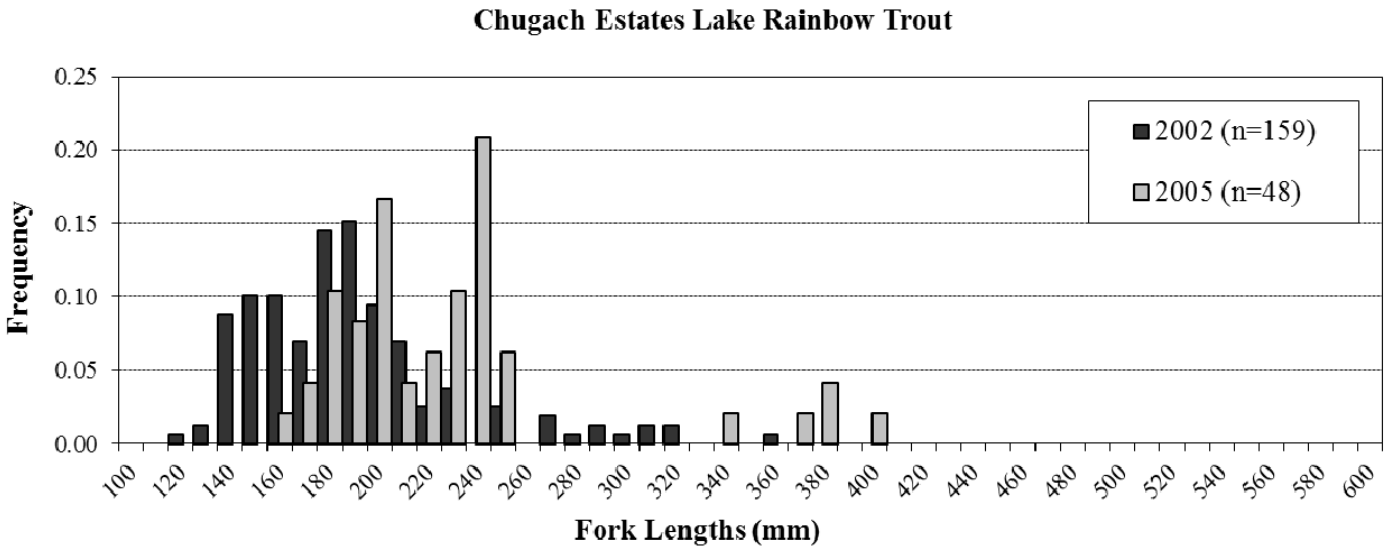
Appendix E2.–Length frequency distribution of rainbow trout in Cabin Lake sampled in 2002 and 2005.



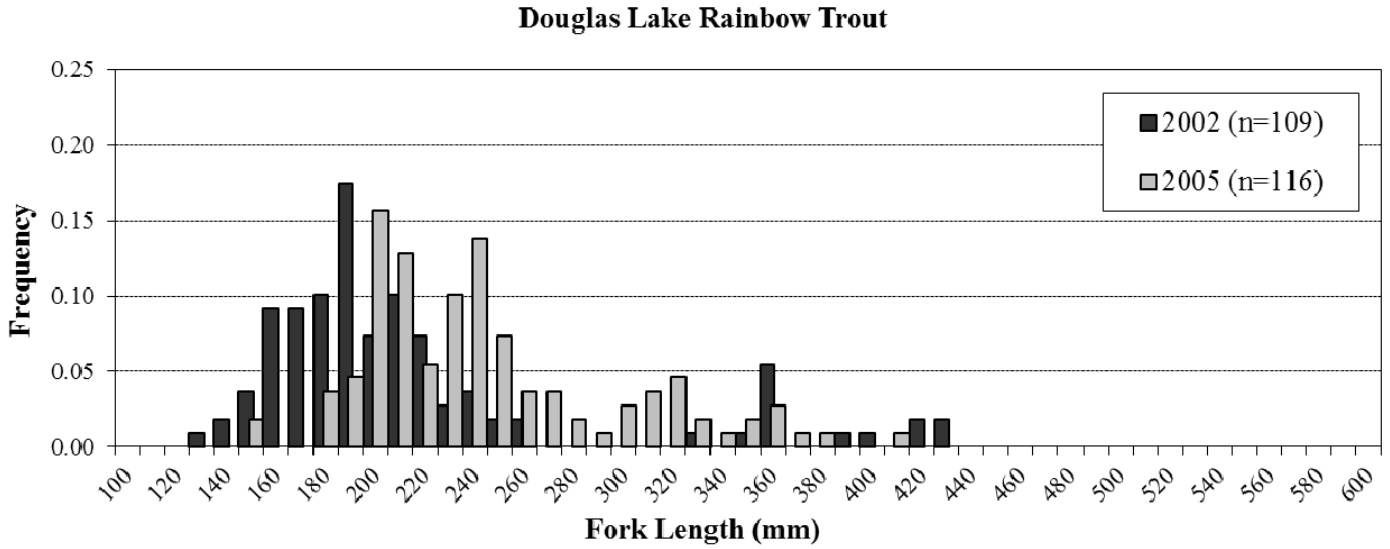
Appendix E3.–Length frequency distribution of rainbow trout in Cecille Lake sampled in 2002 and 2005.



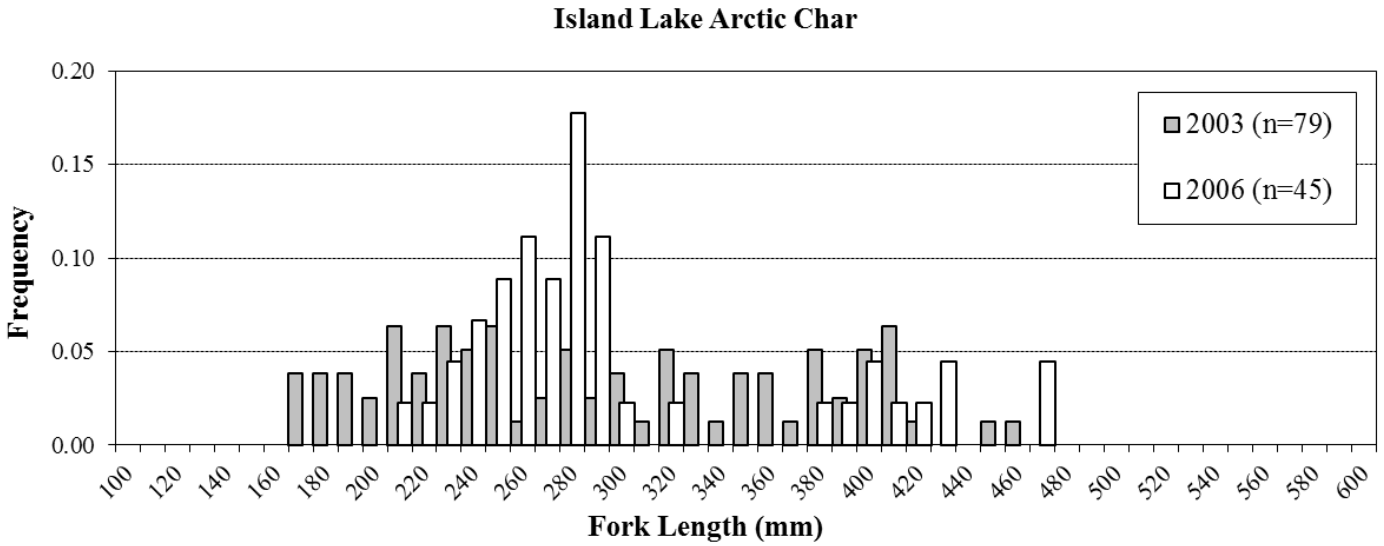
Appendix E4.–Length frequency distribution of coho salmon in Chugach Estates Lake sampled in 2002 and 2005.



