

DRAFT

**Angling Management Plan
Skeena Quality Waters Strategy**

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1.0 Executive Summary

1.1 Quality Waters Strategy

For years, people have told the Ministry of Environment that waters in the Skeena River system have persistent steelhead angler-use issues — crowding, disproportionate numbers of non-resident anglers or guided anglers, lack of opportunities for resident anglers, illegal guiding, and poor angler etiquette — leading to a degraded quality of angling experience.

In response to these concerns, the ministry implemented the Quality Waters Strategy on the Skeena River and its major tributaries. The Quality Waters Strategy is a province-wide process that aims to maintain and improve the angling experiences offered on BC's world-class waters, by managing angler use, through the development of Angling Management Plans.

The primary objective of an Angling Management Plan is to establish a water-specific regulatory regime utilizing the least restrictive measures possible to regulate angler use to levels that maintain the quality of the angling experience.

An Angling Management Plan is not intended as a conservation tool, and as such, does not have in its scope the ability to prescribe conservation-based regulatory measures. An AMP does not address steelhead stock abundance related issues.

The Skeena Regional Quality Waters Management Committee (the Regional Committee) is a group of local representatives of resident anglers, the guiding community, and the Ministry of Environment. The Committee has been meeting for the past two years to oversee implementation of the Skeena Quality Waters Strategy, the community engagement process, and development of the Angling Management Plan.

As part of the process, the Regional Committee selected priority waters to be covered under this Angling Management Plan.

1.2 Working Group process

Members of the Working Groups who helped develop this Angling Management Plan were chosen through a vetting process developed by the Regional Committee. To be eligible, group members needed to demonstrate:

- Knowledge of the waters under discussion
- Endorsement by their angling peers
- Ability to focus on local-level planning
- Agreement with the principles, goals, rules of engagement and timeline for the process

According to the guidelines of the Quality Waters Strategy, the three geographically based Working Groups were comprised of four resident anglers, three licensed guides, and a Ministry of Environment representative. Each Working Group was assisted by an independent, professional facilitator (see Appendix A).

The Working Groups met three times over three months, each time for a two-day period over a weekend. In April 2008, all three groups met together in Terrace. In May 2008, each group met separately in their “part” of the watershed — Terrace, Hazelton and Smithers. In June 2008, all three groups met in Smithers.

Working Group members were expected to represent all interests, not just those immediately around the table, but those in the community who were not sitting at the table — primarily from the tourism, accommodation and hospitality businesses that generate significant economic benefits from the steelhead angling fishery. Working Group members were expected to take part as members of the community, not as representatives of any particular sector. They were supposed to try and focus on issues and interests rather than personal agendas and points-of-view.

One of the critical ways that all interests were represented was by using the information collected in the Phase I consultation process, which took place from January to March 2008 and was summarized in Dolan (2008). One of the key objectives of the consultation process was to provide information to the Working Groups for use in the development of Angling Management Plans.

The Working Groups had a tool box of regulations that they could use in the development of the Angling Management Plan. When selecting regulatory options, the Working Group attempted to utilize the least restrictive tools necessary to achieve the desired objectives. Decision making was also supported by existing angler-use data.

Addressing angler-use problems for the steelhead sport fishery on the Skeena River system is not a straightforward task due to the many “competing” interests. These competing interests include a strong sense of priority for BC resident anglers, which is also a fundamental principal of the Quality Waters Strategy. They also include a licensed guiding industry that offers a “high-end” product to clients who are mostly non-residents, and that produces economic spin-offs to the broader community as well.

The competing interests also include a local economy consisting of accommodations providers, restaurants, bait and tackle stores and others in the hospitality and tourism sector, who garner a significant proportion of their income from non-guided, non-resident steelhead anglers.

Any plan that attempts to address angler-use issues is challenged by these competing interests. The interests need to be clearly identified and articulated so that everyone knows what issues and concerns must be addressed in this problem-solving (or planning) process. In reality, an Angling Management Plan can neither solve all the problems perfectly, nor address everyone’s interests in a way that pleases them 100 per

cent. Instead, an Angling Management Plan seeks to optimize the results for all parties concerned, for all the interests around the table.

A Structured Decision Making process was used to address the range of competing interests in the steelhead sport fishery. Structured Decision Making is a systematic way to think about and resolve complex decision problems.

1.3 Angling Management Plan

The Skeena Angling Management Plan is intended to document the process considerations for the three Working Groups in developing their recommended management alternatives for each of the priority waters. The Angling Management Plan is enabled under Section 5.52(3) of the Wildlife Act and Section 5.11 of BC Regulation 125/90 Angling and Scientific Collection Regulation.

The report is organized by Working Group and then by priority water. Each priority water section is usually divided into the following sub-sections:

- Background information – brief description of the river
- Problems and issues - management and other issues identified on the river
- Management Elements considered – different management tools from the tool box that were considered by the Working Groups
- Management Element analysis – summary of why certain management elements were used and why others were not in the development of a recommended management alternative
- Target calculation – summary of how target number of anglers or angler days was calculated on certain rivers
- Recommended Management Alternative – final recommended management approach for a river

1.4 Overview of the problem

Following consultation with a broad range of stakeholders and members of the public as well as discussions with members of the Working Groups, the essence of the problem with steelhead angler use on the Skeena River system became clear. Some rivers at some times of year get very crowded. The most crowded parts of the season are usually the last two weeks in September and the first two weeks in October.

In the areas and times where angler-use issues are a problem, the Angling Management Plan relies on one main regulatory measure — the combination of a limited-day licence with a lottery system to allocate those licences evenly over the classified water period.

Working Groups considered a range of management options, but most of those options did not address the principal issue of trying to evenly distribute angling effort over the

entire Classified Waters period, so that there were not extreme peaks of angler use that caused crowding and poor quality angling at specific times in certain places.

The limited-day licence and lottery system is applied to the non-guided, non-resident sector of the sport fishery. There are several reasons for this:

- Consultations with stakeholders and the public indicated that the number of non-guided, non-residents fishing in some waters has increased considerably in the past few years and in many cases, that sector is a major component of the crowding problem.
- Many people cited specific examples of crowding caused by non-guided, non-resident anglers.
- The total number of guided anglers for each river is basically capped at specific levels. Ministry data as well as consultations with public and stakeholders suggest that in most instances guided anglers do not contribute to the crowding problem. There may be some situations where there are large numbers of guided anglers during peak times in the season, and changes to guiding regulations could be made to ensure that guided angler use was distributed more evenly over the entire Classified Waters period. However, the number of guides and assistant guides usually places a limit on the number of guided anglers on a river at any one time.
- In many cases, public and stakeholder groups said that resident anglers were not participating in the sport fishery due to crowding. Therefore, regulating the numbers of BC residents, other than trying to find ways to create more opportunities, would not be appropriate.
- One of the over-arching principles of the Quality Waters Strategy states that resident anglers and guided anglers have a higher priority than non-resident anglers on Classified Waters.

The solution to the crowding problem is not so much to reduce the overall angling pressure by non-guided, non-resident anglers on the rivers over the Classified Waters period, but to spread angler effort evenly over the entire Classified Waters period.

In order to spread angler use over a period of time, two things need to be in place. The first is to create a limited-day licence. Working Groups for the most part chose an eight-day licence for two reasons:

- Average length of fishing trip for most non-residents on most waters is similar to this number of days
- Eight-day licence has already been used on the Dean River in BC and is established in regulation

The second thing that needs to be in place is a lottery system. A lottery system is the only way to fairly allocate eight-day licences evenly over a Classified Waters period. There is a lottery system in place on the Dean River although it is an expensive process and involves a lot of ministry staff time. Lottery systems in the future could be integrated with the e-licensing system, but start-up costs may be high and so it is difficult to determine when the ministry might be able to implement this system.

