# <u>Chilliwack River Recreational Fishery Assessment (Creel Survey)</u> October 1 to November 30, 2001

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## Regulations

The fishing boundary for the Chilliwack River was from Slesse Creek down to the boundary signs near its confluence with the Fraser River. The recreational fishery was closed at night, from one hour after sunset to one hour before sunrise

From July 1 to March 31, salmon recreational catch limits was as follows:

• Coho: 4 hatchery fish (adipose fin clipped) per day

• Chinook: 4 per day, only 1 can be over 62 cm

• Chum: 1 per day

#### Study Area

The Chilliwack River sport fishery assessment study area was bounded by its confluence with the Fraser River (downstream boundary) and Slesse Creek (upstream boundary).

#### **Survey Methods**

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

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

Surveyors 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. Further, if permitted by the angler, the surveyor inspected the catch to determine whether the angler's species identification was



correct. 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 overflight). Using total effort, CPUE and RPUE is 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)

Four surveyors assessed the Chilliwack River recreational fishery. **Two surveyors** conducted a bus-route approach survey of the upper and lower sections of the river with no overlap in their respective ranges; in October the Vedder Bridge was selected as the boundary between the upper and lower sections of the river; in November Twin Cedars/Ways Field was selected as the boundary due to shifting angler effort further upstream. These two surveyors conducted interviews of anglers in the process of fishing (incomplete interviews). The sites surveyed were pre-selected for a biweekly period based angler distribution observed on previous roving surveys and overflights of the river. The surveyors' start point and direction of travel (upstream or downstream) was randomized each survey day to ensure that the entire survey area was assessed and that each site was visited at different times of the survey day. A third surveyor was stationed at an access-point located, depending on the month, at the Keith Wilson Bridge in October and Lickman road in late October and early November, and Limits Hole (adjacent to hatchery) in <u>late November</u>. This surveyor obtained exit interviews from anglers and conducted hourly rod counts. A fourth surveyor was stationned at the Boulder Run in October where they obtained exit interviews from anglers and conducted hourly rod counts.

For analyses the data were stratified into month and day type (weekend and weekday) and region. 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.

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