State of Alaska
Department of Fish and Game
Sportfish Division

Nomination Form
Fish Distribution Database

Region: SCN

USGS Quad(s): TYONEK D-5

Fish Distribution Database Number of Waterway: 247-41-10200-2053-3205-4077

Name of Waterway: ☐ USGS Name ☐ Local Name

☐ Addition ☐ Deletion ☐ Correction ☑ Backup Information

For Office Use

Nomination #: 07 490

Revision Year: 2008

Revision to: Atlas ____ Catalog ____ Both X

Revision Code: F-1

ADF&G Fisheries Scientist	Date
ADNR OHMP Operations Mgr.	Date 10/17/07
FDD Project Biologist	Date
Cartographer	Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Sockeye salmon	9/17/2007			X	☑
					☐
					☐
					☐
					☐

IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: Sockeye salmon observed from helicopter in conjuction w/genetic sampling ~~no samples taken at this location~~ samples taken 108

Name of Observer (please print): Andy Barclay

Signature:

Date: 10/10/2007

Agency: ADF&G - CF

Address: 333 Raspberry Road
Anchorage, AK 99518

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Fish Distribution Database.

Signature of Area Biologist: email approval facts Date: 11/21/07

Name of Area Biologist (please print):

Revision 02/05

STATE OF ALASKA

DEPARTMENT OF FISH AND GAME

DIVISION OF COMMERCIAL FISHERIES

SARAH PALIN, GOVERNOR

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ANCHORAGE, ALASKA 99518-1599
PHONE: (907) 267-2105
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MEMORANDUM

TO: Bill Templin
Fisheries Geneticist III

DATE: 9/25/07

FROM: Andy Barclay
Fishery Biologist I

SUBJECT: UCI sockeye baseline sampling trip September 17, 2007

This memorandum summarizes the sockeye sampling trip on September 17, 2007. The purpose of this trip was to collect sockeye genetic samples from Johnson Creek and the Trimble River in the Yentna Drainage. There were only two people on the sampling crew for this trip; me and Adam Lipschultz from the Palmer office. The primary method of capturing was by gill or seine net. We collected an axillary process from each sockeye and put it into a bulk ethanol bottle for preservation. To fly to the sampling locations we used an R44 helicopter operated by Pollux Aviation based in Wasilla and flown by pilot Ray Hodges.

We left Wasilla at 09:00 and arrived at the mouth of Johnson Creek around 10:00. We flew up Johnson Creek from the mouth to the area where radio tags were located on August 28th. We started seeing salmon where the creek leveled out and was slower moving (N62.06525, W152.13955) (Fig. 1). We flew upstream to find a good concentration of sockeye for sampling. Most of the salmon in the creek were in deep holes and appeared to be coho. We turned when the creek became braided and there were no more salmon. We landed at a couple of places that had large clusters of salmon to see if we could net some for sampling. At both locations the salmon were too deep to determine if they were sockeye and they would swim away if we came too close to them. We found one sockeye in a small

side channel that was barely alive and captured it by hand for sampling. We also found one dead sockeye on a gravel bar that appeared to have been dead for about a day and sampled it. We couldn't find any places to capture sockeye on this creek so we headed to the Trimble River around 11:00. There were some coho in shallow side channels and there may have been sockeye in the side channels earlier in the season.