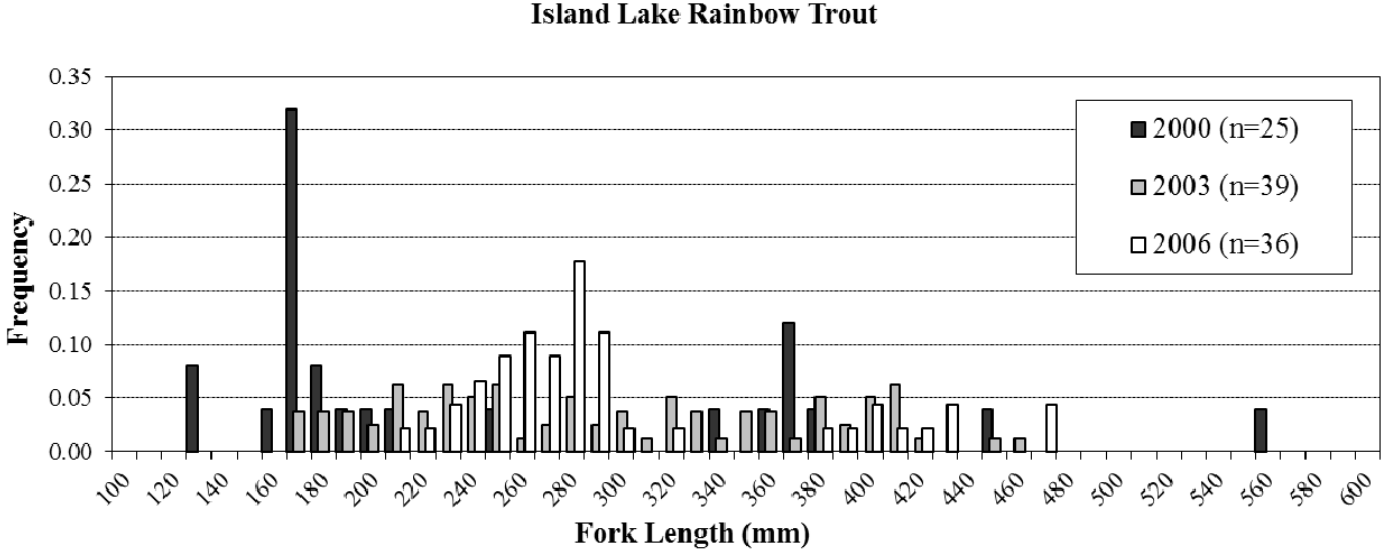
Appendix E5.–Length frequency distribution of rainbow trout in Chugach Estates Lake sampled in 2002 and 2005.



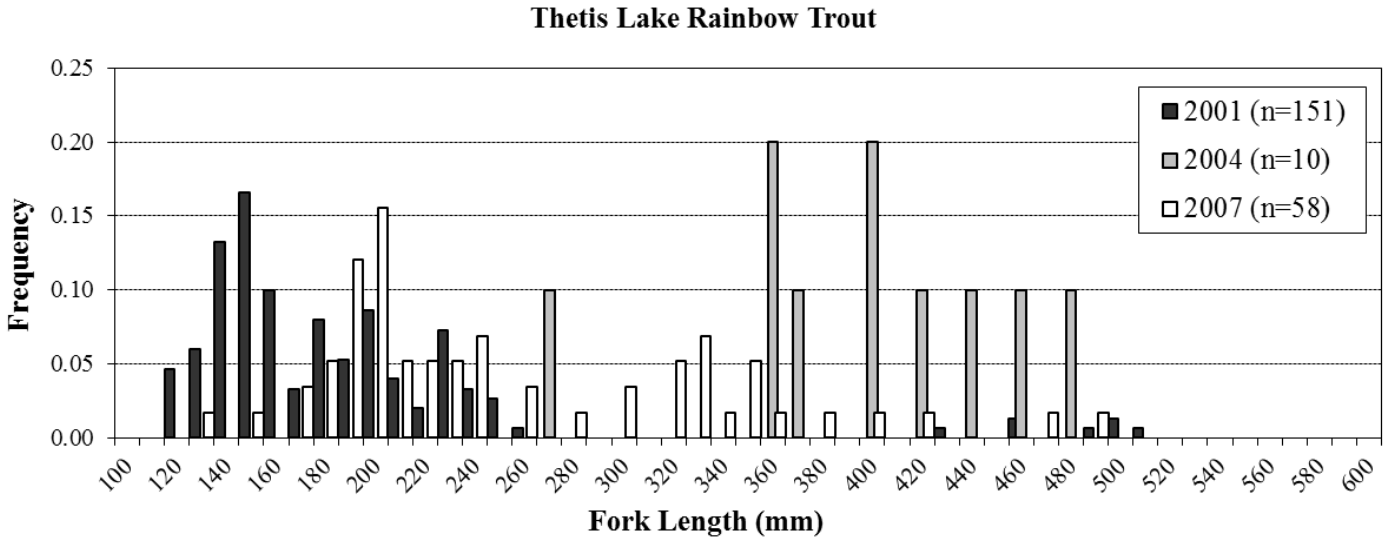
Appendix E6.–Length frequency distribution of rainbow trout in Douglas Lake sampled in 2002 and 2005.



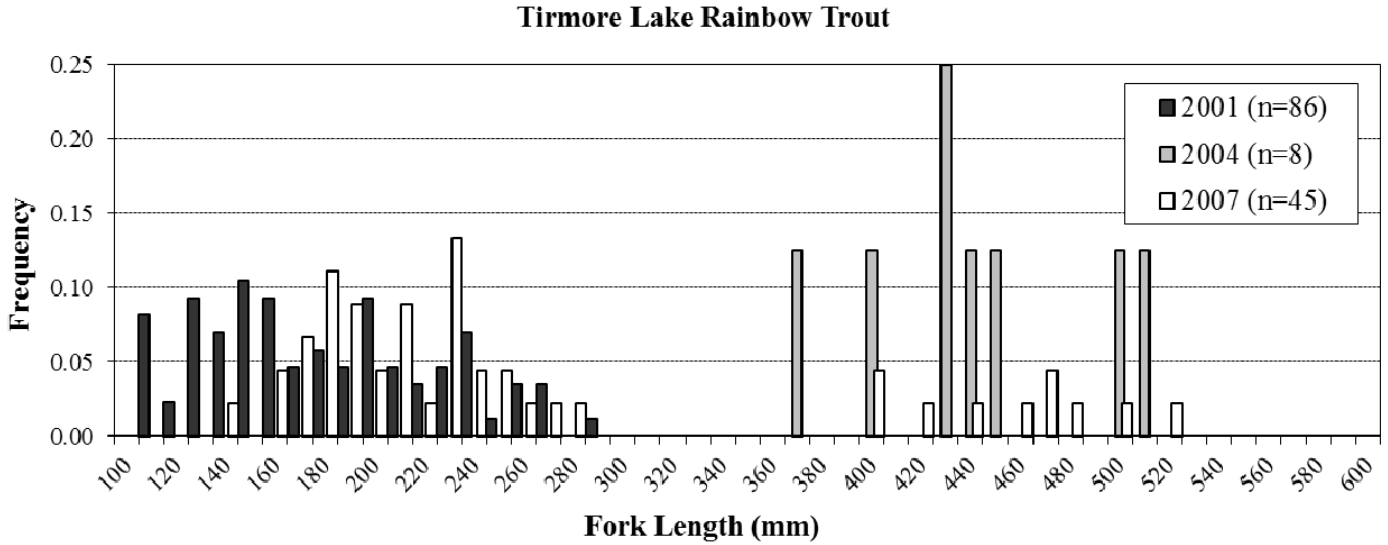
Appendix E7.–Length frequency distribution of Arctic char in Island Lake sampled in 2003 and 2006.



