

## APPENDIX B

*Obstructions on the Fraser River watershed, the investigation and improvement of which is recommended by the International Pacific Salmon Fisheries Commission.*

Stream	Name of Obstruction and Location	Description and Importance	Remedial Measures
1. Fraser River.....	Hell's Gate Canyon.....	Impassable obstruction at certain water levels. Principal spawning grounds of the Fraser system are controlled largely by conditions at this point.	Construction of permanent fishways on each bank at point of obstruction.
2. Fraser River.....	Bridge River Rapids. 6 miles above Lillooet.	Two rapids 900 ft. apart. Both serious obstructions to salmon migration below 20 ft. level.* Over ¾ of available spawning area above this point. Formerly bulk of escapement spawned above this obstruction.	Construct fishways and improve channel for each rapids on both banks of river.
3. Lillooet River.....	Skookumchuck Rapids. 18 miles above Harrison Lake.	Rapids in constricted, canyon-bound channel. Records of sockeye delayed from 1 to 21 days. Blockade forms above 1 ft. level on gauge. Commonly inflicts heavy mortality on important Birkenhead run.	Install fishway on left bank and alter channel. Include 10 ft. maximum water fluctuations.
4. Chilcotin River..	Farwell Canyon. 11 miles from mouth.	Constricted, bedrock channel with fall of 4 to 6 ft. at obstruction. Blockade above 3 ft. level on gauge. Over 15% of Chilko ** run normally lost at this obstacle.	Construct fishway on left bank. Blast cut in rock on right bank. Cover 6 ft. maximum water fluctuations.
5. Chilko River.....	Keighley Holes 7 miles above confluence of Chilcotin River.	Channel between high dirt banks. Large boulders in bed cause fall of 5 ft. at obstruction. Chilko run ** layed at all common water levels.	Remove boulders and rock debris from channel. Construct baffles on right bank to reduce velocity of flow.
6. Quesnel River....	Rapids 4 miles below Likely.	Obstruction caused by tailings from Boullion mine. Present channel is constricted by dumped rock so that velocity of flow is too great for normal passage of salmon.	Remove rock debris from channel and restore original conditions.
7. Stellako River...	Falls 4 miles above Fraser Lake.	A 3 ft. falls located in spawning area is ascended with difficulty. Elimination of obstruction would encourage extension of spawning area to desirable streams above.	Reduce flow in channel.
8. Bowron River....	Gravel bars, mouth of Bowron River.	At low water stages there is not sufficient water on gravel bars to allow salmon to ascend.	Dredge one main channel for entire flow of river.
9. Morris Creek.....	Shallow channel. Mouth of Morris Creek.	Similar to above. At low water channel nearly dry caused by seepage near mouth. Run commonly delayed two to three weeks before able to enter.	Concentrate flow into one main channel.

\*Hell's Gate gauge.

\*\*Chilko run composes over 80% total escapement, 1940-1941.