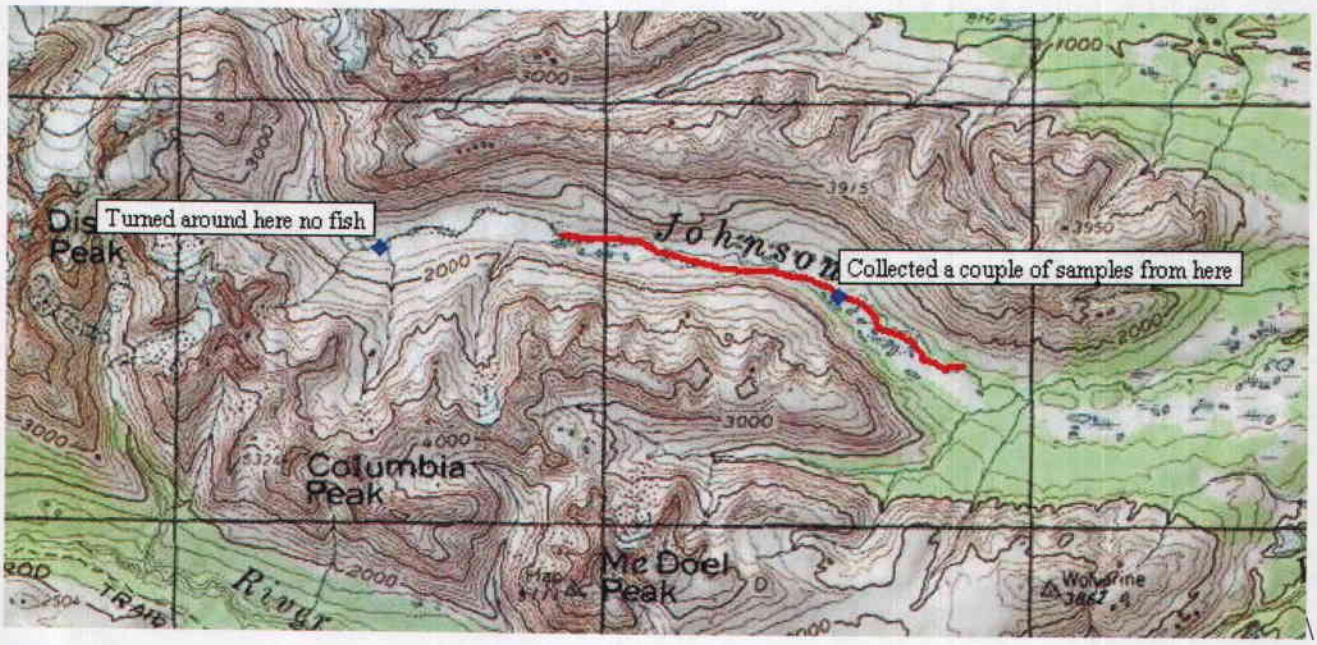


Figure 1 – The red line indicates where we saw salmon.

While flying to the location of the radio tags on the Trimble River we found a small stream with a beaver pond that contained over a hundred sockeye (N61.82009, W152.09809) (Fig.2). This stream was blocked by a series of beaver dams and the sockeye couldn't make it passed the first pond. The bottom of the pond was muddy and we couldn't see a place where the sockeye could spawn. We didn't witness any spawning and none of the sockeye we captured had spawned yet. We used the seine net to capture the sockeye for sampling by herding them down the pond to the shallow end. The sockeye could easily escape under the net in the deep parts of the pond. We collected 61 samples from this site in about three hours. At 15:00 we decided to look for another location on the Trimble River for sampling.

We found a creek full of sockeye just over a mile to the south of our first sampling site (61.80012, 152.09258) (Fig. 2). We flew up the creek about a mile and turned around to land a section of the creek that had a high concentration of sockeye. Some of the sockeye in this creek were paired up and on redds, but many of the sockeye hadn't even spawned yet. This creek had a rocky bottom and was

only about a foot deep in most places. We used the gill net to capture sockeye and by 17:00 we had collected 47 samples. Since we had collected over 100 samples from Trimble River and the pilot wanted to start heading back we decided to call it a day.

