River Guardian Program Horsefly, Quesnel, Mitchell, and Chilko Rivers Summary Report 2008

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Table of Contents

Abstract	v
Introduction	vi
Methods	1
Surveys	1
Horsefly River	1
Quesnel River	2
Chilko River	2
Mitchell River	3
Angler Interviews	3
Freshwater Fishing Regulatory Compliance	4
Results	5
Horsefly River Anglers Interviewed	5
Horsefly River Angler Effort	7
Horsefly River Angler Success	9
Angler Distribution	11
Horsefly River Angler Residency	12
Regulatory Compliance	13
Quesnel River Anglers Interviewed	14
Quesnel River Total Estimated Angler Days	16
Quesnel River Non Guided Angler Success	18
Angler Distribution	19
Quesnel River Angler Residency	20
Regulatory Compliance	21

Chilko River	. 22
Mitchell River	. 22
Summary	.23
Horsefly River	.23
Quesnel River	.23
Chilko River	.24
Mitchell River	.24
References	.25
Appendix	.26
Angler Comments	.26
Acknowledgements	.26
Table 1: Number of survey days and anglers interviewed by classification	5

Table 2: The Horsefly River estimated angler days for weekday or weekend days per month for 2008.	.9
Table 3: Number of survey days and anglers interviewed by classification1	4
Table 4: The Quesnel River estimated angler days for weekday or weekend days per month for 2008	17

Figure 1: 2008 Angler Questionnaire	4
Figure 2: Number of anglers interviewed during a patrol day on the Horsefly River	6
Figure 3: Catch per unit hour effort for non-guided anglers on the Horsefly River during 2008.	0
Figure 4: Anglers distributed by zone on the Horsefly River 2008 1	1
Figure 5: Permanent residence of anglers interviewed1	2
Figure 6: Horsefly River regulatory offences by category1	3

Figure 7: Number of anglers interviewed during a patrol day on the Quesnel River	15
Figure 8: catch per unit hour effort for non-guided anglers on the Quesnel River 2008.	.18
Figure 9: Anglers distributed by zone on the Quesnel River 2008	19
Figure 10: Permanent residence of angler interviewed	20
Figure 11: Quesnel River regulatory offences by category	21

Abstract

In the summer of 2008 two river guardians monitored angling activity on the Horsefly, Quesnel, Mitchell, and Chilko Rivers. Random roving patrols were conducted to determine the presence of angling activity. Anglers were contacted on the rivers either on foot or by boat. Interviews were conducted and information regarding location, time spent fishing, angler success, and permanent residence was recorded. Monitoring and compliance of current sport fishing regulations were also undertaken by the guardians. Due to logistical constraints, the majority of creel survey effort was prioritized towards the Horsefly and Quesnel Rivers, Which were visited 22 and 20 days respectively. The Mitchell and Chilko rivers were visited 5 days and 6 days respectively.

The Horsefly River is estimated to have received 339 unguided angler days from July to September. There were 32 resident and 21 non resident anglers surveyed. Unguided angler success recorded a catch per unit hour of 0.48. The most intense angling pressure occurred in the upper portion of the river. There were 5 anglers found to be fishing without a classified angling license. A total of 7 regulatory infractions occurred among 6 anglers.

The Quesnel River is estimated to have received 169 unguided angler days from July to August. There were 45 resident and 9 non resident anglers surveyed. Unguided angler success recorded a catch per unit hour of 0.89. A total of 29 regulatory infractions occurred among 19 anglers.

Introduction

In the year 2000 a river guardian program was initially implemented on the Horsefly River (Peard, 2000) and subsequently delivered in 2001, 2004, and 2006. Funding for the program was provided by the Quality Waters Strategy (Habitat Conservation Trust Fund). Objectives of the guardian program were designed to determine angler dynamics and catch success, estimate overall angling intensity, and monitor angler compliance with regards to current sport fishing regulations for the river system. The information provided assists fisheries managers to identify trends or concerns in order to manage the resource more effectively.

