State of Alaska
Department of Fish and Game
Nomination for Waters
Important to Anadromous Fish

1985
Year of Revision

ALASKA DEPT. OF FISH & GAME
SEP 17 1985
HABITAT
REGIONAL OFFICE

85310

Anadromous Water Catalog Volume I

USGS Quad Sitka A-4, Sitka B-4

Name of Waterway Nakwasina River

Anadromous Water Catalog Number of Waterway
113-43-10010; 2005, 2013

Change to _____ Atlas
_____ Catalog
X Both

Addition X
Deletion _____
Correction _____

Name addition:
USGS name Nakwasina River
Local name " "

ALASKA DEPT. OF FISH & GAME
OCT 11 1985
REGION II
HABITAT DIVISION

For Office Use

Nomination # _____

Richard Reed 10/9/85
Regional Supervisor Date

OK SRS 10/15/85

TB 10-16-85
Drafted Date

Species	Date(s) Observed	Spawning	Rearing	Migration
Sockeye salmon	9/20/82, 9/16/83, 9/9/83	X		

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.
During fall chum surveys on the Nakwasina River 3 spawning sockeye salmon were observed in 1982; at least one was a ♀♀. In 1983 special attention was given to finding sockeyes again. On 9/9/83 2 ♀♀ and 2 ♂♂ were found in 2013 (one ♀♀ checked - spawned out). On 9/16/83 a total of 9 sockeye were located in 2005 (a jack ♂) and 2013.

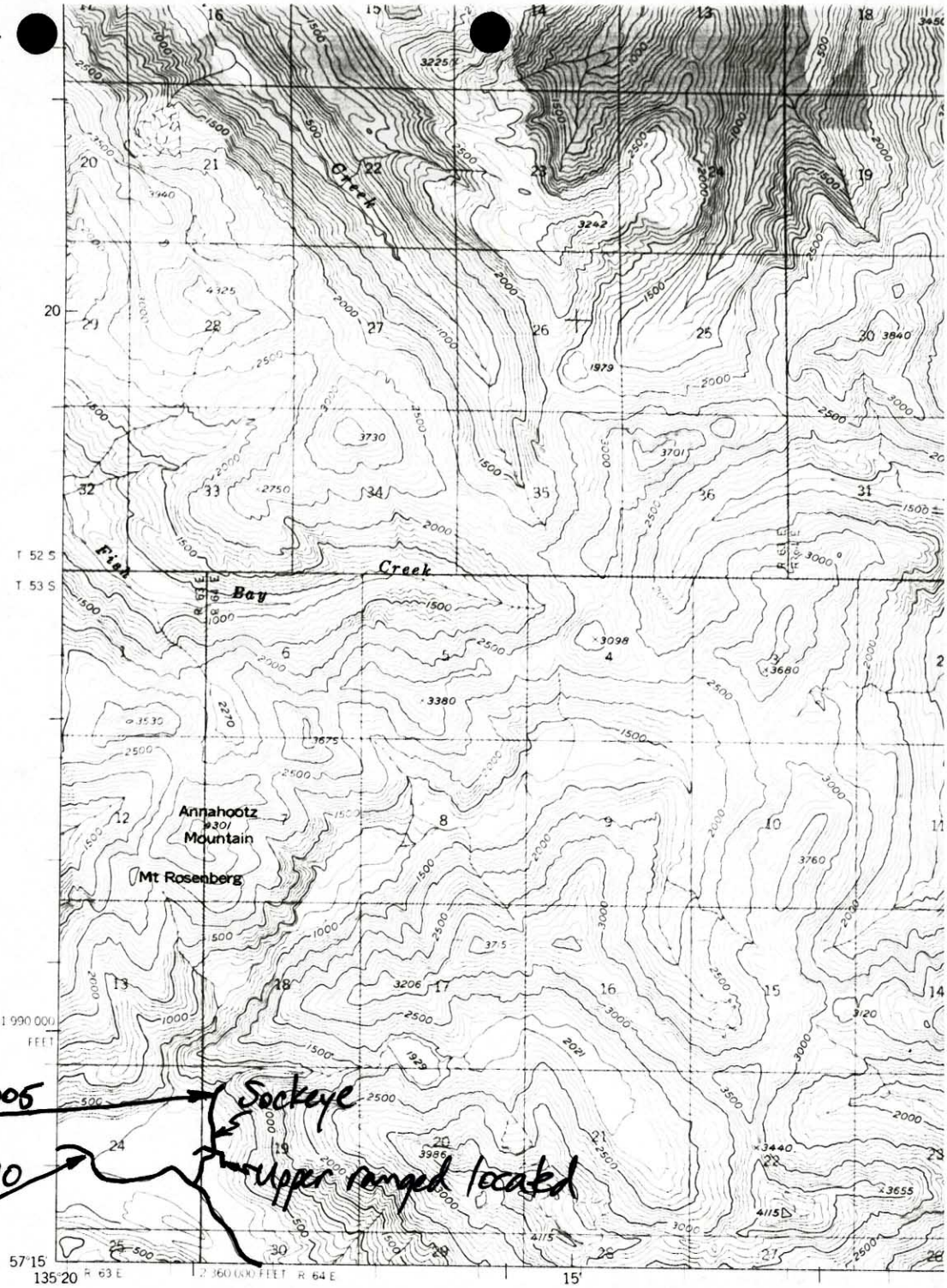
Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print) Mark G. La Riviere N.S.R.A.A. P.O. Box 2606 Sitka, AK 99835