Appendix E8.–Length frequency distribution of rainbow trout in Island Lake sampled in 2000, 2003, and 2006.

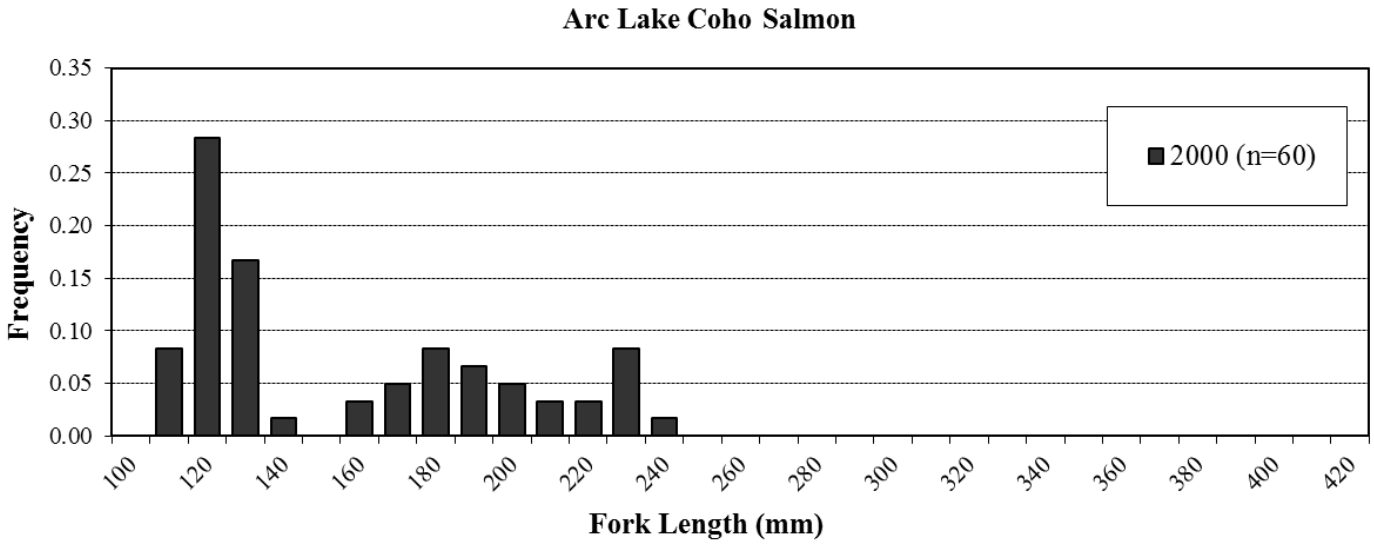


Appendix E9.–Length frequency distribution of rainbow trout in Thetis Lake sampled in 2001, 2004, and 2007.

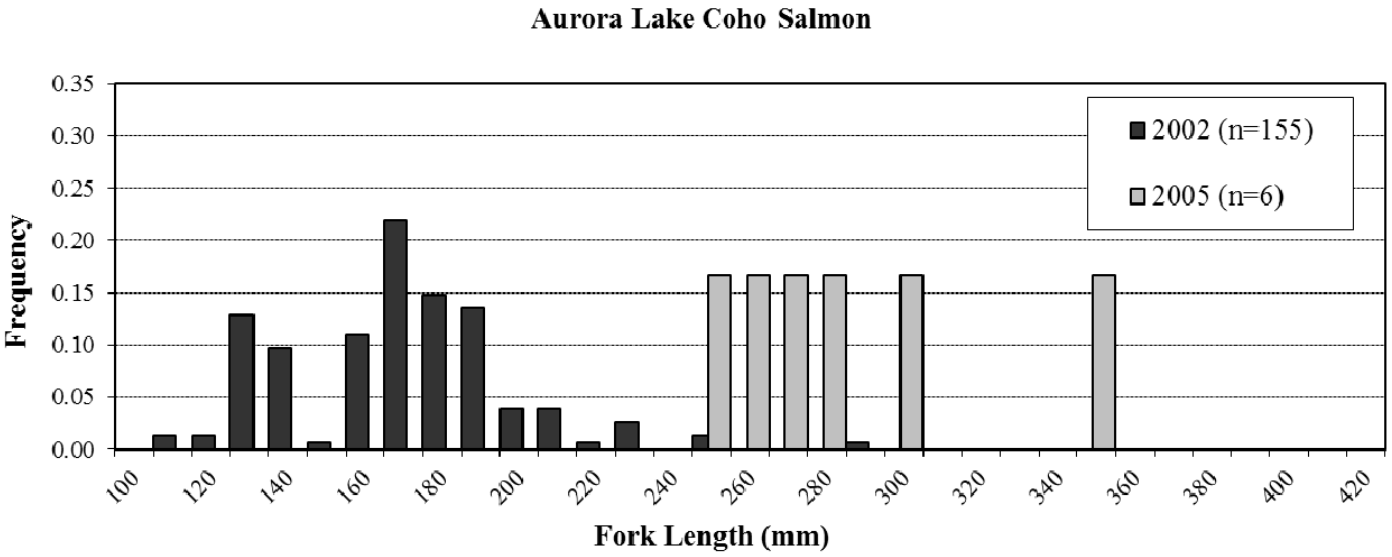


Appendix E10.–Length frequency distribution of rainbow trout in Tirmore Lake sampled in 2001, 2004, and 2007.

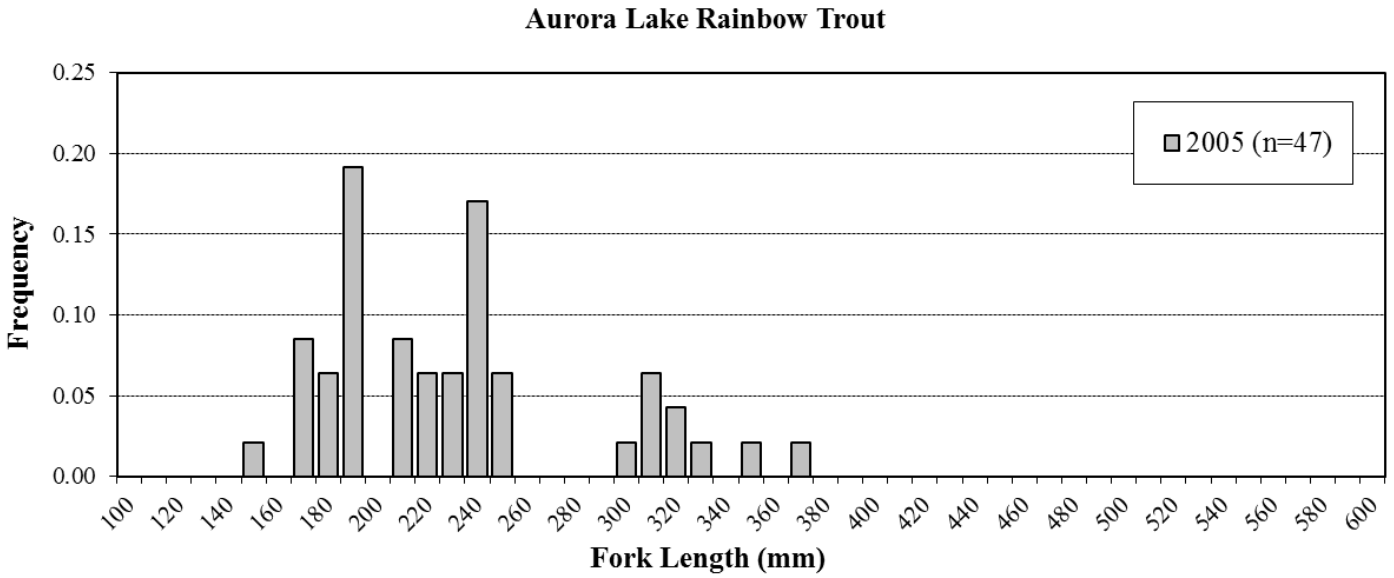
APPENDIX F: LENGTH FREQUENCY DISTRIBUTION OF FISH POPULATIONS FOUND IN SOLDOTNA–STERLING AREA STOCKED LAKES



