

Allen Cove C. (3)

U.S. GEO. SURV. 1913

low head stage (this date)
oil flow is under log
lodged on falls at right
side. Channel this
side is 10 ft cfs. capacity
and salmon should get
up at with log removed.
Several small trout
in bed of channel
visible by fish in low
stages.

At 25 ft cfs head
practically passes
rock island on both
sides and salmon migrants
at least to bars, should
be able to make it
over falls.

At the higher stages,
heads over 50 cfs,
this falls probably
is a total velocity
block over the smelt
rock stream bed at this
falls.

Allen Cove C. (4)

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Recommendations
(1) Clear cut lodged
log and debris caught
on and under it. There
exists a natural
migrating route. With
small rock pools and
V-trough indentations
for migrants along
right side bank at
low flows. Probably
good passage route
to red or est cfs.

(2) Hold development
of this stage mitigation
planning until seen
under those conditions
for evaluation of estimate
and extent of development.
70 ft. of steep pass
fishway of logs found
to be desirable
installation, could be
placed for 12-15000.
Almost dry stage this
date. Thrush any
development costing

Forest Supervisor, South Tongass N.F.

2620

John B. Smith, Assistant Regional Forester

September 23, 1964

Planning

On September 12, 1964, Sheridan examined Aiken Cove Creek with Bill Carson, Kasaan District.

The fall, one-quarter mile above tidewater, appeared to be impassable at the time because low discharge (7-8 cfs) caused water to spread in a thin sheet over the right side of the bedrock channel. On a previous visit this fall also appeared impassable to pink and chum salmon because of high discharge (150 cfs). The presence of hundreds of coho fry of the year, both above and below the fall, is evidence that this species negotiates the barrier and occupies upper spawning grounds.

No adult salmon were observed above the fall--12 pinks, 4 chum, and 1 coho were observed below.

There is a minimum of 40,000 square feet of potential spawning area above the barrier. The streambed is composed of smaller rocks (1-5 inches in diameter) and is of better quality than the spawning area below the barrier (rocks 2-8 inches in diameter).

We are not thoroughly convinced that this barrier is impassable to pink and chum salmon at all water levels. Therefore, before further consideration is given to habitat improvement in the Aiken Cove stream, we need to know (1) if pink and chum salmon ascend the fall this season, and (2) how many salmon are spawning in the stream.

It would be possible to ladder the fall with 4-5 sections of stoeppass. It may also be possible to modify the barrier with powder so that pink and chum salmon can ascend, if they do not already do so.

Background information on the Aiken Cove Stream is given in the enclosed South Tongass Reconnaissance report.

Enclosure

KL.Sheridan/mtn

cc: Mr. Gil Ziemer

Files

October 7, 1964

Kenneth E. Mitchell, Forester

Habitat (Aiken Cove stream)

On October 2, 1964 Bill Carson and myself walked up the stream that runs into Aiken Cove, located in Moria Sound on Prince of Wales Island. The purpose of this trip was to observe (1) how many fish spawned below the falls, (2) if the salmon could climb the falls, (3) and the type and quantity of spawning gravel above the falls.

Between salt water and the falls approximately 2 - 3000 salmon were spawning. By specie there were about 80% chum and 20% pink salmon. The stream distance to the barrier is about one half mile. It should be noted that the majority of the spawning fish were within one quarter mile of salt water. Very few salmon were in the vicinity of the falls. Only a few coho were attempting to climb the falls.

Above the falls 2 - 300 coho were seen resting in the deeper holes. Many coho fry were also observed in this area. No chum or pink salmon were seen.

490 The stream above the falls is very unstable and evidence of great fluctuation in channel and water level is present. The gravel is generally quite small, 1/2 to 2 inches in diameter. About one half mile above the falls the stream fans out into several small streams. All of the coho seen were below this point.

This area has been logged sometime in the past. From the appearance of the stream channel, with deserted logs scattered along its banks, I would guess that this area had been "splash dam" logged.

Evidence of beaver dams could be seen at several places. Bill Carson and Bill Sheridan looked at this area 2 or 3 weeks ago and a large beaver dam was blocking the main channel. However, sometime between then and now a high intensity storm has completely washed this dam out. Only a few sticks remain to show where it was.

In conclusion I would say that the area above the falls has potential to produce pink salmon. However, there are several factors which should be investigated before such a costly project be undertaken.

1. Fluctuating water levels.
2. Inducing pinks to go up the stream that far.
3. Effect of the pinks on the coho that now use the stream.

cc: Bill Sheridan

AIKEN CREEK K-137, MOIRA SOUND

This stream (K-137) is located in Moira Sound, North Arm, Aiken Cove, southwest head. It is mainly a pink and chum salmon stream, with some coho also entering the system. Watershed area is close to five square miles. First examination was in May 1964.