Using past ministry data and local knowledge, the Working Groups developed an “ideal” number of anglers (sometimes referred to as carrying capacity) that can fish a particular water in one day. Those daily targets were expanded to produce targets for the entire Classified Waters period and then the number of eight-day licences that could be issued for that river was determined.

Some of the recommended management alternatives call for an immediate implementation of the eight-day licence and lottery based on the target number of non-resident anglers. Other call for a “trigger,” which means that if a target is reached twice in a three-year period, then that would trigger an eight-day licence and lottery system to come into effect.

The lottery system will require modifications to the province’s e-licensing system. Depending on the target number of non-resident anglers, a set of eight-day licences would be put into the e-licensing system such that they were spread over the entire Classified Water period for a particular river. For example, an angler could receive a licence for Sept 1-9, 2010 on the Kispiox River. All licence issuers would have access to this database until all the licences for each water were sold. A small number of licences could be “held back” for sale closer to the actual angling time. If demand for angling in a particular river were low, there could be the option of a second eight-day licence available to the same angler.

At an established date in the angling year, the lotteries for each river would be opened. An angler could apply to be included in the lottery on more than one river. There could be a provision that if you were unsuccessful in a lottery on a particular river in one year, you would have priority in the lottery on that water in the following year.

This system is very similar in concept to the Limited Entry Hunting (LEH) lottery that has been running for a number of years for hunting big game in BC.

The end result is that some people may potentially not be able to fish for as many consecutive days on one water as they used to. Some people will not be able to fish precisely at the same time of year as they used to. Some people may have to fish on different waters than they have in the past. And some people may not have an opportunity to fish on all the waters that they choose. But by spreading effort over the Classified Waters period, this approach has the least impact on the smallest number of non-resident anglers. And more importantly, it is the only way that the peaks of non-resident angler activity that contributes to crowding can be addressed.

1.5 Recommended Management Alternatives

It is important to note that all the statements in this Angling Management Plan are based on discussions and conclusions by Working Group participants. Although there was considerable expertise around the tables, there are likely lots of differences of opinion on the factual information and many points-of-view on the recommendations made.

That's why this is a DRAFT Angling Management Plan and that's why there is an extensive Phase II consultation process in the fall of 2008 to gather input on this draft plan from other stakeholders and members of the public.

The following are the Recommended Management Alternatives for each of the waters.

(Note: non-resident anglers mean anglers from other provinces in Canada plus anglers from countries other than Canada.)

1.5.1 Central Working Group: Kitseguecla and Kitwanga Rivers

The Kitseguecla and the Kitwanga Rivers were considered together because they are a similar size, resident anglers dominate both rivers, and access is fairly limited. There are no guided rod-days allocated on these rivers. The possibility of making these rivers resident-only throughout the season was considered but rejected because there are only a small number of fishing opportunities and it sends the wrong message to non-residents. Adding guided activity was rejected because the original intent was to offer some Classified Waters in the Skeena watershed that were not open to guided anglers. While crowding is only an occasional issue on these rivers, it was decided that residents should be given some priority. Changes to regulations on nearby waters such as the Kispiox may bring more pressure on these two rivers in the future.

The recommended management alternative is:

- Start with resident angler-only fishing on Saturdays and leave everything else as status quo
- If total angling pressure by non-guided, non-resident anglers exceeds 342 angler-days for two years out of three on the Kitwanga or 228 angler-days for two years out of three on the Kitseguecla, that would trigger a move to an eight-day licence lottery for these anglers with caps of two anglers per day on the Kitwanga and one angler per day on the Kitseguecla, spread evenly over the Classified Waters period from September 1 – October 31

1.5.2 Central Working Group: Suskwa River

The Suskwa River was considered separately from the Kitseguecla and Kitwanga because it has a larger proportion of non-resident anglers. A number of management alternatives including year-round resident-only angling and adding guiding opportunities were considered but rejected for the same reasons as the Kitseguecla and the Kitwanga. The Suskwa was also deemed a river where resident opportunities should be

increased. Changes to regulations on nearby waters may bring more pressure on this river in the future.

The recommended management alternative is:

- Start with resident angler-only fishing on Saturdays and leave everything else as status quo
- If total angling pressure by non-guided, non-resident anglers exceeds 399 angler-days for two years out of three, that would trigger a move to an eight-day licence lottery for these anglers with caps of two anglers per day on the Suskwa, spread evenly over the Classified Waters period from September 1 – October 31

1.5.3 Central Working Group: Skeena IV (upstream from the Kitwanga Bridge)

This part of the Skeena River (see Figure 1) has some localized areas of crowding but large sections of river that are quite underutilized by anglers. There are a large number of unused guided rod-days on this stretch of the Skeena. A number of management approaches were considered including a lottery for non-residents over the entire area or just in zones where it was felt crowding was a problem. A mandatory Steelhead Stamp was considered for the peak of the steelhead fishery, which would provide better management information for the Steelhead Harvest Analysis.

The recommended management alternative is:

- Implement a limited-day licence lottery for non-guided, non-resident anglers with a total of 180 eight-day licences spread evenly over the Classified Waters period (July 1 – October 31) in the following two zones:
 - From mouth of Salmon River to Four-Mile Bridge
 - From triangular markers below the mouth of the Bulkley River to the Kitwanga River Bridge (Note: the Central Working Group originally set this boundary at the mouth of the Kitwanga River, but the mouth falls under the West Working Group, so further discussions are needed)
- Rest of Skeena IV outside two zones is status quo
- Mandatory Steelhead Stamp from September 1 - October 31

1.5.4 Central Working Group: Kispiox River

There are a large number of non-residents coming to the Kispiox River and contributing to crowding especially during late-September and early-October in the section from Resthaven to the confluence of the Kispiox with the Skeena River. A number of management elements were considered for the Kispiox including eight-day licences for non-residents with and without a lottery, angling zones by time and space, extending the Classified Waters period, resident-only fishing times, and guided-only for non-resident anglers. The most important factor in weighing the different options was trying to manage non-resident anglers without seriously impacting local businesses that depend on those anglers. Hence, guided-only for non-residents was rejected because it was too extreme. Extending the Classified Waters season did nothing to address the problem. An eight-day licence without some sort of lottery would not yield the desired results. In the end, an eight-day licence with a lottery system was put forward for the

entire river except a nine-kilometre zone of the river that is a popular place to fish for many of the non-residents staying with local accommodation providers.

The recommended management alternative is:

- Non-guided, non-resident, eight-day licence lottery based on target of 795 angler-days for non-residents in the Classified Waters period, which equates to 99 eight-day licences spread evenly over the season (on entire river except status quo zone)
- Status quo zone in an area of the river from 20.2 kilometres along Kispiox Valley Road to 29.5 kilometres along Kispiox Valley Road
- Resident-only angling on Saturdays on entire river including status quo zone; hence no guided anglers on Saturdays

1.5.5 Central Working Group: Non-regulatory recommendations

- Reinstatement of the River Guardian program
 - Help monitor the implementation of the Angling Management Plan
 - Collect survey data or conduct creel censuses
 - Provide information and education on fish identification, proper handling techniques and proper angler etiquette
 - Assist Conservation Officers in identifying enforcement problems
- Improved Enforcement of regulations
- E-licensing
 - Only way that steelhead angling can be effectively managed is to be able to spread anglers out over the whole fishable period and “cap” their overall numbers
 - Best way to do that is to ensure that the province’s e-licensing system is capable of handling targets, caps, time-limited licences, and spreading licences over the Classified Waters season, for each of the different waters
- Need for a clear definition of “resident priority”
- Public Education
 - Angler etiquette
 - Proper catch and release techniques
 - Fish identification
- Process
 - Better criteria for selection of Working Groups so past members of the Regional Committee and resident anglers who have guided in the past are ineligible.
 - Broader representation from other stakeholders in the community, particularly those in the non-guiding local economy

1.5.6 East Working Group: Babine River

There are crowding problems in the upper five kilometres of the Babine River, caused by both non-guided, and guided anglers who move there when the Nilkitkwa is “out.” There is also a sense that a reduction in the overall number of guided rod-days is required. A limited-day licence combined with a lottery for non-residents was rejected

because there are not a lot of non-guided, non-residents fishing the Babine. Extending the Classified Waters period to December 31 was not felt to be effective. Ways to reduce guide activity were discussed but it was felt that the ministry needs to review the whole guide rod-day allocation situation on the Babine. A variety of other management elements were considered.