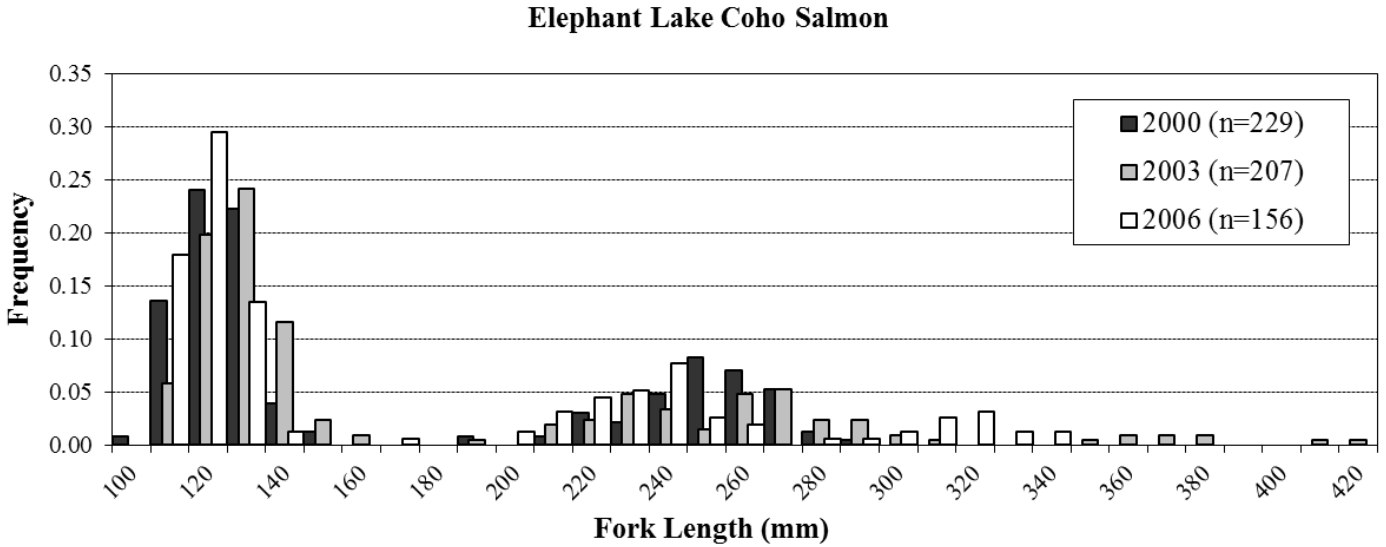
Appendix F1.–Length frequency distribution of coho salmon in Arc Lake sampled in 2000.



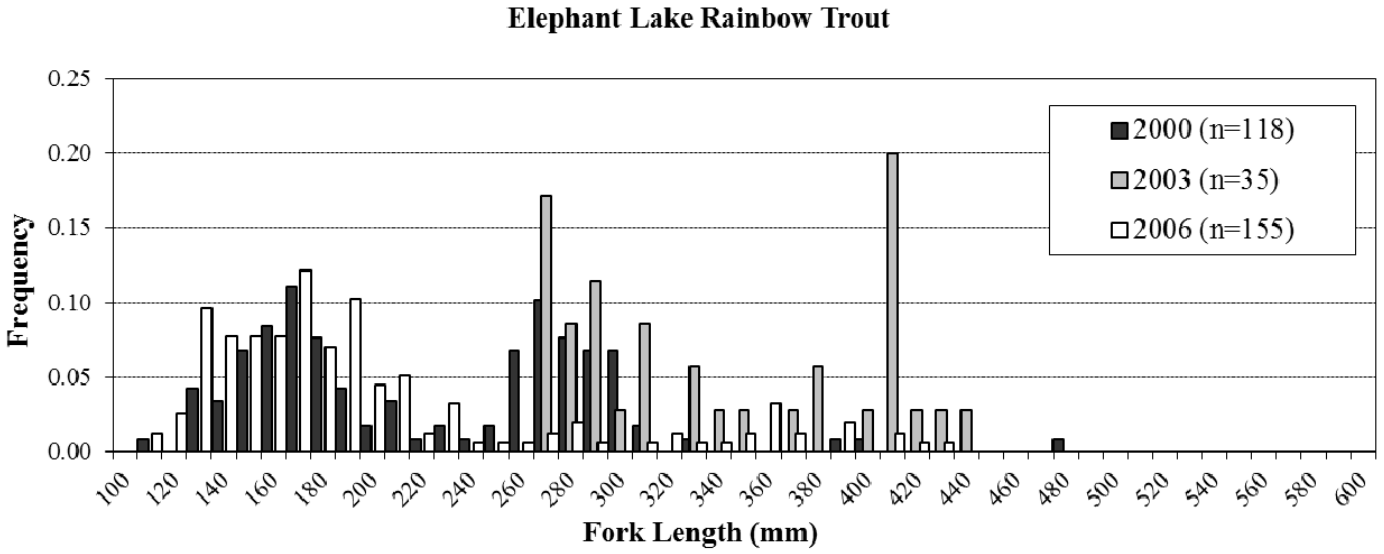
Appendix F2.–Length frequency distribution of coho salmon in Aurora Lake sampled in 2002 and 2005.