In the early 40's, 135 acres, or 4 percent of the watershed, were cutover. A tractor road across the stream, near the mouth, swings well away from the creek until it arrives in the basin where the creek divides. The stream drains a gravel-filled valley, bounded by steep, abrupt rugged slopes. A fairly large, high altitude lake may afford some stability of flow. The tidal zone stream channel is well confined with gravel and gradient suitable for spawning. From tidewater to the fall, the creek is also well defined, fairly fast-flowing with coarse gravel. Tractor roads have stabilized and are growing up to reproduction and alder.

The stream was well above normal levels (150 second feet), and the fall at one quarter mile appeared to be impassable. This fall is 7 to 8 feet high and would not be difficult to ladder. Water levels were so high it was difficult to see the bottom. Therefore, a return visit is needed to this stream to determine the extent of spawning gravel above the falls. Such gravel would not have to be very extensive to justify laddering, since the project appears to be a very reasonable one.

In August 1965, the return visit mentioned above was made to Aiken Creek with Harry Simpson and G. L. Ziemer of Alaska Department of Fish and Game. Report was as follows.

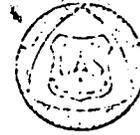
On a previous visit to Aiken Creek (with Beckman) stream discharge was 150 c.f.s. On August 25, 1965, discharge was 2 c.f.s. with the water intermittently disappearing beneath the gravel. Thousands of juvenile cohos, up to 5 inches in length, were stranded in pools where they will be confined until water rises. Some salmon were jumping off the stream-mouth, and about 60 dead, apparently unspawned salmon were observed at the 3/4 tide level. These events occurred as the result of a 20-year drought which created low water condition in streams throughout southeast Alaska. Coho fry and fingerlings were numerous above the fall; therefore, this species negotiates the barrier, which appears to be impassable to pink and chum salmon.

Kasaan Ranger District

September 3, 1969

REPLY TO 2630 Habitat

SUBJECT Monitoring Stream Improvement Project on Katz Creek



TO John T. Standerwick, District Ranger

On August 29, 1969, I walked up Katz Creek to the falls and observed numerous pink salmon and a few silvers. A large number of salmon were in the pool below the falls.

I walked the stream for approximately a mile above the falls and no salmon were noted.

The falls appear to be too steep for the salmon to climb. The side channel developed above the first drop didn't have any water in it, which would be necessary to climb the next drop around the log jam.

The falls will obviously require more rock work and 4 sections of steep-pass before the salmon will be able to make it up. Hank Norman will be called in to estimate the rock work required and an appraisal will be run on the stream for future development.

DAN SWANEY
Kasaan Ranger District

Dan Swaney

cc: SO

REPLY TO: 2620 Planning

October 7, 1969

SUBJECT: Stream survey report from Kasaan District

TO: Forest Supervisor, South Tongass N.F.

Thank you for the stream survey data for Dog Salmon, Aiken, and Ratz Creeks. Such evaluations are just as important as the initial construction of such projects.

With regard to Aiken Creek, dolly varden must be able to routinely ascend the falls each year, because this species does not usually remain in a stream over the summer where there is no access to a lake. Ordinarily, mature dolly varden leave a lake in the spring, enter saltwater, where they remain for awhile, then enter spawning streams in the fall. They usually then overwinter in a lake. It is possible that additional coho salmon entered the system after the date of the survey, September 9. The rearing area and not available spawning area is the main factor limiting production of coho salmon above the fall. In estimating a coho benefit cost ratio for the area above the fall, the rearing area should be used. Possibly coho do not have difficulty ascending the fall, and the system is supporting all the coho it can without additional improvement. Estimation of a benefit cost ratio for installation of steeppasses to allow pinks to ascend the fall would be based upon available spawning area as outlined in the benefit cost booklet.

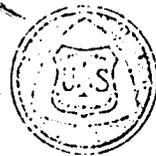
The observation of 140 pink salmon above the fall in Dog Salmon Creek certainly indicates that we may now have a foundation for an upstream run. Coho salmon may go all the way into the small lake and its inlets, if they can make it over all of the falls. According to a logging operator (I think it was Sinclair), who was in the area a few years ago, a small sockeye salmon run went all the way to the lake. Possibly the best way to get the largest number of pinks and chums over the fall into the upstream area would be to curtail fishing intensity in Polk Inlet and Skowl Arm. Perhaps you could consult with Carl Rosier regarding this possibility.

We agree with Don Swaney regarding a benefit cost analysis on laddering the fall in upper Ratz Creek.

WILLIAM SHERIDAN
Fishery Biologist

cc: Roy Rickey, ADF&G
Sheridan

BSheridan:pm



W.S.

1965

Aiken Creek, Kasaan District (Simpson and Ziemer)

This stream (K-137) is located in Moira Sound, North Arm Aiken Cove, southwest head. It is mainly a pink and chum salmon stream, with some coho and a few red salmon also entering the system. Watershed area is close to five square miles. A detailed description of this stream, the spawning potential and the barrier fall appears in previous reconnaissance reports, therefore will not be repeated here.