In the summer of 2008 the river guardian program was extended to four river systems in the interior Cariboo Chilcotin area. The Horsefly, Quesnel, Mitchell, and Chilko rivers were all monitored by the river guardians. The close proximity and easy access of the Horsefly and Quesnel Rivers allowed the guardians to monitor these rivers more frequently than the Mitchell and Chilko. The resulting creel data from the Horsefly and Quesnel rivers provides an interesting contrast between two rivers within the Quesnel Lake watershed. For the Mitchell and Chilko rivers, the focus was primarily on preliminary angler dynamics, information gathering, Ministry presence, and compliance monitoring.

Originating in the Quesnel Highlands the Horsefly River flows in a westerly direction approximately 98 kilometres where it enters Quesnel Lake. A variety of flow patterns exist throughout the river from a 10 metre waterfall to fast flowing runs and riffles, still water low gradient regions, and cascading canyons.

The Horsefly River provides valuable spawning and rearing habitat for a variety of anadromous and non anadromous salmonids. Fall spawning salmonids include sockeye (*Oncorhynchus nerka*), chinook (*O. tshawytscha*), and coho (*O. kisutch*) salmon. A late maturing biologically distinct sub-species of Quesnel Lake rainbow trout (*O. mykiss*) spawn and rear in the Horsefly River watershed before migrating to

Quesnel Lake. The river also contains populations of mountain whitefish (*Prosopium williamsoni*).

The Horsefly River is considered a key nursery area for the Quesnel Lake rainbow trout. Concerns regarding a decline of large adult rainbow trout numbers in the Quesnel Lake fishery resulted in catch and release regulations for rainbow trout over 50 cm being implemented in 2002. It was recognized that reduced populations in the rainbow lake fishery would have a direct impact on the river through a reduced recruitment rate resulting from lower numbers of potential spawning fish (Horsefly River Angling Management Plan 2006).

Objectives to preserve stock and provide reasonable fishing opportunities have lead to designating a portion of the Horsefly River a class II system beginning at Quesnel Lake and extending upstream to Horsefly River falls.

Quesnel Lake, a glacial fed fjord lake, lies at an elevation of 725 m and is rated the deepest lake in British Columbia. Quesnel River begins at the outlet portion of the lake, located approximately 90 km North/East of Williams Lake, and flows approximately 110 km in a northwest direction where it enters the Fraser River at Quesnel, BC (Andrusak and Dolighan, 2004).

The river contains a variety of anadromous and non anadromous salmonids including sockeye, chinook, coho (*O. kisutch*), rainbow trout (*O. mykiss*), and bull trout (*Salvelinus confluentus*). Shoreline access to this river is readily available and provides ample fishing opportunities to local residents of Likely, Big Lake and Williams Lake (Carlson et al. 2006).

Located in the Cariboo Mountains the Mitchell River is the second largest inlet stream entering Quesnel Lake. The diversity of the area provides habitat and supports a variety of large and small furbearing animals, birds, amphibians, and reptiles. The river travels approximately 19 km from the outlet of Mitchell Lake with the last 14 km meandering through oxbows and wetlands (Management Plan, 2002).

The river provides critical spawning and rearing habitat for non anadromous rainbow trout, and bull trout. The major anadromous species, sockeye salmon, are reported to have returns of 250,000 spawning fish in dominant years. Smaller spawning runs of chinook and coho salmon also utilize this valuable habitat.

Originating in the Pacific Coast Mountains region, the headwaters of the Chilko River are fed by glacial waters of Chilko Lake and flows in a northerly direction through the foothills of the Coast Range Mountains into the southern portion of the Cariboo Plateau. Just west of the town of Alexis Creek it joins the Chilcotin River and flows downstream where it enters the Fraser River south of Williams Lake, BC (Carlson et al. 2001). The Chilko River provides spawning and rearing habitat for a variety of anadromous and non anadromous salmonids including sockeye, chinook, coho, rainbow trout, and bull trout.

Methods

Surveys

Survey days were randomly selected and stratified by weekdays and weekends for the Horsefly and Quesnel Rivers, where the most intensive creels occurred. The Guardians covered the areas by conducted by roving vehicle or foot patrols, drifting a section of river in pontoon boats, or utilizing a jet boat. Prior to a survey, vehicle reconnaissance of common access points along each river were conducted to confirm angling activity. Guardians attempted to access all the anglers available within the survey area for the river visited each day. Survey times were conducted from mid morning to early evening.