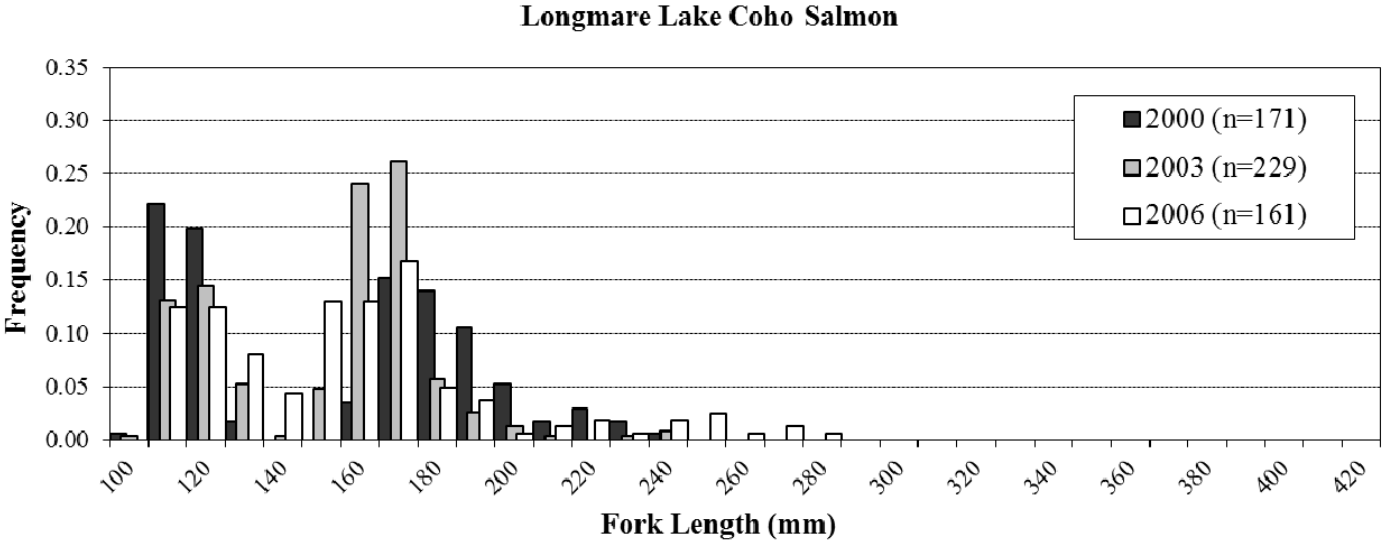
Appendix F3.–Length frequency distribution of rainbow trout in Aurora Lake sampled in 2005.



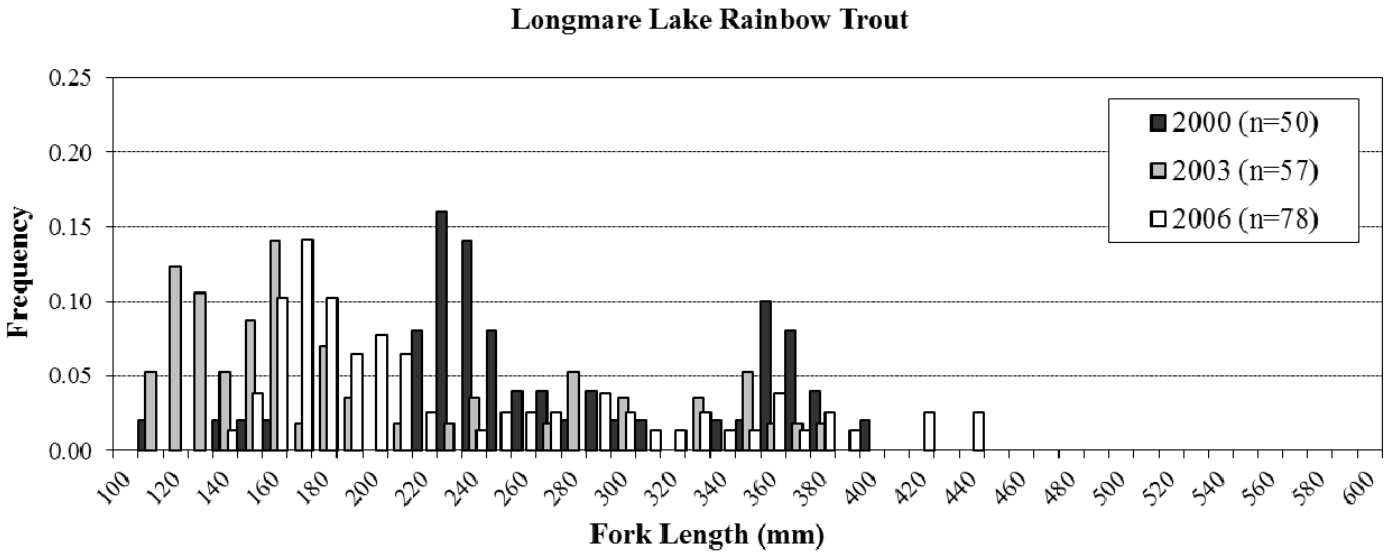
Appendix F4.–Length frequency distribution of coho salmon in Elephant Lake sampled in 2000, 2003, and 2006.



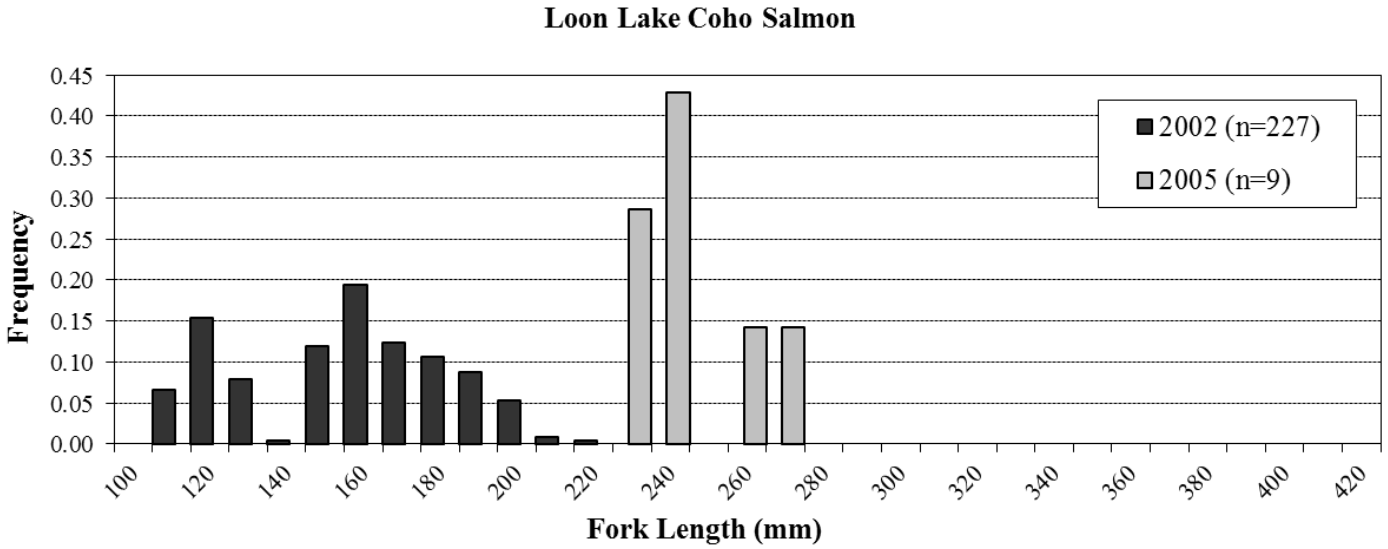
Appendix F5.–Length frequency distribution of rainbow trout in Elephant Lake sampled in 2000, 2003, and 2006.