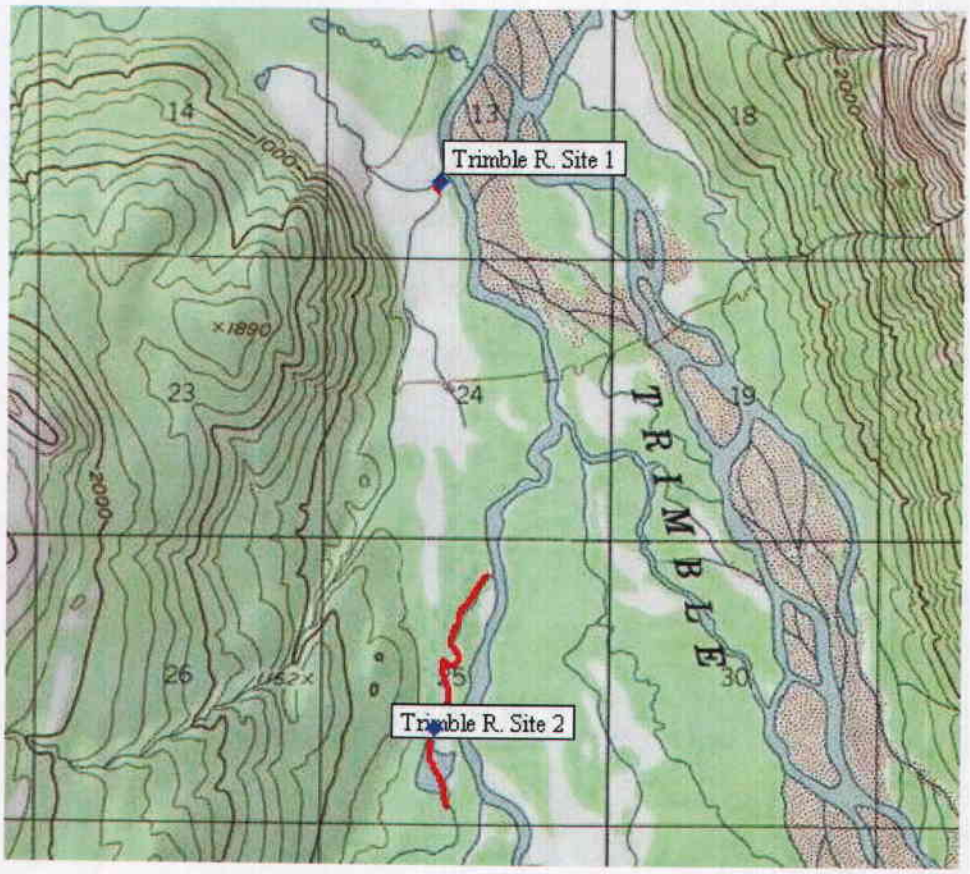


Figure 2 – Trimble River sites 1 and 2. Red lines indicate where sockeye were seen and dots show where sockeye were sampled.

On the way back to Wasilla we flew over a few creeks that contained sockeye and I set waypoints on the GPS to record their locations (Fig. 3). We also flew up the Talachulitna River to see if we could find any sockeye where the radio tags were located a couple of weeks earlier. We didn't see any sockeye on the Talachulitna, but we couldn't look for very long because we were running low on fuel. We landed at the Pollux Aviation hanger around 18:30.

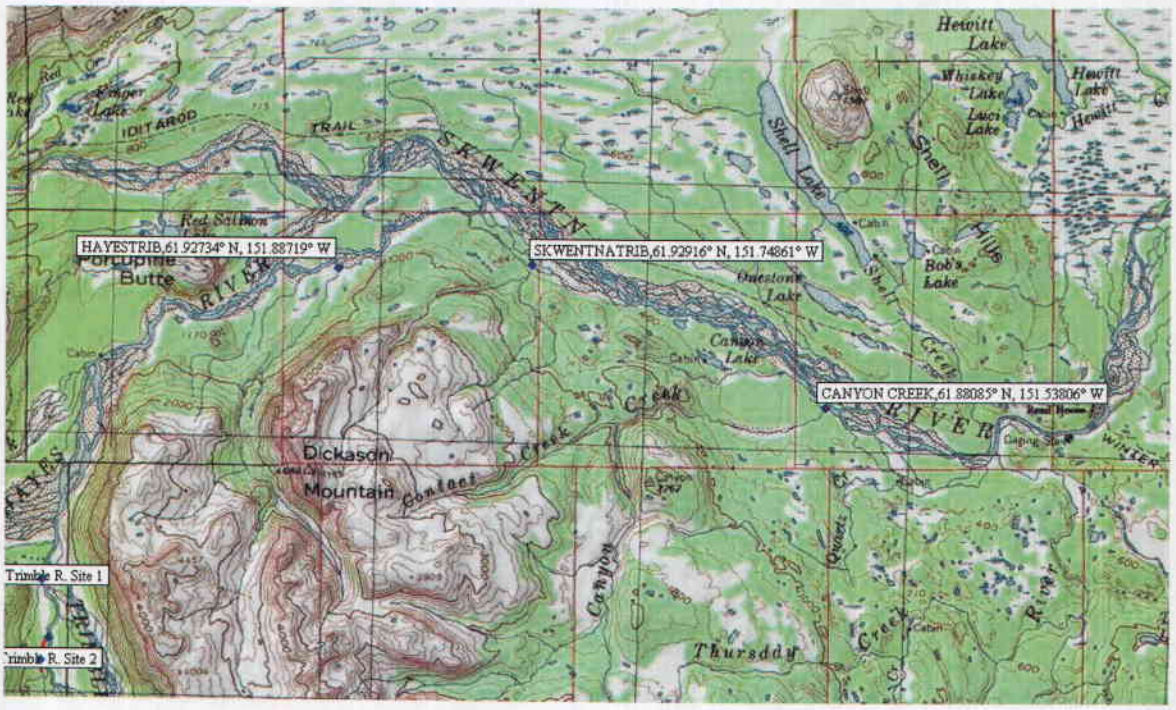


Figure 3 – Location of creeks where we found sockeye.