Horsefly River

The Horsefly River is bordered by a significant amount of private property or rough terrain which limits angler access. Two separate roads, the Horsefly-Quesnel Lake road and the Black Creek road to the Horsefly river recreation site on 500 road, were first driven to confirm angling activity in areas typically used by anglers. The most common areas where anglers were expected to be found were:

- Squaw Flats recreation site
- Rat Creek
- Horsefly bridge recreation site
- Horsefly River spawning channel
- 106 km on Black Creek road (common pontoon boat launch site)
- 118 km on Black Creek road (common boat pick-up site)
- Horsefly River recreation site on 500 road

Should drift boat anglers be deemed present, the guardians would launch pontoon boats to cover sections of river deemed to have the highest use.

Quesnel River

The most common area for angling activity on the Quesnel River is near the town of Likely in an area referred to as the narrows. The narrows begin at the outlet of Quesnel Lake just above Poquette Creek and run downstream approximately 2.5 km to the bridge at Likely.

Anglers wishing to fish the river by boat typically fish the narrows section of the river. The river can be too treacherous for boats below the bridge at Likely especially during high water events. Other shoreline access points exist at Goat Island, below the Likely bridge, to a distance of approximately 2 km downstream.

An area known as the Bullion Pit is frequented by anglers. The Bullion Pit is located approximately 5 km downstream of Likely. It is a large secluded fast flowing region of the river with a large pool and spectacular view of an area which was subject to hydraulic mining in the late 1800's and early 1900's. Access to the Bullion Pit is on River Road. The last 1.5 km of this road narrows significantly and is difficult to drive for an average vehicle. Use of a heavy duty 4 wheel drive vehicle is highly recommended.

Survey days on the Quesnel River involved roving vehicle patrols of common angling areas. In some instances surveys extended to Quesnel Forks approximately 13 km down Rosette Lake Road.

Chilko River

The Chilko River, located approximately 280 km southwest of Williams Lake, begins at the outlet of Chilko Lake. Monitoring this river required driving towards Tatla Lake on

Highway 20 then turning off onto Tatlayoko Road and following the signs to Chilko Lake. Surveys completed on the Chilko occurred over a two day period. The guardians surveyed the river on the day of arrival and the day of departure.

The survey area began approximately 1km below the Gwa Da Ts'ih campground and extended downstream approximately 10 km to an area known as Lingfield Creek. The section below Lingfield Creek contains a rapids section which is generally avoided by anglers and boaters. Surveys required the use of a jet boat as the river is fast flowing and contains a significant number of large boulders throughout. There are very few shoreline access points for anglers.

Mitchell River

The Mitchell River flows into Quesnel Lake and is located approximately 35 km down the lake's North arm. The river was accessed by launching a boat on the east arm of Quesnel Lake and boating up the North arm to the river mouth. The river requires the use of a jet boat as it contains significant woody debris hazards and low flow gravel bar areas.

Angler Interviews

Once an angler was located the date, time and location were noted then the angler(s) were approached by the river guardians. After a short introduction, a request was made to interview and ask a series of pre-determined questions (Figure 1).

Creel Questionnaire 2008

Date: Time: Location:

- 1) Where is your permanent residence?
- Are you guided or unguided? If guided, by whom
- 3) How many fish have you landed today? Species? Length?
- 4) How long have you been fishing?
- 5) (If in a boat) Where did you put in?

Where do you plan to take out?

- 6) How many years have you been fishing this river?
- 7) How many trips a year do you make on this river?
- 8) Is the fishing better or worse in the past few years?

Figure 1: 2008 Angler Questionnaire.

Freshwater Fishing Regulatory Compliance

To ensure anglers were following the regulations a request was made to check their angling licence and hook currently in use. If an angler was determined to be noncompliant, with the regulations for the particular body of water they were fishing, they were advised of the infraction and requested to take steps to become compliant. They were further informed their infraction would be reported to the Conservation Office in Williams Lake.

Results

Horsefly River Anglers Interviewed

Surveys on the Horsefly River began on July 2, 2008 and ended on September 21, 2008. During this period 22 survey days occurred with 17 survey days taking place during the week, and 5 survey days completed on a weekend day. A total of 55 anglers were interviewed throughout the survey period (Table 1). Non-guided anglers represent the largest number of anglers interviewed n=51. A total of 4 guided anglers were interviewed. Due to the limited amount of data for guided anglers this report will concentrate on angler success for non-guided anglers.