The recommended management alternative is:

The creation of three zones on the Babine River during the Classified Waters period:

- Resident and non-resident anglers permitted upstream of Nichyeskwa Creek to 80 metres below the smolt-counting fence under status quo regulations but no guiding will be permitted in that zone
- Resident anglers only will be permitted to angle between Nichyeskwa Creek and Nilkitkwa River. No guiding will be permitted in that zone
- Open to all licence classes and permitted guides downstream of the Nilkitkwa River confluence with the Babine

The ministry should review and rationalize guided rod-days on the Babine (used and unused) and seek to reduce the total allocation. Participants recognized that the unused days are primarily from guides not sitting on the Working Group.

1.5.7 East Working Group: Bulkley River

There are crowding problems on the Bulkley, especially non-resident campers at river access points. The only way to reduce the “peaks” of non-guided, non-resident angling activity that lead to crowding was to use a limited-day licence (the Working Group did not reach agreement on how many days the limited entry licence would cover) with a lottery system that “spreads” angler use evenly over the Classified Waters period. That lottery would be established in the future if the number of non-resident anglers exceeds a target. There are also concentrations of guided anglers during the peak season. A range of management elements was considered to address these issues. The most important factor in weighing the different options was trying to manage non-resident anglers without seriously impacting local businesses that depend on those anglers. There are almost 500 unused guided rod-days on the Bulkley but reducing those days was rejected as a management approach at this time. It was recognized that this and other guide restrictions (number of clients per guide, number of assistant guides per guide, etc.) may be required in the future to maintain a quality experience for all anglers. There is a need to provide more resident angler opportunities on the Bulkley River and try to find ways to address crowding issues.

The recommended management alternative is:

- Zoning for resident-only weekends during the Classified Waters period for three, small, easily accessible locations where the Bulkley meets Chicken Creek, Toboggan Creek, and the Telkwa River.
- Telkwa River a resident-only zone for the Classified Waters period
- Allocate limited-day licences in a lottery if a non-guided non-resident angler-day target is exceeded twice in three years. There are two threshold target options that will be presented to the public:

- Option 1 (high use) – The lottery would allocate 1,716 angler-days in limited-day licences to non-guided, non-resident anglers.
- Option 2 (average use) – The lottery would allocate 814 angler-days in limited-day licences to non-guided, non-resident anglers.
- One participant was unable to agree to an eight-day licence and prefers a 10-day licence. The number of days for limited-day licences will be determined either provincially or regionally. The licences will be allocated so they are spread evenly over the entire Classified Waters period.

1.5.8 East Working Group: Morice River

It was felt that crowding occurs on the Morice River, particularly in the area around campgrounds at peak season. Many campers stay and fish for long periods of time. A number of management elements were considered for the Morice that were similar to those for the Bulkley. It was felt that the non-resident crowding situation may be a problem in the future but for the moment the status quo is acceptable. Some zones were set aside for resident anglers to increase opportunities for that group.

- Working Group members did not recommend the immediate implementation of any management elements. However, they did propose a target if a limited-entry lottery were needed in the future.
- Allocate limited-day licences in a lottery if a non-guided non-resident angler-day target is exceeded twice in three years. There are two threshold target options that will be presented to the public:
 - Option 1 (high use) – The lottery would allocate 617 angler-days in limited-day licences to non-guided, non-resident anglers.
 - Option 2 (average use) – The lottery would allocate 449 angler-days in limited-day licences to non-guided, non-resident anglers.
- The ministry should review and rationalize guided rod-days on the Morice (used and unused). Participants recognized that the unused days are primarily from guides not sitting on the Working Group.

1.5.9 East Working Group: Non-regulatory recommendations

- Education on etiquette - An angler education program needs to be set up that includes information on driving boats, angler etiquette and fish handling.
- Manage and maintain access - There is a need to ensure that existing access points remain functional, because access is critical to distributing angler effort along the rivers. The Ministry of Environment along with the Integrated Land management Bureau should work together to ensure that both existing and potential access points are mapped, maintained, managed and/or developed.
- Enforcement - There is a need for improved enforcement of management regulations for all rivers.
- Data collection - More funding is needed so that data collection could be improved. The most pressing need is for more regular creel censuses.

- Long-term camping on the Babine - There is a need to work with BC Parks to address issues around long-term camping along the Babine River. In the same way that it regulates river rafters, the park could implement rules around length-of-stay, timing of visits, and location and distribution of campsites.
- Illegal guiding - There is a need for signage on the boats of licensed guides so everyone knows who they are and to distinguish them from illegal guides. Increased education is required to let anglers know the potential implications of being involved in illegal guiding. Additional enforcement is also needed.
- Floatcraft - There is a need to regulate both recreational rafts and boats, and angling boats including powerboats, so that the river is a safer place, conflicts are minimized, and the quality of the experience improved.
- Guiding - Unused rod-days could be distributed to local businesses or First Nations. Communications between upper Babine guides needs to be improved so that use of the river is better coordinated.

1.5.10 West Working Group: Zymoetz I River

The upper part of the Zymoetz River has experienced crowding due to increases in the number of non-guided, non-resident anglers. There are some concerns around the number of guided anglers on this stretch of water. Zymoetz I has a low capacity to support a lot of angling effort. Both lottery/limited-day licences and guided-only options were considered for Zymoetz I. It was felt that given the limited access of this area, the sensitivity of the habitat and the difficulties with enforcement, the best option was to go to guided-only for non-resident anglers. Guiding restrictions were considered primarily to “flatten out” use over the Classified Waters period and prevent peaks in activity that result in crowding.

The recommended management alternative is:

- Extend Classified Waters period to begin on August 1 and continue until the close of the steelhead season on December 31. This accurately reflects the time that summer steelhead are in the river and when the river is open to fishing
- A Steelhead Stamp would be mandatory during this period (August 1 – December 31). Both of these elements would facilitate the distribution of guided and non-guided effort throughout the open water season and would increase the Ministry of Environment’s data collection abilities through the Steelhead Harvest Questionnaire.
- Limit the three existing guides to the use of one boat per guide per day. This would put a maximum of three guided parties on this section of water on any day.
- Limit the three existing guides to a maximum of three anglers per boat. In conjunction with the previous element there would only be nine guided anglers on the class I section of the Zymoetz River on any given day.
- All non-residents must be guided. This element was viewed by the Working Group as key to ensuring that the capacity of this small river is not exceeded.

Additionally, it addressed a perceived illegal guiding issue. It was acknowledged that increased demand by non-resident anglers could be accommodated in the guiding industry.

- The three existing guides currently hold 58 rod-days. Their allocation will be increased by 10 rod-days each for a total of 30 additional rod-days to accommodate increased demand brought about by the requirement that all non-residents be guided. The Working Group considered the impacts to local economic interests and that there was capacity in this reach to increase the guide allocation to compensate for increased non-resident demand.
- The Working Group recognized that, in the future, BC Residents may need to be restricted if the carrying capacity of the upper Zymoetz is exceeded. The Working Group recommends that the Ministry of Environment establish an effort level target for this trigger, which is consistent with the concept that the levels must be exceeded two times in three years before any restrictions are put in place.