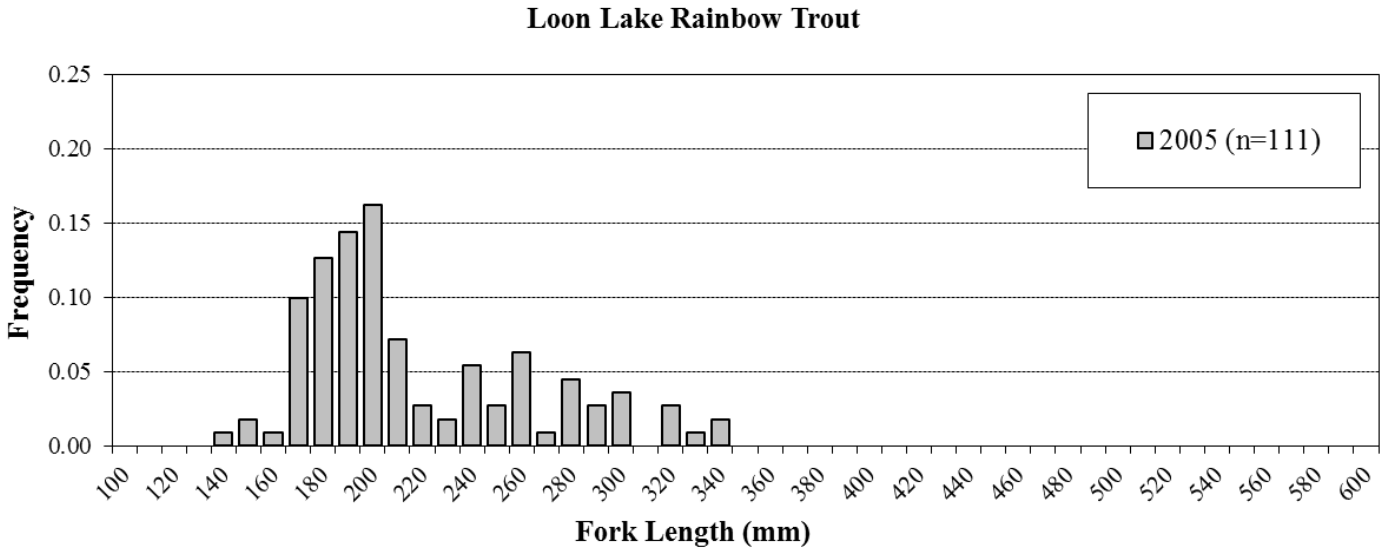
Appendix F6.–Length frequency distribution of coho salmon in Longmare Lake sampled in 2000, 2003, and 2006.



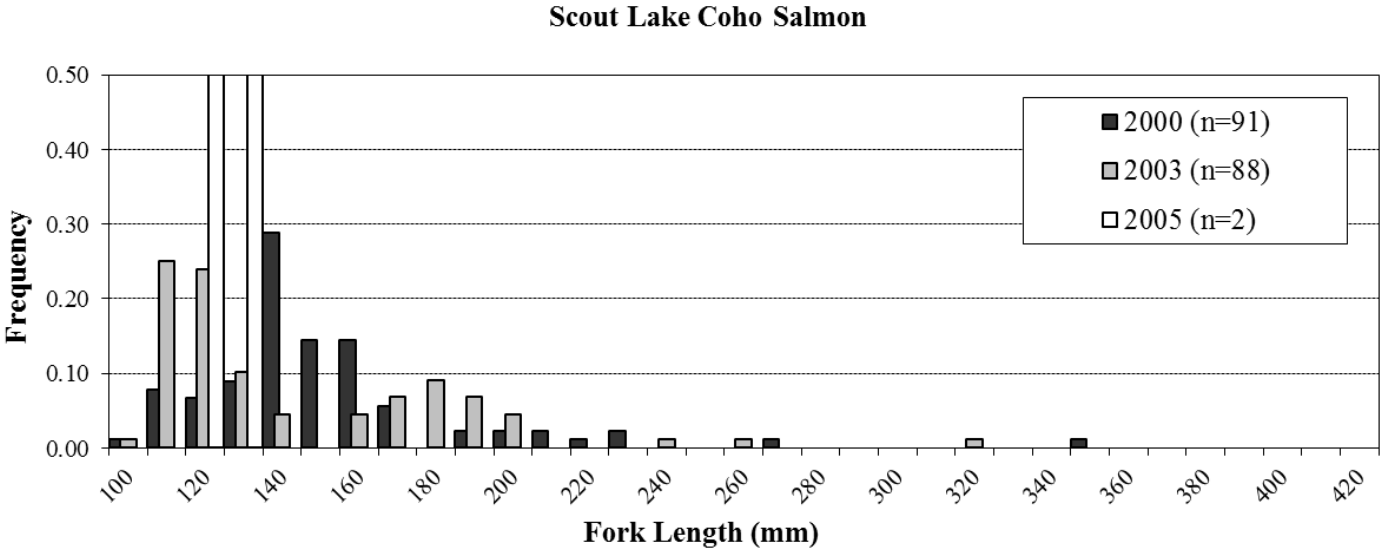
Appendix F7.–Length frequency distribution of rainbow trout in Longmare Lake sampled in 2000, 2003, and 2006.



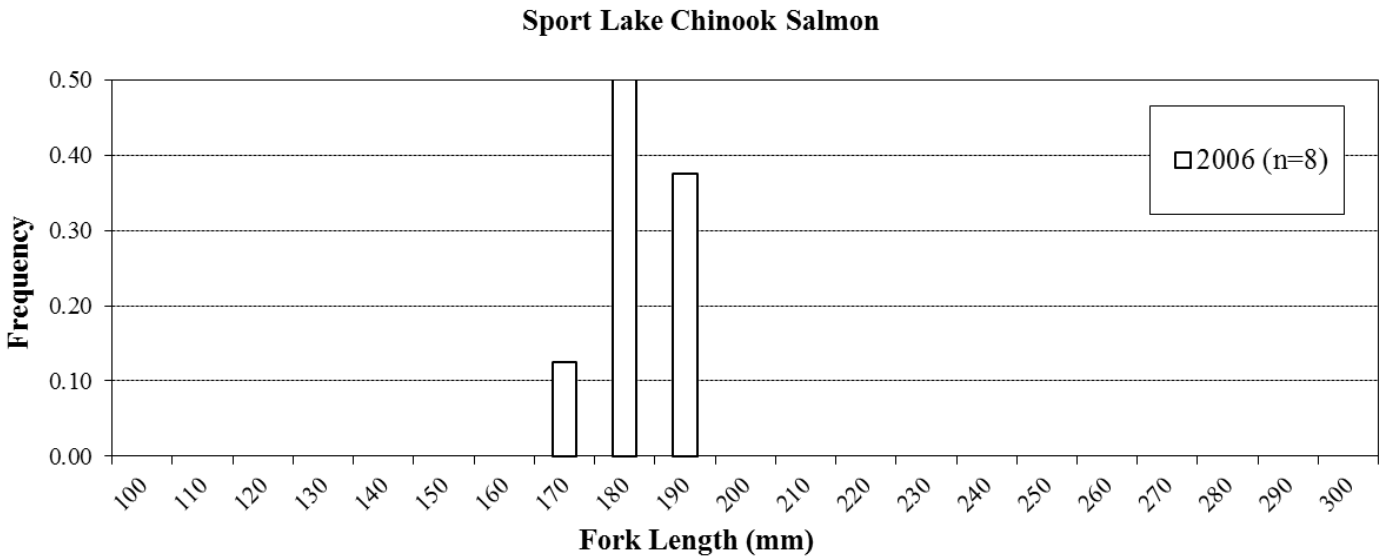
Appendix F8.–Length frequency distribution of coho salmon in Loon Lake sampled in 2002 and 2005.



