

121 S.W. Bay Blvd.  
Newport, Oregon  
August 12, 1952

SR #19

Investigation of fish stoppage due to log jams in the  
Yaquina River and Elk River, August 12, 1952.

Purpose of Investigation:

A survey was made on this date for the purpose of ascertaining whether or not log jams in the Elk City region of the Yaquina River and Elk River (Yaquina River tributary) were a serious menace to the passage of salmon.

Portion of Stream Surveyed (in relation to Elk City):

Elk City is located at the point where Elk River (Creek) empties into the Yaquina River, a little over thirteen miles by road in an easterly direction from Toledo, Oregon. The entire section surveyed is in tidewater which complicates the determination of the source of the logs causing the jams in the rivers. The following portions of the two rivers were surveyed:

Yaquina River:

Downstream from Elk City a distance of 1.55 road miles (the road roughly parallels the river for this distance). The following landmarks were measured from the Elk City junction:

- 0.25 mile log boom area containing a raft of logs extending  $\frac{2}{3}$  distance across stream from west bank
- 0.30 " Charles Hampton's log stockpile on easterly bank of river
- 0.50 " Charles Hampton's saw and planer mill on westerly bank of river.
- 0.75 " farm owned by Mr. Scoville on westerly bank near point where Abbey Cr. empties into Yaquina R.
- 0.80 " an unloading platform on the easterly bank of the river and directly downstream from this on the same side are logboom areas;

Findings:

A log jam was found 0.25 miles downstream from Elk City at the point where the logboom mentioned above was tied up to the westerly bank of the stream. Where the raft reached it's greatest width a free floating log had jammed crosswise of the stream between the logboom and the easterly bank of the stream. Debris such as old timbers, pieces of logs, and bark had backed up from this log on the upstream side for a distance varying from 25 to 50 yards. The river was estimated to be 90 feet wide at this point. All debris was free floating, and allowing 5 - 6 feet depth of water beneath the debris this jam was definitely not a hazard to the passage of fish.

An interview was obtained with Mr. Scoville, a farmer on the westerly bank of the river (see above). Mr. Scoville stated that the complaint of log jams in the river probably originated from anglers who could not pass freely up and down the stream due to the presence of log jams. He further stated that the Army Engineers required the logging companies to restrict the width of their boom or raft areas to  $\frac{1}{3}$  the width of the river. This apparently is only enforced when a complaint is registered. According to Mr. Scoville

the tide height in the Elk City region varies from a high of about plus 7.0 feet to a low of about 0.0 feet. This condition allows the debris present in the river to float back and forth with the changing tide. Mr. Scoville claimed that Charles Hampton operated his mill in a commendable way so as to cause a minimum amount of log jamming. He put the blame for the present jams on the C.D. Johnson and Guy Roberts logging companies, both of Toledo. The duration of any one log jam may be from a few days to the entire summer season.

The log jams are undoubtedly due to a combination of two factors, (1) narrowing of the stream due to log raft storage and (2) the presence in the stream of free floating logs and old boom sticks which are up to 60 - 70 feet long (80 feet per Mr. Scoville). The latter is believed to be the primary factor. The depth of water at Mr. Scoville's farm was approximately 5' at 1200 hours PST. The tidal action complicates tracing the ownership and origin of the free floating logs and boom sticks as they could have come from anywhere within the tidewater area of the Yaquina River. During the summer at which time the stream flow is the least the tidal action is therefore the most active in the transport of debris and logs. The river at that time is more nearly a closed system.

#### Upstream from Elk City on the Yaquina River:

The following landmarks and mileages from the Elk City road junction were noted:

0.00 miles	Elk City
0.10 "	covered bridge over the Elk River
0.65 "	private road branched to the left (westerly)
0.70 miles	bridge crossed the Yaquina River; log jam here
0.72 miles	F. & H. (may be F & A) lumber mill on westerly bank of river (dead end road)
1.60 "	G.E. Babbitt residence; log jam here
1.90 "	beginning of large boom area
2.10 "	end of large boom area

#### Findings:

The first log jam encountered was about 3/4 mile (0.70) above Elk City. Logs covered about 150 yards of stream. About 1/5 of the logs were large (50-60ft.). The rest were shorter logs and debris. Logs and debris appeared to have been in water sometime, i.e. not freshly cut timber. There were about 200 logs in this jam. This jam was not a fish block, but was definitely a navigational block.

Interviewed man at F & H log mill. He informed us a Mr. Bill Norwood living at Lincoln Hotel at Toledo does buying and general managing for Guy Roberts also of Toledo. The logs for both C. D. Johnson and Guy Roberts are often stored in stream until high water in fall when they are floated down to Toledo mills. He said many jams upriver similar to the one just surveyed were present. This jam formed some one or two weeks previously. He attributes most of booms and log storage in this area to C. D. Johnson and Guy Roberts.

At the Babbitt residence a small navigational jam of three to five logs blocked the stream. This was not a fish block.

At 1.90 miles above Elk City a boom area was discovered. Logs were stored from bank to bank for 0.2 mi. These apparently had been in stream for some time. Probably being held for transport downriver in the fall. Ownership of these logs was not established.

Most of the distance was covered by car and the river was not always visible hence, the number of jams observed would probably be minimum. Only portions of the stream were covered on foot.

Upstream from Elk City on the Elk River:

The following landmarks and mileages from the Elk City road junction were noted:

0.00 miles	Elk City
0.85 "	Log jam across stream
1.85 "	Turned around

Findings:

Only one block was observed, this being a navigational block only. It consisted of eight or nine logs and debris. The jam was at a bend in the river.

No other blocks were seen in this stretch of river.

SUMMARY

1. Log jams were numerous in the area surveyed.
2. Cause of log jams was old free floating logs and boom sticks, which when lodged crosswise in river bed ~~cross~~ stopped all other debris.
3. All log jams observed were navigational blocks but not fish blocks.
4. The source of loose, free floating logs was probably from logging operations of the C. D. Johnson Lumber Co. and the Guy Roberts Lumber Co. of Toledo.
5. The source of the complaint of log jams in this area probably came from fishermen who were unable to use boats freely in the stream.
6. It is not an impossibility that the log jams observed could become a hazard to the passage of fish if allowed to remain for an indefinite period of time.

Respectfully submitted,  
Lowell D. Marriage  
Kenneth D. Waldron  
Aquatic Biologists  
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