1.5.11 West Working Group: Zymoetz II River

Crowding and over-use by all types of anglers has been a problem on Zymoetz II, the lower section of this river. Anglers who camp for long periods of time add to crowding problems. The only way to reduce “peaks” of non-guided, non-resident activity that lead to crowding is to use a limited-day licence with a lottery system that more evenly distributes angler use over the Classified Waters period. Working Group members considered a limited-day licence and lottery for non-guided, non-resident anglers, restrictions to limit number of guides, especially at peak times, and making provisions for resident priority times on the river. The resulting recommended management alternative is a combination of most of the management elements considered.

The recommended management alternative is:

- Extend the Classified Waters period from August 1 to May 31 and retain Class II status. This reflects the time that steelhead are in the river and covers both the summer and winter runs. A Steelhead Stamp will be mandatory during this period. This would allow angling effort to be controlled during the entire fishery and not just during the months of September and October.
- The Working Group recommended that the Clore River be managed under the umbrella of Zymoetz II Classified Water.
- The Working Group recommended that there would be no guiding on weekends (Saturday and Sunday) during the classified period. It was also recommended that there would be no non-resident angling on weekends, which provides for a resident-only fishery on Saturday and Sunday during the classified period. This would provide an opportunity for non-guided, resident anglers to access the fishery during the days of the week that are highly desirable by local anglers. This was a major concession by the guide community as they recognized the importance of this fishery to the resident angling community.
- Restrict the maximum number of anglers that a guide or assistant guide may assist during a day to three anglers. This limits the maximum guided party size.
- The Working Group recognized that the current guide allocation on Zymoetz II (five guides and 117 rod-days) would need to be increased to accommodate the

extension of the Classified Waters period. The recommendation is that each of the five guides be increased by 30 rod-days (total of 150 additional rod-days).

- The Working Group recommended that guided effort be more evenly distributed throughout the fishing season to address the crowding issue. The recommendation was to have 40% of the guided effort occur during the two shoulder seasons (i.e., 20% in August and 20% in November-May) and to have the remaining 60% of the guided effort occur during September and October.
- Non-resident anglers would access the weekday fishery by lottery and this would be implemented immediately. The non-resident lottery cap is 267 rod-days (equal to the new guide allocation). Non-resident angler allocation would be 534 angler-days via the guides and lottery access.
- The distribution of non-resident angling effort would be distributed throughout the season like the guide effort, so it is: 40% during the two shoulder seasons (i.e., 20% effort in August and 20% from November to May) and 60% of remaining effort during the peak (September and October).
- The Working Group considered that the “best” total effort estimate of 1,398 angler-days (based on the 1999 creel survey) would give non-residents access to 564 days or 40% of the days fished.

1.5.12 West Working Group: Kitsumkalum River

Increased angler use and guided effort has produced crowding on the Kitsumkalum in September and October and also in April and May. There is lots of resident angler interest in this river but opportunities for residents have been declining due to crowding. Illegal guiding was identified as a concern on this river. Working Group members considered a range of options and selected management elements that ensured guide effort was spread across the Classified Waters period while providing increased opportunities for resident anglers.

The recommended management alternative is:

- To address the issue of guides contributing to crowding on the Kitsumkalum River, the Working Group proposed to limit each licensed guide to the use of one boat on the upper river and one boat on the lower river on any single day.
- Along with the first element, it was proposed that angling guides be restricted to a maximum of four guided anglers per boat.
- To acknowledge the importance of this fishery to resident anglers, no guiding on Sundays on the entire river is proposed.
- No guiding on the section of river from the Glacier Creek confluence upstream to the outlet of Kitsumkalum Lake on Saturday. The remainder of the river (downstream of the Glacier Creek confluence) would be open to guiding. The first four elements will adversely impact the guide sector and benefit the resident angling sector.
- A change to the BC Regulation 125/90 is proposed that would reduce the maximum number of guides allowed on the Kitsumkalum River from 13 to 11 guides. There are currently 11 licensed angling guides operating on the Kitsumkalum. This will constrain the access of more guides to the Kitsumkalum fishery.

- All non-residents must be guided during the period when guiding is allowed – March 15-October 15. This will mean that there is a resident-only fishery between October 16 and March 14 as both guides and non-residents are restricted from access to the fishery at that time.
- It was noted that this option severely restricts non-guided, non-resident opportunities and that it has very high management and regulatory costs associated with implementation.

1.5.13 West Working Group: Lakelse River

The Lakelse River has no licensed guides with rod-days on it. There is a large fall salmon sport fishery that exacerbates any crowding because of steelhead anglers. There has been an increase in non-resident use on this river in recent years. A range of management elements was considered on this river.

The recommended management alternative is:

- Class I all year (change from Class II all year). This acknowledges the wilderness attributes of the river, especially in some of the more remote sections.
- Steelhead Stamp mandatory between September 1 and May 31 (extension from present December 1 – May 31, to reflect actual time steelhead are in the river).
- The Working Group recommended establishing a resident-only fishery for steelhead from March 1 to May 31 for Lakelse River. This would cover both the spring steelhead and cutthroat trout fisheries. This element recognizes that importance of these fisheries to resident anglers.
- Non-resident anglers can access the fishery from June 1 – February 28. This recognizes the summer and fall salmon fisheries that overlap with the steelhead fishery. This is a compromise to accommodate the interests of local businesses although it is expected that non-guided, non-resident effort would be lower under this management option.
- Non-resident angling effort will be constrained if total non-guided, non-resident effort exceeds 100 angler-days, two years out of three. When this target or trigger is achieved a limited-day licence lottery would be implemented based on a target of 100 angler-days. The non-guided, non-resident effort will be monitored for the time being.
- There could be some negative impacts to the local economy.

1.5.14 West Working Group: Skeena IV (downstream from Kitwanga Bridge)

This part of the Skeena River (see Figure 1) has some localized areas of crowding, notably at the mouth of the Kitwanga River and in Kitselas Canyon. Changing classification of this part of Skeena IV would make it a more desirable destination and would make it more marketable for guides. Licence-class restrictions such as resident-only licences were not felt to be necessary on this part of the Skeena. Although restrictions on non-guided, non-resident anglers are not required right now, provisions needs to be made for the future.

The recommended management alternative is:

- Class I all year (Change from Class II between July 31 and October 31). This would better reflect the wilderness nature of this section of Skeena IV.
- The Working Group elected to maintain the current Steelhead Stamp requirement, which is only required when fishing for steelhead. This reduces the licensing impact on salmon anglers.
- The existing (pre-Angling Management Plan) Skeena IV guides will not be constrained in the use of their Skeena IV angler-day allocation. They can guide in either reach (upper or lower) of the new Skeena IV Classified Waters.
- To address the concerns of the guide sector, four new guide opportunities of 20 rod-days each would be made available (total 80 new rod-days). This addresses the issue that new guides (usually non-Classified Waters guides) have few opportunities to access premier fisheries.
- Additionally, the existing Skeena IV guides from the Terrace area (four guides were identified that presently hold a cumulative total of 85 rod-days) would be issued 30 additional rod-days. This would increase their cumulative allocations by a total 120 rod-days.
- If total non-guided, non-resident angler effort exceeds 1,000 angler-days, two years out of three, a limited-day licence lottery would be implemented with a target of 1,000 angler-days. While the available data are sparse, the Working Group did not feel that present non-guided, non-resident angler effort was near this target.

This draft Angling Management Plan and the recommended management alternatives will be presented to the public and stakeholders in the fall of 2008. In early 2009, the Working Groups will re-convene to modify the plans in relation to feedback received during the fall consultation process. The final draft management plan containing the recommended management options will be forwarded to the Director of Fish and Wildlife at the Ministry of Environment in February 2009. The director will carefully review the recommendations to ensure they balance all the different community interests. The ministry will respond to the plan and any regulation changes that are approved will likely be reflected in the 2010/2011 Angling Synopsis.

2.0 Acknowledgements

This Angling Management Plan would not have been possible without the tireless dedication and hard work of the volunteers who were members of the three Working Groups (see Appendix A). They spent three, two-day weekends away from friends and family, as well as additional time at informal meetings, reading over background information, and developing ideas to be considered in the groups.

