

Chehalis River Fishery Assessment (Creel) Survey **October 1 - December 11, 2001**

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Regulations

Chehalis River was open from the logging bridge, 2.4 km below Chehalis Lake, to the confluence of the Harrison/Chehalis Rivers, including tributaries to that part. The recreational fishery was closed at night, from one hour after sunset to one hour before sunrise. Coho retention of 4 hatchery fish per day (only 2 can be over 35 cm) was permitted from July 1 to March 31. Chum retention of 2 fish per day was permitted from November 1-November 30. Chinook retention was permitted from June 1 to August 10 (4 per day, only 1 over 62 cm) and from September 16 to December 31 (4 per day, only 1 over 62 cm). No fishing for chinook was permitted from Jan 1 to May 31 and from August 11 to September 15.

Study Area

The Chehalis River study area extended from the mouth of the river to the bottom of the canyon (upstream of the Chehalis River Fish Hatchery).

Survey Methods

The Chehalis River recreational fishery survey began on October 1, 2001.

The surveyor worked all weekends and holidays with rotating days off during the week. They worked one of two shifts (morning or afternoon) that spanned the entire daylight period. Shifts were randomly assigned to each survey day.

The surveyor conducted angler interviews at their survey sites to obtain the following information: where the angler was fishing, party size, length of angling trip, when their fishing lines were in the water, how much longer they intend to fish, target species, gear used, total catch retained, total catch released. Interviews were used to determine catch-per-unit effort (CPUE), release-per-unit effort (RPUE), and to summarize the angler characteristics listed above.

Daily effort is calculated using a combination of interview data, hourly rod counts conducted at the survey sites, and overflight rod counts of the survey area (conducted twice per week: one weekend and one weekday). Using total effort, CPUE and RPUE is

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expanded to determine catch and release numbers by species for the entire study area. Such analyses are documented in several DFO publications (Schubert 1992; Schubert 1995)

One surveyor assessed the Chehalis recreational fishery in October and early November, two surveyors assessed this fishery in late November and early December. Complete hourly rod counts commenced on October 4. Instantaneous effort counts began on October 13; counts occurred during peak effort (11:00 am).

To collect interviews, four key sites were selected where angling activity was concentrated. These sites included the following: Purdy's (downstream from hatchery), the Hatchery Hole, Easter Seal Run (upstream of hatchery in campground), and the Canyon. All sites were visited each survey day, with the surveyor's start point and direction of travel randomized each day. The time spent conducting interviews at each of these sites was determined based on previous angler effort; the sites with the greatest effort had the greatest survey time allocated. Complete interviews (anglers who had finished fishing for the day) were collected from these sites. Hourly rod counts were conducted each survey day at the Hatchery Hole since this was the location of greatest angler effort; the surveyor would return each hour to this site to conduct the hourly rod count. When two surveyors were present, one was stationed at the Hatchery Hole to conduct rod counts and interviews. The second surveyor conducted interviews from the remaining three sites (Purdy's, Easter Seal Run, Canyon). Again the surveyor's start point and direction of travel was randomized at these three sites and the time spent at these sites was based on the proportion of effort occurring at these sites.

For analyses the data were stratified into month and day type (weekend and weekday). Data were stored and analyzed using excel.

References

Schubert, N.D. 1992. Angler Effort and Catch in the 1985-1988 Lower Fraser River Sport Fishery. Canadian Manuscript Report of Fisheries and Aquatic Sciences No. 2170.

Schubert, N.D. 1995. Angler Effort and Catch in Four Fraser River Sport Fisheries, 1991. Canadian Manuscript Report of Fisheries and Aquatic Sciences 2267.

Acknowledgements

Technical support was provided by D. Haye and D.Cline. Data entry was provided by P. Lam. Technical assistance and study design input was provided by L. Kalnin, and K. Peters. Study design and analyses input and advice was provided by N. Schubert.