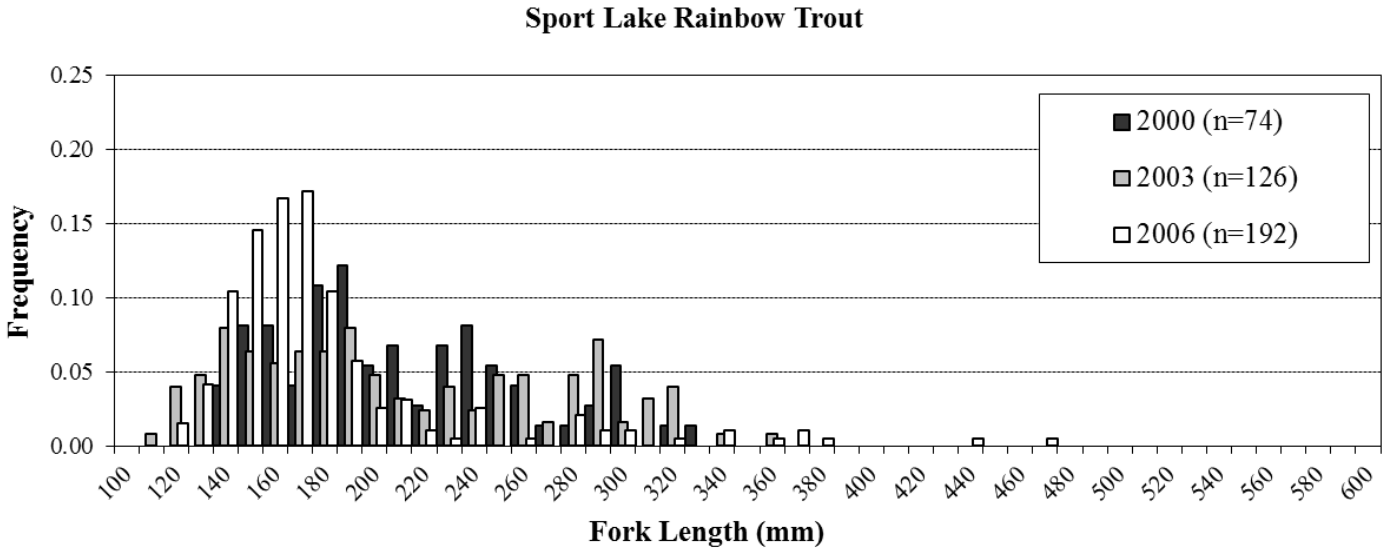
Appendix F9.–Length frequency distribution of rainbow trout in Loon Lake sampled in 2005.



Appendix F10.–Length frequency distribution of coho salmon in Scout Lake sampled in 2000, 2003, and 2005.



Appendix F11.–Length frequency distribution of Chinook salmon in Sport Lake sampled in 2006.



Appendix F12.–Length frequency distribution of rainbow trout in Sport Lake sampled in 2000, 2003, and 2006.

APPENDIX G: SUMMARY OF STOCKED LAKE NETTING RESULTS FROM 28 LAKES IN THE NKPMA FROM 2000 TO 2007

Appendix G1.–Summary of stocked lake sampling for 28 lakes in the NKPMA from 2000 to 2007.

Lake	Size (acre)	Year	Gear[a]	Hours Set	Species[b]	<100 mm	100-200 mm	>200 mm	Total	CPUE	Length Range[c]	Comments
Arc	16	2000	FK	25	SS	0	25	1	26	0.017	105–204	1 pike
			VM	24	SS	0	25	9	34	0.024	110–235	4 pike
Aurora	8	2002	FK	24	SS	0	101	11	112	0.078	101–287	mature males milting.
			VM	24.5	SS	0	40	3	43	0.029	120–242	mature males milting.
		2005	VM	22	RB	0	17	30	47	0.036	150–364	
			FK	23.5	SS	0	0	1	1	0.001	275	
			VM	22	SS	0	0	5	5	0.004	247–345	
Barbara	45	2002	FK	21.5	RB	2	17	1	20	0.016	125–243	
			VM	21.5	RB	0	26	19	45	0.035	104–410	
		2005	FK	24	RB	41	1	4	46	0.032	194–348	3 muskrats, ~200 stickleback
			VM	24	RB	0	1	11	12	0.008	197–385	
Cabin	53	2002	FK	22	RB	210	47	23	280	0.212	131–332	
			VM	21	RB	0	6	19	25	0.020	152–358	
		2005	FK	24.5	RB	5	2	19	26	0.018	186–378	1 muskrat
			VM	24	RB	0	0	16	16	0.011	208–436	
Carter	48	2003	VM	24	RB	0	72	23	95	0.066	122–471	
		2005	VM	24	RB	0	129	34	163	0.113	115–520	
Cecille	10	2002	FK	21	RB	0	31	19	50	0.040	134–308	
			VM	21	RB	0	23	16	39	0.031	145–353	
		2005	FK	24	RB	25	0	3	28	0.019	270–275	~25 stickleback, 6 muskrats
			VM	23	RB	0	0	16	16	0.012	238–365	
Centennial	25	2001	FK	19	SS	2	114	0	116	0.102	102–200	
			VM	19	SS	0	35	4	39	0.034	100–242	
		2004	VM	24	RB	0	37	4	41	0.028	125–230	
			VM	24	SS	5	16	9	30	0.021	100–270	
		2007	FK	23	RB	1	18	0	19	0.014	125–165	
			VM	22	RB	0	21	15	36	0.027	136–355	
			FK	23	SS	34	87	0	121	0.088	105–195	
			VM	22	SS	0	76	1	77	0.058	106–236	

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Lake	Size (acre)	Year	Gear[a]	Hours Set	Species[b]	<100 mm	100-200 mm	>200 mm	Total	CPUE	Length Range[c]	Comments
Chugach	18	2002	FK	24	RB	0	86	19	105	0.073	120–309	
Estates			VM	24	RB	0	36	18	54	0.038	135–352	
			FK	24	SS	0	18	9	27	0.019	110–252	mature males milting.
			VM	24	SS	0	6	4	10	0.007	115–238	mature males milting.
		2005	FK	23.5	RB	0	16	11	27	0.019	155–240	
			VM	23.5	RB	0	4	17	21	0.015	174–400	
			FK	23.5	SS	0	4	14	18	0.013	184–370	
			VM	23.5	SS	0	0	12	12	0.009	204–230	
Douglas	90	2002	FK	25	RB	0	51	22	73	0.049	125–360	scales not taken—experimental net
			VM	25	RB	0	14	22	36	0.024	135–425	
		2005	FK	24	RB	0	15	40	55	0.038	148–355	
			VM	24	RB	0	13	48	61	0.042	148–406	
Elephant	340	2000	FK	22	RB	0	45	30	75	0.057	110–300	
(Spirit)			VM	21	RB	0	11	32	43	0.034	147–480	
			FK	22	SS	1	136	9	146	0.111	101–272	
			VM	21	SS	0	17	67	84	0.067	105–282	
		2003	FK	25	RB	357	0	3	360	0.240	275–325	1 muskrat, 2 beetles, 50 sticklebacks
			VM	24	RB	0	0	32	32	0.022	264–425	
			FK	25	SS	0	64	9	73	0.049	105–275	
			VM	24	SS	55	71	63	189	0.131	108–415	
		2006	FK	24	RB	27	35	6	68	0.047	105–410	
			VM	21.5	RB	1	137	39	177	0.137	110–425	
			FK	24	SS	10	30	2	42	0.029	101–236	
			VM	21.5	SS	142	94	54	290	0.225	103–340	
Encelewski	101	2001	FK	24	RB	0	32	8	40	0.028	135–390	
			VM	22	RB	0	33	27	60	0.045	142–512	
		2004	FK	25	RB	0	16	3	19	0.013	135–320	over 300 stickleback
			VM	24	RB	0	145	35	180	0.125	133–470	
		2007	FK	24.5	RB	0	33	22	55	0.037	133–318	
			VM	24	RB	0	49	33	82	0.057	125–378	