	Weekday Surveys	Non-Guided Anglers Interviewed	Guided Anglers Interviewed
July	8	12	2
August	4	6	2
September	5	17	0
Total Weekday Surveys	17	35	4
	Weekend Surveys	Non-Guided Anglers Interviewed	Guided Anglers Interviewed
July	1	2	0
August	1	6	0
September	3	8	0
Total Weekend Surveys	5	16	0

Table 1: Number of survey days and anglers interviewed by classification on the Horsefly River

Angling activity started off slow in 2008. The first peak in activity occurred in mid July while a second peak occurred in late July early August. A third peak occurred in September during the annual sockeye run. During the course of the survey period there were 10 days where no anglers were located on the Horsefly River (Figure 2). Several factors may have contributed to the reduced level of angling activity observed.





A cool wet spring period persisted through May and June resulting in high water levels leaving sections normally fished from shore inaccessible until mid July. Initial interviews indicated poor catch results even from anglers with years of fishing experience on the river. The majority of those interviewed rated fishing success to be slower or worse than previous years. Angling activity increased during the early fall period which coincided with the annual sockeye return. The sockeye return stimulates piscivorous rainbow trout from Quesnel Lake to migrate into major tributaries in search of nutrient rich salmon eggs. These migrations provide a unique opportunity for anglers in this catch and release fishery (Andrusak & Dolighan 2004). The 2008 sockeye run was a sub dominant year for spawning salmon. Visual observations suggested a very sparse return for 2008. Many anglers contacted were quick to point out the low numbers of returning sockeye and reported a significant decrease in catch success over previous years.

Horsefly River Angler Effort

Due to the nature of the Guardian Program in 2008, which encompassed four rivers to varying degrees, the creel survey on the Horsefly was correspondingly limited in scope in comparison to those completed in previous years (2000, 2001, 2004, and 2006). The angler day effort calculations have been completed using the same methodology as in the past; however the creel data should be compared to previous years under this context.

Overall effort is estimated by expanding recorded monthly effort stratified by weekdays or weekends and applying the results to the entire month (Peard 2001). In the past, aerial surveys were done in conjunction with roving patrols to determine a percentage of anglers missed during a survey day (Peard 2001). Aerial surveys indicate roving patrols are able to locate 60 percent of anglers during a survey day. While no aerial surveys were done in 2008 it is assumed the guardians were able to locate 60 percent of the anglers. An expansion factor has been included to compensate for anglers missed during a survey day.

Angler effort is estimated by calculating a mean angler day value for both weekday and weekend days within a given month (Table 2). The mean angler day is equal to the total number of anglers surveyed during the month for weekdays and weekend days then divided by the number weekday or weekend day patrols. This value is then multiplied by the number of weekdays or weekend days (including statutory holidays).

The formula used to calculate the monthly estimated angler usage is: Estimated angler usage = $(1.4 * (\sum n/p * x))$

Where:

n= number of anglers
p= number of creel days
x= number of weekdays or weekend days (including statutory holidays) in a month
1.4= expansion factor

The estimated angler days per month are as follows:

- July 71 days
- August 134 days
- > September 134 days

The total estimated unguided angler days between July 1 and September 30 2008 are 339 days.

Table 2: The Horsefly River estimated angler days for weekday or weekend days per month for 2008.

Horsefly River Estimated Weekday Anglers							
	Angling Days	Creel Days	Angler Days (mean)	Multiplied by Number of Weekdays	Total	Expansion Factor 1.4	Estimated Non-Guided Angler Usage
July	12	8	1.5	22	33.0	13.2	46
August	6	4	1.5	20	30.0	12.0	42
September	17	5	3.4	21	71.4	28.6	100
						Total	188

	Horsefly	River	Estimated	Weekend	Anglers
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	Angling Days	Creel Days	Angler Days (mean)	Multiplied by Number of Weekend days	Total	Expansion Factor 1.4	Estimated Non-Guided Angler Usage
July	2	1	2.0	9	18.0	7.2	25
August	6	1	6.0	11	66.0	26.4	92
September	8	3	2.7	9	24.3	9.7	34
						Total	152

Horsefly River Angler Success

Angler success for unguided anglers is measured as a catch per unit hour effort (CPUH). Anglers were located and interviewed at various stages of their fishing day. Prior to contact, notes were made regarding time of day, location, etc. A zero catch and time spent fishing was recorded for anglers preparing gear and equipment prior to angling. Their data is not reflected in the CPUH statistic.