Hundreds of people took part in the stakeholder and public meetings that took place from January to March 2008. Their input, which was summarized in my Phase I Consultation Report (Dolan 2008), was critical to the development of this Angling Management Plan.

A number of staff from the Ministry of Environment's Skeena Region office made significant contributions to the Working Groups and the Angling Management Plan process. These included Paddy Hirshfield, Quality Waters Biologist, Dana Atagi, Section Head, Fish and Wildlife, Jeff Lough, Fisheries Biologist, and Dean Peard, Resource Information Biologist. Tom Bell, Regional Manager, attended parts of the first and last Working Group meetings.

I also thank Kristin Lunn, Senior Policy Advisor, and Michele MacIntyre, Unit Head, Environmental Economics, with the Ministry of Environment in Victoria, who assisted with process and Structured Decision Making approaches. Tom Ethier, Director of Fish and Wildlife from the Victoria office attended the final Working Group meeting and thanked participants for their contributions. Miles Stratholt, Fish Science Analyst from the Victoria office also participated in the final Working Group meeting.

I could not have survived the intensity of this process without the professional and emotional support of my two other facilitators, Dorli Duffy and Sandra Bicego. They were intricately involved in the process from the beginning, from comments on approach, to developing agendas, to editing of this report.

Lee Failing of Compass Resource Management offered very valuable insights into our approach to Structured Decision Making.

Alan Dolan, Senior Facilitator
Alan Dolan & Associates
October 2008

3.0 Overview

For years, people have told the Ministry of Environment that waters in the Skeena River system have persistent steelhead angler-use issues — crowding, disproportionate numbers of non-resident anglers or guided anglers, lack of opportunities for resident anglers, illegal guiding, and poor angler etiquette — leading to a degraded quality of angling experience.

3.1 Quality Waters Strategy

In response to these concerns, the ministry implemented the Quality Waters Strategy on the Skeena River and its major tributaries. The Quality Waters Strategy is a province-wide process that aims to maintain and improve the angling experiences offered in BC's waters, by managing angler use. The strategy includes a community engagement process to help identify issues of concern that require new or revised regulations.

The end product of the community engagement process will be an Angling Management Plan that will recommend revisions to current sport fishing regulations for steelhead angler-use issues on the Skeena River and its major tributaries. The Angling Management Plan will not address steelhead populations and conservation issues; those are addressed through other planning processes.

The Quality Waters Strategy is a stakeholder-driven process with a Provincial Quality Waters Management Committee and a Regional Quality Waters Management Committee (Regional Committee). Each of these committees has four resident anglers, three members of the guiding community, and one Ministry of Environment representative. The Regional Committee in the Ministry of Environment's Skeena Region (see Appendix C) plays an important role in overseeing the Skeena Quality Waters Strategy.

The Quality Waters Strategy is outlined in the Quality Waters Strategy Resource Document (MWLAP 2005). The process for developing Angling Management Plans outlined in this document is very detailed and prescriptive, so the Ministry of Environment, in cooperation with the Regional Committee, has modified the process to better accommodate the unique nature of the Skeena steelhead fishery.

3.2 Angling Management Plan process

The Regional Committee identified certain “priority waters” in the Skeena River watershed as a priority for the Angling Management Plan Process. An independent facilitator was hired by the Ministry of Environment to assist with engaging the public and stakeholder groups in the planning process and to write the Angling Management Plan.

The process for developing the Angling Management Plan is as follows:

- Phase 1 – Facilitator consults with stakeholder groups and the public on problems, issues and solutions for the steelhead sport fishery in the priority waters of the Skeena River (January – March 2008)
- Facilitator produces Phase 1 Consultation Report to summarize the consultations (March 31, 2008) (Dolan 2008)
- Regional Committee calls for applications and selects members of three Working Groups (four resident anglers, three guides, and one Ministry of Environment representative) for waters in the three sections of the watershed — West, Central and East (February – April 2008)
- Working Groups meet with facilitator over three weekends to develop key components of the Angling Management Plan (April – June 2008)
- Facilitator writes up draft Angling Management Plan (June – July 2008) **THIS REPORT**
- Phase 2 – Facilitator consults with stakeholder groups and the public on the draft Angling Management Plan to get feedback on the recommended management alternatives for each priority water (September – November 2008)
- Facilitator produces Phase 2 Consultation Report to summarize the fall consultations (December 1, 2008)
- Working Groups meet with facilitator to discuss stakeholder and public response to the Angling Management Plan and modify the plan in response to that feedback (January 2009)
- Facilitator writes final draft of the Angling Management Plan and presents it to the Ministry of Environment (January 31, 2009)
- Ministry of Environment reviews the final draft and the Director of Fish and Wildlife publicly responds to the Angling Management Plan (April 1, 2009)
- Ministry of Environment begins implementation of the Angling Management Plan, including writing of any new regulations (Fall 2009)
- New regulations incorporated in the 2010/2011 Angling Synopsis

3.3 Intent and scope of Angling Management Plans

Angling Management Plans are intended to address angler-use issues on a specific water or waters in the same watershed. The plans are living documents subject to review on an annual basis. The decision to undertake an Angling Management Planning process is the result of regional and provincial review under the Quality Waters Strategy and years of stakeholder dissatisfaction.

The primary objective of an Angling Management Plan is to establish a water-specific regulatory regime utilizing the least restrictive measures possible to regulate angler use to levels that maintain the quality of the angling experience.

An Angling Management Plan is not intended as a conservation tool, and as such, does not have in its scope the ability to prescribe conservation-based regulatory measures. However, since unrestricted angler demand may pose some risk to fish stocks or their habitats, an Angling Management Plan may identify conservation benefits as a

secondary consideration. Any mechanisms to regulate availability of angling opportunities in waters of concern must be technically and legally feasible. The planning process, and particularly the Working Groups, must consider both the costs and likely effectiveness of any proposed regulatory mechanisms.

The Tool Box, which was utilized by the Angling Management Plan Working Groups, lists the various tools available for managing angler use, the implications of using the tool, and the implementation requirements and performance measures to evaluate the use of the tool. When selecting regulatory options, the Working Group should attempt to utilize the least restrictive tools necessary to achieve the desired objectives. Decision making was also supported by existing angler-use data. Ultimately, the Angling Management Plan must establish a management regime that achieves an acceptable balance between the following interests:

- Quality of the angling experience
- Angling opportunities
- Angling costs
- Economic benefits associated with angling
- Likely effectiveness of management policies
- Management costs (licensing, monitoring and enforcement)

There are many other factors that may affect the quality of angling opportunities including surrounding land use, water allocation, and others. These broader issues are beyond the scope of an Angling Management Plan and will not be directly considered in the development process for an Angling Management Plan. Stakeholders are encouraged to promote angling interests in other planning processes such as local land-use planning and economic development processes. The Angling Management Plan development process may also provide useful information on the magnitude and value of local angling opportunities to support changes in other planning processes.

3.4 Skeena River watershed

The Skeena River is the second longest river entirely in British Columbia and one of the longest un-dammed rivers in the world (see Figure 1). Its origins are south of Spatsizi Plateau Wilderness Provincial Park in northwestern British Columbia and it flows for 570 kilometres before entering the Pacific Ocean at Prince Rupert. The watershed has an area of 54,400 square kilometres with an average discharge of 2,157 cubic metres a second.