Date: 9/13/85 Signature: Mark G. La Riviere

Address: Box 2606 Sitka, AK 99835

Signature of Area Biologist: _____



Nakwasina River (SITKA A-5)

Addition of sockeye salmon to spawning species

September 1983

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1948, field annotated 1951 Map not field checked

Selected hydrographic data compiled from USC&GS Charts 8239 (1952) and 8283 (1933) This information is not intended for navigational purposes

Universal Transverse Mercator projection, 1927 North American datum
10,000 foot grid based on Alaska coordinate system, zone 1
1000 meter Universal Transverse Mercator grid ticks, zone 8, shown in blue

Land lines represent unsurveyed and unmarked locations predetermined by the State of Alaska, Divison of Lands Copper River Meridian

Entire land area is within the Tongass National Forest

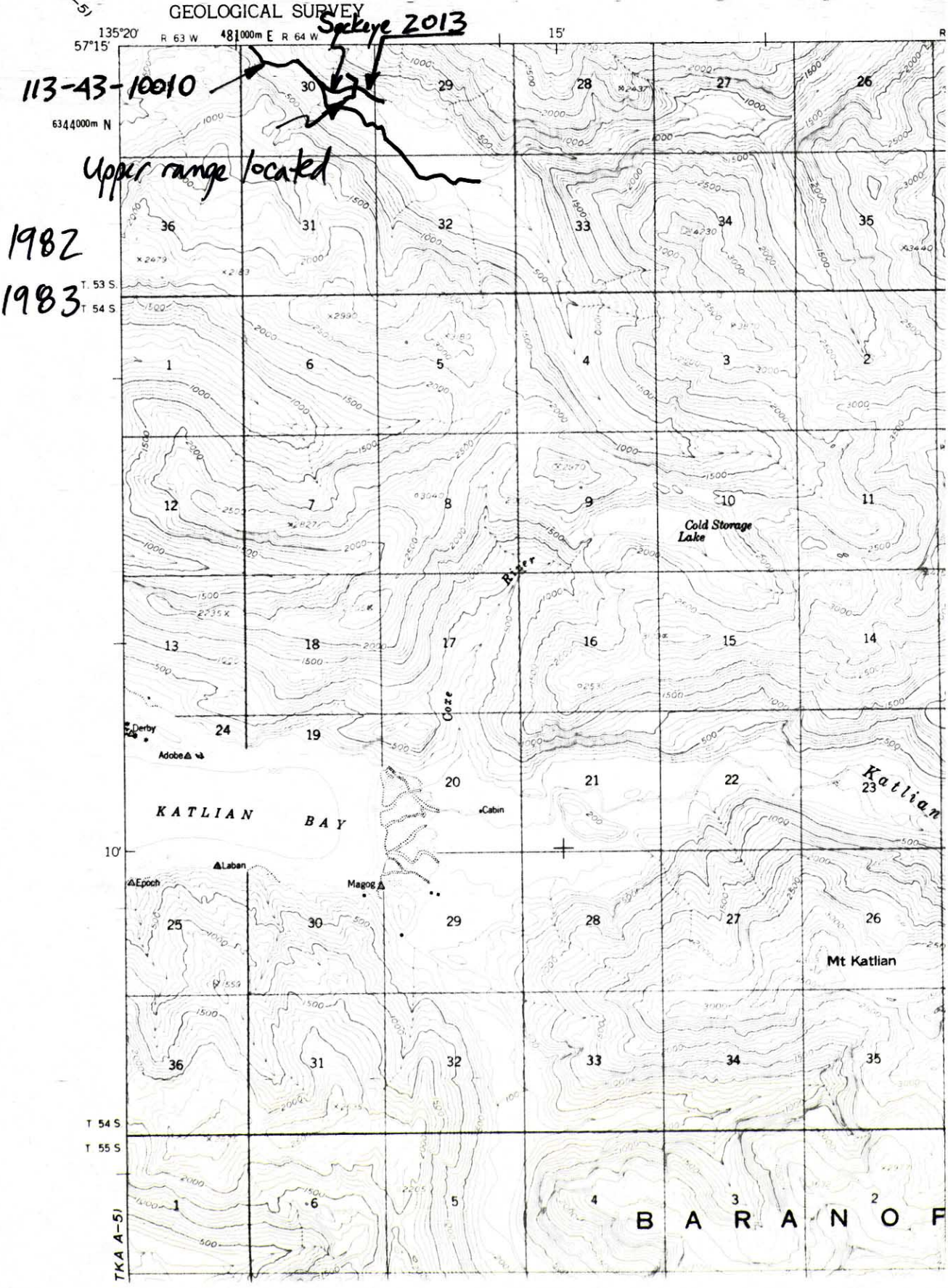
29½°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1951