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Lake	Size (acre)	Year	Gear[a]	Hours Set	Species[b]	<100 mm	100-200 mm	>200 mm	Total	CPUE	Length Range[c]	Comments
Island	268	2000	FK	23	RB	14	10	1	25	0.018	122–554	
			VM	22	RB	0	5	9	14	0.011	162–447	
		2003	VM	21	AC	0	10	69	79	0.063	163–455	
			FK	24	RB	0	3	8	11	0.008	165–352	
			VM	21	RB	0	4	24	28	0.022	169–480	
		2006	FK	25	AC	0	0	3	3	0.002	375–405	
			VM	26	AC	0	0	42	42	0.027	208–470	
			FK	25	RB	18	8	5	31	0.021	118–334	
			VM	26	RB	0	6	17	23	0.015	120–498	
Jerome	16	2001	FK	24	RB	2	39	18	59	0.041	144–294	
			VM	25.5	RB	0	43	32	75	0.049	130–337	
		2004	FK	29	RB	94	68	26	188	0.108	140–365	4 Dolly Varden
			VM	28	RB	1	31	79	111	0.066	140–340	25 Dolly Varden
		2007	FK	25	RB	0	15	9	24	0.016	148–314	
Johnson	85	2000	FK	25	RB	0	37	14	51	0.034	109–319	6 stickleback
			VM	25	RB	0	45	58	103	0.069	112–409	
		2003	VM	21	RB	0	0	44	44	0.035	232–460	
		2006	FK	23	RB	0	0	5	5	0.004	275–440	fin deformities
			VM	23	RB	0	0	21	21	0.015	243–455	fin deformities
Long	15	2003	VM	23	RB	0	9	22	31	0.022	130–465	
		2006	VM	23	RB	0	33	22	55	0.040	120–300	
Longmare	172	2000	FK	30	RB/SS	NA	NA	NA	0	0.444	NA	approx. 800 trout+coho, unsampled
			VM	29	RB	0	4	46	50	0.029	110–393	
			VM	29	SS	0	159	12	171	0.098	100–238	
		2003	FK	23.5	RB	0	9	4	13	0.009	103–341	
			VM	21	RB	0	30	14	44	0.035	105–375	
			FK	23.5	SS	3	141	0	144	0.102	100–198	
			VM	21	SS	0	84	4	88	0.070	103–240	
		2006	FK	21	RB	3	18	6	27	0.021	132–305	
			VM	19.5	RB	0	24	30	54	0.046	147–435	
			FK	21	SS	113	79	10	202	0.160	103–280	
			VM	19.5	SS	2	65	7	74	0.063	102–245	

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Lake	Size (acre)	Year	Gear[a]	Hours Set	Species[b]	<100 mm	100-200 mm	>200 mm	Total	CPUE	Length Range[c]	Comments
Loon	18	2002	FK	26	SS	0	173	3	176	0.113	101–220	
			VM	26	SS	0	51	0	51	0.033	105–193	
		2005	FK	20	RB	0	40	25	65	0.054	135–315	
			VM	20	RB	0	23	23	46	0.038	145–338	
			FK	20	SS	0	0	8	8	0.007	230–265	
			VM	20	SS	0	0	1	1	0.001	283	
Meridian	15	2003	VM	23	RB	0	26	14	40	0.029	124–483	
		2006	VM	24	RB	0	45	7	52	0.036	118–490	
Quintin	14	2001	FK	23	RB	30	0	0	30	0.022	N/A	
			VM	24	RB	0	0	7	7	0.005	414–476	
		2004	FK	21.5	RB	0	29	13	42	0.033	125–300	stickleback and tapeworm
			VM	21.5	RB	0	18	8	26	0.020	148–327	1 lake trout
		2007	VM	23.5	RB	0	1	17	18	0.013	195–340	
Rainbow	15	2002	FK	24	RB	0	16	4	20	0.014	115–255	
			VM	24	RB	4	108	33	145	0.101	125–270	
		2004	VM	25	RB	0	10	10	20	0.013	145–325	
		2007	VM	N/A	RB	0	3	5	8	unknown	146–263	net was disturbed
Roque	5	2000	FK	24	SS	0	618	0	618	0.429	105–182	did not sample 450 coho
		2003	FK	25	RB	22	0	0	22	0.015	<100mm	
			FK	25	SS	0	24	0	24	0.016	158–200	
			VM	24	SS	0	33	2	35	0.024	164–223	
		2006	VM	26	RB	0	1	17	18	0.012	200–308	
Scout	95	2000	FK	24	SS	3	459	7	469	0.326	100–342	did not sample 375 coho
		2003	FK	19	RB	5	0	0	5	0.004	N/A	4 sculpin, 100+ stickleback
			FK	19	SS	1	61	2	64	0.056	125–360	4 sculpin, 100+ stickleback
			VM	19	SS	0	24	1	25	0.022	103–235	
		2005	VM	23.5	SS	0	2	0	2	0.001	115–125	2 pike 534-565 mm

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Appendix G1.–Page 4 of 4.

Lake	Size (acre)	Year	Gear[a]	Hours Set	Species[b]	<100 mm	100-200 mm	>200 mm	Total	CPUE	Length Range[c]	Comments
Sport	72	2000	FK	24	RB	0	39	35	74	0.051	133–330	
		2003	FK	21	RB	11	57	20	88	0.070	108–320	
			VM	21	RB	0	14	35	49	0.039	140–360	
		2006	FK	25	RB	0	138	12	150	0.100	115–365	
			VM	26	RB	0	22	20	42	0.027	130–467	
			VM	26	KS	0	8	0	8	0.005	170–190	
Thetis	38	2001	FK	26	RB	0	52	9	61	0.039	111–258	
			VM	23.5	RB	0	62	28	90	0.064	118–504	
		2004	VM	22	RB	0	0	10	10	0.008	265–455	
		2007	FK	23	RB	11	15	11	37	0.027	125–354	
			VM	23	RB	0	8	24	32	0.023	176–486	
Tirmore	52	2001	FK	23.5	RB	2	14	0	16	0.011	105–156	
			VM	23.5	RB	0	47	25	72	0.051	106–288	
		2004	FK	21.5	RB	15	0	0	15	0.012	N/A	lots of stickleback
			VM	21.5	RB	0	0	8	8	0.006	370–510	
		2007	FK	24	RB	0	7	9	16	0.011	134–412	
			VM	24	RB	0	11	20	31	0.022	162–518	
Troop	27	2003	VM	25	RB	0	14	14	28	0.019	143–315	
		2006	VM	25	RB	0	30	21	51	0.034	122–384	
Upper Summit	258	2001	FK	24	RB	1	28	3	32	0.022	105–229	1 Dolly Varden
			VM	24.5	RB	0	26	12	38	0.026	110–334	245 Dolly Varden
		2004	FK	24.5	RB	0	1	0	1	0.001	120	5 Dolly Varden, 60 Stickleback
			VM	24	RB	0	17	20	37	0.026	115–535	253 Dolly Varden
		2007	FK	23.5	RB	48	132	4	184	0.130	104–224	14 Dolly Varden
			VM	22	RB	0	31	27	58	0.044	104–555	
Vagt	43	2002	VM	25.5	RB	1	165	32	198	0.129	102–400	
		2004	VM	24.5	RB	0	41	10	51	0.035	120–320	
		2007	VM	24	RB	0	82	14	96	0.067	115–395	

[a] VM = variable-mesh sinking gillnets; FK = fyke nets.

[b] AC = Arctic char, KS = Chinook salmon, RB = rainbow trout, SS = sockeye salmon.

[c] Length range does not include fish caught less than 100 mm