The CPUH for non-guided anglers for 2008 is 0.48 RB/hr which translates into 1 rainbow trout for every 2.1 hours angled. There was only one significant peak in CPUH of 2.80 RB/hr which occurred on July 11. A second peak occurred on July 16 with a CPUH of 1.25. All other angling success remained close to or below 0.48 CPUH average throughout the rest of the survey (Figure 3).





Figure 3: Catch per unit hour effort for non-guided anglers on the Horsefly River during 2008.

Angler Distribution

Past creel surveys have established 5 separate zones on the Horsefly River. These zones have been applied to the 2008 survey. Zone 1 begins at Quesnel Lake and runs upstream to Squaw Flats. This region accounted for 8 anglers surveyed. At Squaw Flats there is a small recreation site were shore fishing opportunities exist. Zone 2 begins at Squaw Flats and continues upstream to the Bridge at the Horsefly town site. There are very limited areas for shoreline fishing within this zone. No anglers were found in this zone. Zone 3 begins at the Horsefly town site bridge and runs upstream to Woodjam Bridge. Nineteen anglers were surveyed in this Zone. Anglers in this zone generally fish from shore near the town site bridge or launch pontoon boats at the 106 km marker on Black Creek Road and drift down to the town site bridge. Shoreline fishing opportunities exist provided river levels are not too high. Zone 4 runs from Woodiam bridge to the bridge on 500 road. A total of 22 anglers were surveyed in this zone. Most anglers utilizing this area launch pontoon boats near the bridge at 500 road and drift down to the 118 km marker on Black Creek Road. Zone 5 is upstream of 500 Road Bridge and includes the Horsefly River Forest Recreational Site. Shoreline anglers generally access this area when river levels are low enough to wade the river. Ten anglers were surveyed in this area (Figure 4).



Figure 4: Anglers distributed by zone on the Horsefly River 2008

Horsefly River Angler Residency

A total of 32 anglers interviewed were resident anglers with 16 anglers residing within a 200 kilometre radius of the Horsefly River. The balance of resident anglers (n=16) travelled from the lower mainland area.

There were 21 non resident anglers interviewed. Five of these anglers resided out of province while 16 resided in the United States (Figure 5).



Horsefly River Distribution of Anglers by Permanent Residence

Figure 5: Permanent residence of anglers interviewed.

Regulatory Compliance

If a sport fishing regulation infraction was noticed during an interview the issue was brought to the attention of the angler concerned. Information regarding the type of infraction, the angler's license number, and address were recorded. The information was passed along to enforcement officers in the Williams Lake office or called into the Report all Poachers and Polluters (RAPP) hotline. In total six anglers were found to be non compliant on the Horsefly river. Each angler found in non compliance was offered a copy of the sport fishing regulations for future reference.

Fishing without a classified angling license was the most common infraction. A total of 5 anglers were found to be fishing without the proper license requirements (Figure 6). Fishing with a barbed hook was another non-compliance occurrence. No other compliance issues were found during the survey.



Horsefly River Non Compliant Offences by Category

Figure 6: Horsefly River regulatory offences by category

Quesnel River Anglers Interviewed

Surveys on the Quesnel River began July 3, 2008 and ended August 26, 2008. A total of 19 survey days occurred with 15 surveys taking place on a weekday and 4 surveys completed during a weekend day. A total of 56 anglers were interviewed throughout the survey period (Table 3). Non-guided anglers represent the largest number of anglers interviewed n=52. A total of 4 guided anglers were interviewed.

Table 3: Number of survey days and anglers interviewed by classification on the Quesnel River

	Weekday Surveys	Non-Guided Anglers Interviewed	Guided Anglers Interviewed
July	8	26	4
August	7	11	0
Total Weekday Surveys	15	37	4
	Weekend Surveys	Non-Guided Anglers Interviewed	Guided Anglers Interviewed
July	2	9	0
August	2	6	0
Total Weekend Surveys	4	15	0

There were a total of 5 survey days where no anglers were located on the Quesnel River. There was one major difference between the Quesnel and Horsefly Rivers where angler activity may have been stimulated. In early July a significant stonefly hatch occurred on the Quesnel River. Rainbow trout were observed to be actively feeding throughout the day in the "narrows" portion of the river. Angling activity peaked from July 12 to July 21 which coincided with the stonefly hatch. A second peak of angling activity occurred in late July and early August (Figure 7). Insect hatches were evident throughout the summer on the Quesnel system which was in contrast to observations made on the Horsefly system.