NA
DEPTH
SHORELINE

FAIRBANKS, ALASKA
A FOLDER DESCRIB

Nakwasina River

Addition of sockeye salmon to spawning species



September 1982

September 1983

1982 STREAM SURVEY SUMMARY

Stream Identification (Name, I.D, number, location) Nakwasina River
113-43-02, head of Nakwasina Sound

Survey Period: 7/29 - 9/20/82 Number of Visits: 6

GENERAL STREAM CHARATERISTICS:

Barriers: low gradient, gravel bars and pools
none in lower 4 miles

Gradient: low

Substrate: gravel bars + pools

Spawning habitat: excellent for salmon, scouring probably exists

Temperature fluctuation: probably high 7.4°C to 8.6°C

Fish collection recommendation: beach seine in river, purse seine in Sound

FISH SUMMARY:

Species observed: DV, pink salmon, chum salmon, Pac. Staghorn sculpin, sockeye salmon

BKD ANALYSIS DATA:

Species	# Collected for Analysis	Results	Date Received	Estimated Run
Chum	60	<5% positive		5,742 1/
Pink	—	—		1000 1/

1/ Final count on 9/20 survey.

NSRAA/11/09/81

STREAM SURVEY FORM

Via Raven Copters 1300.

Stream Identification (name, ID number, location of mouth) Nakwasina River, 113-43-02, Nakwasina Sound

Observers: LaRiviere / Sigler Date: 9/20/82 Weather: High overcast

Depth at gaging site marker — Temp (°C) at gaging site —

Discharge (ft^3/sec) — Mean Velocity (ft/sec) — Area (ft^2) —

Fish Summary *(CoF = Condition of Fish)

Type of Gear	Site of Collection: (e.g. 1st pool above tidewater)	Fish Observed: (numbers, species, CoF, lenghts)	Fish taken for BKD analysis: (BKD number, species, sex, length, C
Walking survey	Live 4842	Chum salmon counts Dead 900	
		Total = 5742	

Comments: Helicoptered into upper river, Hillard 12 E dropped us off at base of cascade falls at base of peak 4230' on north side of valley. Counted going downstream except where necessary to go upstream in tributaries.

Majority of fish up left fork of main stream + tributaries near River Mile 3.0. Much bear sign, surprised one - within 20'. Noted 3 sockeye salmon in tributary above "forks".

Good comprehensive, instantaneous survey of chum escapement into Nakwasina River. Reached river mouth @ 2000 hours. Many carcasses on the stream banks indicating spawning peaked or nearing peak.

Fair numbers of fresh "green" chums in the intertidal.

1983 STREAM SURVEY SUMMARY

Stream Identification (Name, I.D, number, location) Nakwasina River
113-43-02, Nakwasina Sound

Survey Period: 8/10 - 9/16/83 Number of Visits: 4

GENERAL STREAM CHARATERISTICS:

Barriers: None in lower 3 miles of river, some large log jams in upper river

Gradient: low

Substrate: gravel bars & pools, fine to medium gravel

Spawning habitat: excellent except for unstable river bottoms

Temperature fluctuation: probably high - no temperature records in

Fish collection recommendation: Electroshoking + dipnetting in small tributarie
purse seining in the Sound, beach seining and dip netting in the river.

FISH SUMMARY:

Species observed: Chum, pink, sockeye and coho salmon. Dolly Varden char,

BKD ANALYSIS DATA: None in 1983.