For the purposes of management, the main stem of the Skeena River is divided into four sections:

- Skeena I - from the mouth of the Skeena to the Exchamsiks River confluence
- Skeena II - from Exchamsiks River confluence to 1.5 km above Kitsumkalum River confluence (currently Class II Classified Water)
- Skeena III - from the Kitsumkalum River confluence to 1.5 kilometres upstream from the Zymoetz River confluence (currently Class II Classified Water)

-
- Skeena River and Major Tributaries**
- Map showing the Skeena River and its major tributaries (Bulkley, Babine, Skeena, Kitwanga, Bulkley) flowing through British Columbia, Canada. The map includes the Skeena River, Bulkley River, Babine River, Skeena River, Kitwanga River, Bulkley River, and Skeena River. Key locations marked include Prince Rupert, Skeena I, Skeena II, Skeena III, Skeena IV, Kitwanga, Hazelton, Moricetown, Smithers, Telkwa, Houston, and Kitimat. The map also shows Highway 16, Highway 37, and Highway 97. An inset map shows the location of the study area within British Columbia. A scale bar indicates distances up to 100 Kilometres.

Draft Angling Management Plan - Skeena Quality Waters Strategy

3.5 The Skeena sport fishery

The Skeena River and its tributaries are world-renowned for sport fishing. The river system is home to all five species of Pacific salmon as well as steelhead. The sport fishery has led to economic spin-offs in the form of accommodation providers such as bed and breakfasts, lodges, campgrounds, hotels and motels, bait, tackle and fish licence retail outlets, and restaurants and other businesses that anglers utilize while in the area. The watershed also has a strong fish guiding industry. A 2006 IBM study on the economics of wild salmon in the watershed (commercial plus sport fishing) estimated that the value of this part of the fishery was somewhere in the order of \$110 million. No data are available for the value of the steelhead sport fishery.

Wild steelhead have always been important to the Skeena watershed. Over the past half-century, their popularity has soared among sport anglers, who revere their chart-topping size, abundance and ability to put up a great fight. As popular books and media reports continue to affirm their reputation, the species has become internationally recognized among anglers. Today, the Skeena watershed's unrivalled steelhead angling draws residents as well as visitors, supports numerous guiding businesses, and benefits many local communities with tourism-related economic activity.

The peak season for steelhead is in the fall — September and October. So many anglers come from different parts of the world that the airlines add on additional flights to accommodate the increased passenger volume.

The steelhead sport fishery in the Skeena River system is a “catch and release” fishery.

3.6 Classified Waters

In 1990, the Ministry of Environment established a province-wide Classified Waters sport fishery management system. The system sought to improve angler-use problems by classifying waters according to the quality of angling experience they offer and “capping” the number of rod-days available to angling guides.

For anadromous fish — fish that migrate from the sea to freshwater to spawn — such as salmon and steelhead, there are two classes of rivers:

3.6.1 Class I

- Quality wilderness waters with wild anadromous fish
- Water that have a high-quality angling experience due to their remote natural setting
- Waters that are remote with no road access or very limited road access

3.6.2 Class II

- Quality semi-wilderness waters with wild, anadromous fish
- Waters that offer a quality angling experience because of their natural ability to

- produce trophy fish
- Waters that are rustic with limited to extensive road access

Classified waters require a Classified Waters Angling Licence in addition to a basic freshwater fishing licence. Non-residents require a Classified Licence for Class I and II waters while residents require an annual Classified Waters licence.

In the Skeena River watershed, there are four Class I waters and 13 Class II waters.

3.7 Angler-use data

Angler use is defined as: the effort an angler places on a piece of water to catch a fish. It is commonly measured in two ways — number of anglers and number of angler-days. Angling Management Plans describe the preferred level of angling use. Working Groups use information on current and past levels of angler use as indicators of what constitutes crowding.

Several sources of data are collected by the Ministry of Environment to track angler use including:

Steelhead Harvest Analysis - An annual questionnaire is mailed to a random sample of steelhead anglers each year. The Steelhead Harvest Analysis collects total annual angler effort for both summer-run and winter-run steelhead fisheries. The total number of anglers and total number of angler-days for each river is determined by extrapolating questionnaire responses from responses received by the number of steelhead stamps sold. Steelhead Harvest Analysis is useful strictly as a trend index, not as an absolute amount as it tends to over-estimate angler effort. It does not capture the guided status of anglers.

Classified Waters Licence data – The Classified Waters Licence was created in 1990 with the inception of the Classified Waters system. The licence collects river-specific information on:

- Number of days purchased (not angled)
- Date(s) of days purchased and
- Guided status

The Classified Waters Licence captures reliable non-resident angler effort data. The guided status of the angler is provided, but there is no BC resident data. The licence is generally thought to underestimate angler effort.

Guide reports – Licensed angling guides submit an annual report as a condition of their licence. Until recently, Guide Reports used to collect the number of anglers-days by residency, but in 2004, the actual number of anglers was added to the report. The reports capture guided-angler effort only, and provide a reliable estimate of guided-angler effort by residency — BC resident, non-resident Canadian and non-resident alien (non-Canadian).

Creel censuses – Creel censuses are surveys of anglers on the river conducted over a sufficiently long period of time that total angling effort for a specific water and a specific year or season can be calculated. Steelhead creels are usually conducted during peak angling season (September – October). If considerable steelhead angling occurs during shoulder periods (August and November), and the survey was not conducted during this time, surveys may under-sample the total angling effort. Creels are very expensive but provide relatively reliable estimates of angler use.

3.8 Regulations – the Tool Box

The tool box is intended to provide the Angling Management Plan Working Group with regulatory tools that address angler-use issues such as crowding.

The over-arching principle in applying any tools from the tool box is to select the least intrusive tool that equates to the smallest intervention required to solve an identified angler-use issue.

The tools chosen must respect resident-angler priority on the water, and at the same time they must respect the business interests of angling guides and the local economy.

These tools allow current regulations to be changed without writing new legislation.

The full description of the tools can be found in MWLAP (2005). A summary is presented in the table below.

3.9 Summary of the Tool Box

Type of Tool	Tool	Description
Water Designation	Classify Water	Designating a body of water as either Class I or Class II under <i>the Wildlife Act</i> . Duration of the classified period may be extended or shortened. Waters are classified to address angler crowding, expansion of guiding, growth of illegal guiding, and need to establish management criteria for guided angling.
	Conservation Surcharges	Levying a water-specific fee against all anglers wishing to participate in a fishery (the “steelhead stamp” is a province-wide conservation surcharge and cannot be revisited as part of the Skeena Quality Waters Strategy).
Angler-Use Regulations	Limiting non-resident and non-resident alien (non-	Limiting number of fixed-day, Classified Waters licences for a non-resident or non-resident alien angler.

Type of Tool	Tool	Description
	Canadian) licences	
	Lottery	Allocating a limited number of angler-days to non-guided, non-residents or non-guided, non-resident alien applicants by chance.
	Area “zoning”	Identifying specific times and waters where anglers must possess a certain class of licence to fish. Zoning by residency is possible.
	Licence-Class Restrictions	The current licensing system requires Classified Waters licences for non-resident and non-resident aliens to be date-specific and water-specific. Hence, it is possible to create a “resident-only” fishery on Classified Waters.
	Mandatory Guiding for Non-residents	Making the use of a guide mandatory for all non-residents and/or non-resident aliens for a specified zone on Classified Waters.
Angler-Access Regulations	No Angling from Power Boats	Not allowing anglers to fish from a power boat on certain waters, but anglers may be transported by power boats.
	No Angling from Boats	Allowing anglers to use a boat or other floating device for transportation but not for fishing in certain waters.
Guide-Use Regulations	Client and Assistant Guides Restrictions	Limiting guides on a specific Classified Waters during a specified time period to a maximum number of assistant guides, and a maximum number of clients per guide or per assistant guide
	Limited Guide Authorizations	Placing a cap on the number of guides authorized to operate on Classified Waters.
	Rod-Day Quotas	Allocating a fixed number of days on Classified Waters during a specified time period.
	No Guiding	Excluding guides from operating on Classified Waters completely, or for a designated time period.