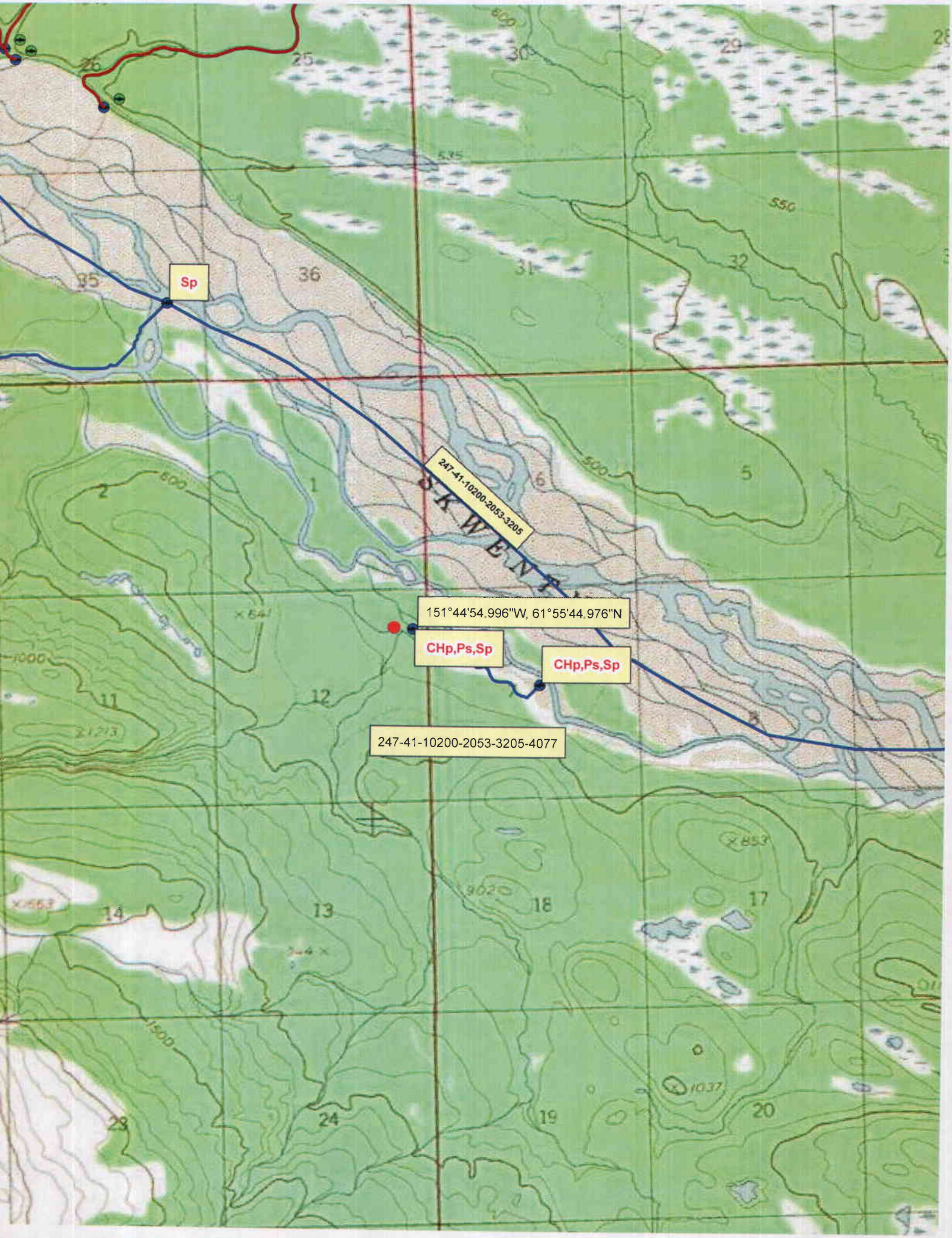
Comments

It would be nice to revisit Johnson Creek a little earlier in the season when there are more sockeye. A raft may be needed to drift through some of the deep holes with a gill net. However, it would be difficult to get a raft up there with an R44 helicopter due to its payload capacity and I didn't see a place where a plane could land. It looks like there are enough coho in this creek to make it worth collecting a baseline sample. Coho could be captured from this creek using a gillnet or by fishing rod. I don't think that snagging for coho would work very well here because the fish get spooked very easily. Using a lure and/or baited hook would probably be more effective.

Trimble River site 2 would be a good place to revisit if we would like to increase the sample size from this river. A crew of three people could collect a hundred samples at this location in less than two hours. We did see couple of coho at site 2 in the section where we collected our samples, but not enough for a collection. There may have been more coho in the creek, but we only looked at a short section.

The easiest way to access the three locations with sockeye that we found on our return trip would be by helicopter. There were a few cabins around the mouth of Canyon Creek and there might be an

airstrip nearby to land a small plane. However, a helicopter would still be the best way to get to where the fish are.


Sp
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CHp,Ps,Sp
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