Species	# Collected for Analysis	Results	Date Received	Estimated Run
Chum				6,449 1/
Pink				≈ 20,000
Sockeye				9 1/
Coho - low % found in lower river on 10/4/83				?

1/ Maximum escapement counted - total chum run probably nearer 8,000, sockeye unknown. Including NSRAA + SJC broodstock removal total run = 7437

NSRAA/11/09/81

STREAM SURVEY FORM

Stream Identification (name, ID number, location of mouth) Nakwasina River, 113-43-02, Nakwasina Sound

Observers: LaRiviere / Bill Davidson (SJC) Date: 9/9/83 Weather: Clear, sunny

Depth at gaging site marker — Temp (°C) at gaging site —

Discharge (ft^3/sec) — Mean Velocity (ft/sec) — Area (ft^2) —

River: low + clear, easily wadable in hipboots

Fish Summary *(CoF = Condition of Fish)

Type of Gear	Site of Collection: (e.g. 1st pool above tidewater)	Fish Observed: (numbers, species, CoF, lenghts)	Fish taken for BKD analysis: (BKD number, species, sex, length, C
	Chum Salmon	Pink Salmon	Sockeye salmon
	Live Dead	Live Dead	Live Dead
	3705 97	Not estimated - >20,000	4 (2♂, 2♀) Ø

Walking survey of Nakwasina River:
Counted intertidal portion first, then helicoptered (via Johnson Helicopters) into upper river, being dropped off on bar in front of HOEAD camp (in 1982). Surveyed going downstream from there, turning and following each tributary upstream as far as possible.

Comments: Departed Crescent Hbr via SJ whaler 0800, arrived off mouth of Nakwasina @ 0900. Surveyed lower river first then meet helicopter for short ride into upper valley @ 1000. Fair number of chum jumpers still in the Sound and good numbers of fish in lower river - especially pinks. Upstream limit of survey was first severe log jam encountered on right (south?) side of virgin spruce stand in valley bottom. Approximately 400 m above main river fork.

Several sockeye were again encountered this year in small groundwater(?) fed tributaries of the valley floor. Pink salmon had penetrated much further upriver this year than in 1982. No bears observed on this trip, although much sign was evident.

Very few carcasses relatively on this trip indicating main spawning yet to occur. No high water to this

STREAM SURVEY FORM

Stream Identification (name, ID number, location of mouth) Nakwasina River, 113-43-02, Nakwasina Sound

Observers: LaRiviere/Davidson (SJC) Date: 9/16/83 Weather: clear, cool in AM

Depth at gaging site marker _____ Temp (°C) at gaging site _____

Discharge (ft^3/sec) _____ Mean Velocity (ft/sec) _____ Area (ft^2) _____

River: Low + clear, still no high water to flush out carcasses yet. Lower than 9/9/83 survey.

Fish Summary *(CoF = Condition of Fish)

Type of Gear	Site of Collection: (e.g. 1st pool above tidewater)	Fish Observed: (numbers, species, CoF, lenghts)	Fish taken for BKD analysis: (BKD number, species, sex, length, C
	Chum Salmon Total count	Pink Salmon Not counted: estimated @ > 20,000 again.	Sockeye Salmon Live / Dead
	6,449 — approximately 35% of this total were carcasses.		9 / Ø (including 1 jack in NF)
	Walking survey of river: Started farther upstream this week, but still did not encounter chum salmon until we reached the area near the valley-bottom spruce stand. Discovered an additional tributary this trip (small, near the orange trailmarker) and penetrated farther up main spawning tributaries than before. Many more carcasses this week and all tributaries had a mix of chum and pink upon the spawning gro		

Comments: Departed Crescent Hbr. @ 0655 and met helicopter @ Nakwasina River mouth @ 0800. At 0807 we were dropped on a bar in upper river approx. 1 mile above previous week's drop-off, and site of 1982 drop off. Hiked downstream through dry braided channels and log jams until we reached beginning point of previous weeks survey. Continuing down to the fork we encountered a bear on bar where helicopter dropped us off. The week before 400-500 lbs. chocolate/brown colored. Nobody bothered anybody.....

The upper river and portions of the middle river were a mess! Erosion, trees fallen into the stream, huge log jams and very unstable gravel bottoms. In the pool @ the turn below the USGS station (since burned down) a large school of DV were stationed behind a larger school of pinks, giving rise to speculation on my part that the DV were hitting the sides of the pinks and forcing eggs out (as has been rumored). All in all a very enjoyable + fruitful trip.