3.10 Regional and Provincial Quality Waters Committees

The Skeena Regional Quality Waters Management Committee (the Regional Committee) is a group of local representatives, and is composed of four resident anglers, three individuals from the guiding community, and one Ministry of Environment representative. The Regional Committee has been meeting for the past two years to oversee the Skeena Quality Waters Strategy, the community engagement process, and development of the Angling Management Plans. Present members of the Regional Committee are listed in Appendix C.

As part of the process, the Regional Committee selected priority waters to be covered under this Angling Management Plan process, as listed in the table below. At a later date, the Regional Committee may consider planning processes for other waters in the Skeena watershed or other watersheds in the region.

3.11 Priority rivers

Working Group	Geographic Area	Priority Waters
East	Smithers-Houston	Babine Bulkley Morice
West	Kitimat-Prince Rupert-Terrace	Kitsumkalum Lakelse Skeena IV (downstream from Kitwanga Bridge) Zymoetz I and II
Central	Hazelton	Kispiox Kitsequecla Kitwanga Skeena IV (upstream from Kitwanga Bridge) Suskwa

3.12 Public and stakeholder consultation

The Phase I consultation process took place from January to March 2008. The objectives of the consultation process were to:

1. Open up a dialogue on angling-use issues in the Skeena River watershed
2. Identify what and where the angler-use problems are in different priority waters
3. Suggest possible solutions to angler-use problems on those waters
4. Provide comments on the overall consultation process
5. Provide information to the Working Groups to use on the development of Angling Management Plans

The consultation process began with stakeholder meetings throughout the watershed followed by a series of Public Meetings in the larger communities. A total of 25 stakeholder meetings were held in Houston, Terrace, Smithers, Hazelton, Kitimat and Prince Rupert with 113 people attending. Six Open House / Public Meetings were held along the watershed in Houston, Smithers, Hazelton, Terrace, Kitimat and Prince Rupert with a total of 255 people attending.

Three questions were used to stimulate discussions at both the stakeholder and the Public Meetings:

1. Do you have any questions or comments on the proposed consultation process?
2. What do you think are the problems surrounding angler use and steelhead in the Skeena River system?
3. What do you see are the solutions?

Email invitations and information updates were sent out at regular intervals to an ever-expanding public and stakeholder database. A website was established at: wlapwww.gov.bc.ca/ske/qws/. Advertisements were placed in local papers in advance of the Open House and Public Meetings.

A brochure was developed describing the QWS and the Angling Management Planning process. It was made available in all six communities along the watershed prior to the Public Meetings. The brochures were distributed at each of the Public Meetings and made available on the website. Various summaries of angler data and angler-use data were prepared and placed on the website and available at the Open House / Public Meetings.

A response form was developed to provide more quantifiable information from those taking part in the community engagement process. The form was placed on the website as an interactive form and was available in a paper format at all the Public Meetings. A total of 248 Response Forms were received.

The results of the Phase 1 of the Skeena Quality Waters Strategy consultation process demonstrated that people from all walks of life care passionately about the future of steelhead sport fishing on the Skeena River and its tributaries. This passion extends around the world, and clearly there is little doubt in most peoples' minds that something needs to be done to preserve the quality of angling in this world-class fishery.

The primary role of Phase 1 consultations was to document public comments on angler-use issues around steelhead sport fishing in the Skeena River watershed, providing useful information for the development of the Angling Management Plans.

Some key points from those who filled out Response Forms are:

- 61% of BC residents strongly agree or agree there is a crowding problem; only 14% of non-resident aliens (non-Canadian anglers) agree; responses from non-resident Canadians are mixed; 63% of guides agree or strongly agree; local economy responses are mixed

- 66% of BC residents and 85% of non-resident aliens say that crowding occurs in the fall
- More than 10% of BC residents note crowding in the Bulkley, Kispiox, Skeena (downstream from Kitwanga Bridge) and lower Zymoetz, non-resident aliens note crowding in the Babine, Bulkley, Kispiox and lower Zymoetz
- 57% of BC residents agree there are too many unguided, non-resident alien anglers; 73% of non-resident aliens disagree
- 62% of BC residents agree there is a problem with illegal guiding activity; 31% of non-resident aliens agree
- 50% of BC residents believe that non-resident angling fees should be increased; 71% of non-resident aliens disagree; non-resident Canadians give mixed responses; Guides have mixed responses; 52% of respondents in the local economy strongly disagree or disagree
- BC residents have a range of responses to designating certain waters or times as resident-only angling with 36% strongly agreeing; 74% of non-resident aliens strongly disagree; 64% of non-resident Canadians disagree; 45% of guides strongly disagree while 36% strongly agree; 64% of local economy respondents strongly disagree or disagree
- 63% of BC residents agree to restricting the length of time that a non-resident alien can fish; 78% of non-resident aliens disagree, non-resident Canadians have a range of responses; non-resident Canadians give a range of responses; 59% of guides strongly agree or agree; local economy responses were variable
- 65% of BC residents agree that a lottery system for non-resident aliens is a good idea; 86% of non-resident aliens disagree; non-resident Canadians give a range of responses; 54% of guides strongly agree or agree; 40% of local economy respondents strongly disagree while 24% strongly agree
- 75% of BC residents agree with a hierarchy of licence fees (resident < non-resident Canadian < non-resident alien); non-resident alien responses to this statement were not conclusive; 69% of non-resident Canadians agree; 55% of guides strongly agree or agree and 32% were neutral; responses from the local economy are mixed

The first objective of the consultation process was to establish a dialogue on steelhead angler-use issues. The engagement of this broad community, in particular the residents of British Columbia who live, work and fish in the Skeena River watershed, was challenging because the terms of reference for the consultation were very clearly focused on steelhead angler-use issues, but participants wanted to talk about many other issues including stock status and abundance, access to fishing grounds, habitat related concerns, and use of jet boats.

The second objective of the consultation was to hear what people thought the angler-use issues and problems are. It was very clear that the vast majority of participants in the community consultation process believe there is a crowding issue and that the quality of fishing in terms of angler use, is in need of improvement.

Interestingly, the results of the crowding question for non-resident alien respondents

were quite different. There are two possible reasons why the non-resident aliens do not see crowding as a problem. The first is that many of these people fish in their own countries and elsewhere in the world and relatively speaking, they may not see the Skeena as crowded. The second reason is that this segment of respondents was not supportive at all of the Quality Waters Strategy process, felt threatened by the possibility that their fishing may be constrained in some way and expressed a desire for the whole process to “go away.”

Certain problems with the steelhead angling experience were identified by participants at all the meetings. They included:

- Too many non-resident aliens
- Illegal guiding
- Not enough resident opportunities, no sense of the resident-priority of the Quality Waters Strategy
- Angler etiquette issues — working pools inappropriately; fly versus gear conflicts, both logistical and ideological; actual interpersonal conflicts, unacceptable boating practices
- Too many guided anglers in certain waters
- Access issues (lack of boat ramps, public land access, remote areas)
- Absence of women, children and families
- Too many boats — jet boats and individual boats

Participants raised the following solutions most often:

- Implement regulations that balance the angling experience with the guiding industry and the local economy, which is dependent on steelhead in so many ways
- Establish an overall cap, both daily and seasonally, on the density of anglers for a particular river and then allocate the available “spaces” to the different user groups
- Re-establish priority for residents through resident-only zones or times (weekends), cheaper licences, or free licences for youth 16-19
- Control non-resident alien usage through shorter-term licences (eight-day), a lottery system, or guided only fishing
- Reassess guiding on each of the rivers for their rod-day allocations and number of clients per guide
- Address illegal guiding through public education campaigns (media, on licences, signage), high-profile “sting” operations, and better identification of legal angling guides
- Deal with etiquette problems through public education in the Angling Synopsis and on fishing licences, video or DVDs, and having an angler test similar to the hunter exam

Considerable media interest was sparked by the Phase I consultation process and a summary of that is included in the report.

Prior to the Phase I consultation process, there was an expectation that some of the

meetings might be quite confrontational. This was not the case. Many different ideas were brought forward, but for the most part, they were talked about in a respectful way. People recognize that though they may come from different places, do different things and have different ideas, in the end they are all neighbours, and are all part of a community.