Figure 7: Number of anglers interviewed during a patrol day on the Quesnel River.

Quesnel River Total Estimated Angler Days

During survey days when no angling activity was evident on the Horsefly River a decision was made to extend the survey to the Quesnel River. First, a roving patrol of all angler access points was completed on the Horsefly River. If no anglers were found the guardians drove to Likely to survey the Quesnel River. Approximately six survey days on the Quesnel River occurred on the same day as Horsefly River surveys.

The survey area for the Quesnel River was considerably shorter compared to the Horsefly River. Virtually all anglers utilizing the river during a survey were likely to be located, therefore no expansion factor was required to estimate the number of angler days per month (Table 4). The formula used to calculate the estimated angler usage is:

Estimated angler usage = n/p*x

Where:

- n= number of anglers
- p= number of creel days
- x= number of weekdays or weekend days (including statutory holidays) in a month

The estimated non-guided angler days per month are as follows:

- July 107 days
- August 62 days

Table 4: The Quesnel River estimated non-guided angler days for weekday or weekend days per month for 2008

Quesnel River Estimated Weekday Anglers						
	Angling Days	Creel Days	Angler Days (mean)	Multiplied by Number of Weekdays	Estimated Non-Guided Angler Usage	
July	24	8	3.00	22	66	
August	10	7	1.43	20	29	
				Total	95	

Quesnel River Estimated Weekend Anglers						
	Angling Days	Creel Days	Angler Days (mean)	Multiplied by Number of Weekend days	Estimated Non-Guided Angler Usage	
July	9	2	4.50	9	41	
August	6	2	3.00	11	33	
				Total	74	

Quesnel River Non Guided Angler Success

The average 2008 CPUH for the Quesnel River was 0.89 RB/hr which translates into 1 trout for each 1.1 hours of time spent angling. There were four peaks in angler success for 2008. The greatest peak of 4.0 RB/hr occurred on August 26. Two peaks of 2.56 and 2.5 RB/hr occurred on July 12 and August 6 respectively. A fourth peak of 1.73 RB/hr occurred on July 21 (Figure 8).



Quesnel River Catch per Unit Hour 2008 (Non-Guided Anglers)

Figure 8: Rainbow trout catch per unit hour effort for non-guided anglers on the Quesnel River 2008.

Angler Distribution

For the purposes of this survey the Quesnel River has been broken down into 3 zones. Zone 1 begins at Poquette Creek and covers the narrows portion of the Quesnel River to the bridge at Likely. A section of the narrows at the Likely town site proved to be a popular area for shoreline anglers. A total of 32 anglers fished in zone 1. Zone 2 starts at the downriver end of the Likely bridge and ends at Harmes road. The most popular area to fish in this zone is Goat Island just below the bridge. Eleven anglers were interviewed in this area. Zone 3 begins at Harmes Road and ends at the Bullion Pit. Very few accessible shoreline fishing areas exist in this zone. The most common place to fish in zone 3 is the Bullion Pit where 13 anglers were interviewed (Figure 9).



Figure 9: Anglers distributed by zone on the Quesnel River 2008

Quesnel River Angler Residency

A total of 45 anglers interviewed were resident anglers with 29 anglers residing within a 220 kilometre radius of the Quesnel River. The balance of resident anglers (n=16) travelled from outside the 220 kilometre radius.

There were 9 non resident anglers interviewed. Four anglers resided out of province while 4 resided in the United States and 1 in the UK (Figure 10).



Figure 10: Permanent residence of angler interviewed

Regulatory Compliance

There was a significant difference in amount and type of regulatory infractions found on the Quesnel River (Figure 11). In some instances, anglers were found to have several infractions. The river guardians interviewed 56 anglers and found 29 infractions among 19 anglers. The most common offence was fishing with a barbed hook (n=14). The second highest offence was fishing without a sport fishing license (n=6). Other offences include fishing in a closed zone (n=4), fishing with a treble hook (n=3), and fishing with bait (n=2).



Quesnel River Non Compliant Offences by Category

Non Compliant Offence

Figure 11: Quesnel River regulatory offences by category

Chilko River

The Chilko River received 6 survey days over the course of 3 trips to the area. The month of July resulted in two survey days with the remainder occurring in August. Interviews were conducted with 19 anglers of which 15 were guided. There were a total of 16 non resident anglers and 3 resident anglers interviewed. All anglers interviewed were compliant with current regulations. Discussions with the guides suggested a degree of non compliant activity occurring by unguided anglers in the area. These guides were encouraged to collect as much information as possible in the future and report any infractions to the local conservation office or the RAPP line.

During the first trip to the region it was discovered the Chilko Lake Lodge suspended operation for the 2008 season. The loss of operation of the Chilko Lake Lodge suggests the potential guided effort may have been reduced.

Mitchell River

Returning sockeye salmon stimulates angling activity on the Mitchell River as anglers seek out large migratory bull trout and rainbow trout. The Mitchell River received a total of 5 survey days with 3 surveys occurring in late August and 2 in September. Interviews were conducted with 17 anglers of which 9 were guided. There were a total of 9 non resident anglers and 7 resident anglers. Anglers indicated low catch success and a reduced sockeye run. All anglers were compliant with current regulations.

Summary

Horsefly River

- There were 22 surveys on the Horsefly River from July 2 to September 21, 2008
- > 51 unguided and 4 guided anglers were interviewed
- Zone 4 (bridge at 500 road to Woodjam bridge) received the majority of angler effort
- It is estimated the Horsefly River received 339 unguided angler days during the survey
- > Unguided catch success recorded a rainbow trout CPUH of 0.48
- > 32 anglers were BC residents 21 anglers were non resident
- There were 7 regulatory offences recorded. Fishing without a classified license was the most common infraction

Quesnel River

- > There were 18 surveys on the Quesnel River from July 3 to August 26, 2008
- > 52 unguided and 4 guided anglers were interviewed
- > Zone 1 received the majority of angler effort
- It is estimated the Quesnel River received 169 angler days during July and August
- Unguided catch success recorded a rainbow trout CPUH of 0.89
- > 45 anglers were BC residents 9 anglers were non resident
- 5 types of regulatory offences were recorded amounting to 29 infractions among 19 anglers

Chilko River

- There were 6 surveys conducted on the Chilko River from July 25 to August 20, 2008
- > 15 guided and 4 unguided anglers were interviewed
- > 16 anglers were non resident and 3 anglers were resident
- > There were no regulatory offences recorded
- The Chilko Lake Lodge suspended business operation for 2008 which suggests a reduction in guided angling effort

Mitchell River

- There were 5 surveys conducted on the Mitchell River from August 15 to September 12, 2008
- > 8 guided and 9 unguided anglers were interviewed
- > 9 anglers were non resident and 7 anglers were resident
- ➢No regulatory offences were recorded

References

Andrusak, H., Dolighan, R., 2004. Quesnel Lake Fish Interaction Workshop

Carlson et al., 2001. The Chilko River Watershed A Synopsis of Reports And a View to sustainability

Carlson et al. 2008., Quesnel River Creel Survey 2007

Horsefly River Management Angling Plan Ministry of Environment Environmental Stewardship Division Fish and Wildlife Division January 30, 2006

Management Plan for Bowron Lake, Cariboo Mountains and Cariboo River Provincial Parks February, 2002

Peard, D., 2001. River Guardian Program Horsefly River Summary Report

Appendix

Angler Comments

All anglers interviewed were encouraged to give any relevant comments which could be used to improve management of the resource or the guardian program. The majority of the comments received indicated a high regard for the guardians and the work they were doing. Most anglers were either impressed or happy to see a monitoring presence on these rivers. These anglers encouraged and supported the continuation of the program.

The most significant comment regarding management of the resource came from one angler with worldwide fishing experience. It was suggested anglers travelling to different water bodies should be required to disinfect wading boots and waders. The individual was concerned with the possible transference of aquatic organisms or pathogens by anglers to pristine watersheds.

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