All information in the Phase I consultations was recorded in the Phase I Consultation Report completed on March 31, 2008 (Dolan 2008). Once this draft Angling Management Plan is developed, it will be taken to public and stakeholders meetings and will be made available on the website in the fall of 2008 for review and comments as part of the Phase II consultation process.

Following this process, a Phase II Consultation Report will be written and the results of that report will be used by the Working Groups when they meet again in January 2009 to prepare the final draft of this Angling Management Plan for presentation to the Ministry of Environment.

The ministry will review the final draft of the Angling Management Plan and approval rests with the Director of Fish and Wildlife. The ministry will then proceed with the writing of new regulations for the steelhead angling fishery on the Skeena River and its major tributaries. Those new regulations will be reflected in the 2010/2011 Angling Synopsis.

4.0 Development of the Plans

4.1 Working Groups

Members of the Working Groups who helped develop this Angling Management Plan were chosen through a vetting process developed by the Regional Committee. To be eligible, group members needed to demonstrate:

- Knowledge of the waters under discussion
- Endorsement by their angling peers
- Ability to focus on local-level planning
- Agreement with the principles, goals, rules of engagement and timeline for the process

According to the guidelines of the Quality Waters Strategy and as agreed to by the Regional Committee, the three geographically based Working Groups were comprised of four resident anglers, three licensed guides, and a Ministry of Environment representative. Each Working Group was assisted by an independent, professional facilitator.

The members of the Working Groups are presented in Appendix A.

The Working Groups met three times over three months, each time for a two-day period over a weekend. The schedule was as follows:

Date	Groups	Duration	Location
April 19 – 20, 2008	All	Two-day	Terrace
May 10 – 11, 2008	West	Two-day	Terrace
May 10 – 11, 2008	Central	Two-day	Hazelton
May 10 – 11, 2008	East	Two-day	Smithers
June 7 – 8, 2008	All	Two-day	Smithers
January 10 – 11, 2009	All	Two-day	Smithers

The agendas for each of the meetings are in Appendix B.

The objectives of the first meeting in April 2008 were as follows:

- Orient Working Group members on the roles, responsibilities and code of conduct for all

- Ensure Working Group members understood the scope of work to be completed by June 2008
- Ensure Working Group members understood the process to be used to complete this task, including decision-making and the use of structured decision making.
- Ensure Working Group members understood the background information and context for the task
- Gain agreement on communications between the Working Group and the broader public
- Clarify next steps including additional information needs, homework and agendas for subsequent meetings.

Considerable time was spent clarifying the role of Working Group members at the April meeting. Working Group members were chosen because of their knowledge of local waters, their experience with steelhead sport fishing, and their historical background around both steelhead angling issues and ministry management planning processes.

Working Group members were expected to represent all interests, not just those immediately around the table, but those in the community who were not sitting at the table — primarily those from the tourism, accommodation and hospitality businesses that generate significant economic benefits from the steelhead angling fishery. Working Group members were expected to take part as members of the community, not as representatives of any particular sector. They were supposed to try and focus on issues and interests rather than personal agendas and points-of-view.

Ministry of Environment representatives were there for their technical knowledge, to provide background and resource materials, to undertake data analysis where appropriate, to provide assistance in understanding and using the regulatory tool kit, to keep the Angling Management Plan within the context of the Quality Waters Strategy and to ensure that members of the Working Groups considered all community interests in their deliberations.

Participants were given basic guidelines for their code of conduct and responsibility while members of the Working Groups. Members discussed and agreed that, “What’s said in room, stays in room.” Hence they did not want the meetings to be open to the general public. Members realized that they needed the freedom to speak their minds and to brainstorm ideas and think “outside the box” and that this is best accomplished in a situation where members meet in privacy. All these early discussions would eventually culminate in a draft Angling Management Plan and that was the important document to bring before the community, not the conversations that took place along the way, unless of course they were directly related to why the group chose a certain direction or alternative.

At the second meetings in May, there was an opportunity for members of the public to address the Working Groups in Terrace, Smithers or Hazelton, on new issues that had not received attention in the Phase 1 Consultation Report.

The senior facilitator was appointed media contact for the Working Groups but would only speak to process questions. There was an agreement to respect everyone's right to be heard and to recognize that everyone's views were important. Members agreed to seek common ground, to use plain language, and to respect the time available.

Members of the Working Groups agreed to use consensus decision making for all their decisions, recognizing that consensus is not always about unanimous consent. A member may not agree with a particular decision, but may:

- Abstain or “stand aside” and allow the consensus to stand
- Accept the decision “for the good of the group,” respecting all interests

Consensus is defined as: general agreement where all parties accept a decision that was reached through a consensus process. It is in effect a cooperative development of a decision, where:

- Everyone is equal
- All ideas are taken into account
- Differences are recognized
- Everyone participates

Consensus is all about attitude. It requires an attitude of:

- Agreement seeking
- Mutual understanding and respect
- Respect for diversity

The objectives of the second meetings of the Working Groups in May 2008 were:

- To remind Working Group members of their roles, responsibilities and code of conduct
- To assemble all the background information, finalize the situational analysis, and clearly understand the problems and issues of each river
- To develop management alternatives for each of the priority waters
- If time permits, to begin the process of evaluating the management alternatives
- To clarify next steps including additional information needs, homework and agenda for June meetings

The final meeting of the Working Groups, which was held in June 2008, had one objective:

- To develop recommended management alternatives for the priority rivers

4.2 Process approach

Addressing angler-use problems for the steelhead sport fishery on the Skeena River system is not a straightforward task due to the many “competing” interests. These competing interests include a strong sense of priority for BC resident anglers, which is also a fundamental principal of the Quality Waters Strategy. They also include a licensed guiding industry that offers a “high-end” product to clients who are mostly non-residents, and that produces economic spin-offs to the broader community as well.

The competing interests also include a local economy consisting of accommodations providers, restaurants, bait and tackle stores and others in the hospitality and tourism sector, who garner a significant proportion of their income from non-guided, non-resident steelhead anglers.

Any plan that attempts to address angler-use issues is challenged by these competing interests throughout the watershed. The interests need to be clearly identified and articulated so that everyone knows what issues and concerns must be addressed in this problem-solving (or planning) process. In reality, an Angling Management Plan can neither solve all the problems perfectly, nor address everyone's interests in a way that pleases them 100 per cent. Instead, an Angling Management Plan seeks to optimize the results for all parties concerned, for all the interests around the table.

4.2.1 Structured Decision Making

Throughout the Phase I consultation process, stakeholder and the public were asked over and over again to identify the problems and issues that are contributing to a reduced quality steelhead angling experience on the Skeena River system. The Working Groups revisited and framed those problems and issues in their first meetings and distilled them down to a list that was agreed to by all.

The Working Groups then defined a series of objectives that articulated how we would solve the issues and problems. They looked at ways that different management alternatives could be measured against the objectives. Then, with the help of the facilitator, Working Group members created large tables called consequence tables. These tables were used to assess a range of management alternatives, using different groups of regulations from the tool box. The consequence tables tried to determine the best mix of management alternatives to best address the most objectives.

The process that was utilized was iterative in that Working Groups created a number of tables before they had the right objectives identified that captured the key problems and issues, that were measurable and that would allow them to assess options and come up with a recommended management alternative for each water.

This Structured Decision Making process is a systematic way to think about and resolve complex problems. As decision analysis expert Ralph Keeney puts it, structured decision making is "a formalization of common sense for decision problems which are too complex for informal use of common sense" (Hammond, Keeney and Raiffa 1999).

Structured Decision Making is a useful communication tool for discussing and crafting options with stakeholders. The intent is that stakeholders can become much less positional because they see that their values/objectives are on the table and are being addressed or considered. The Structured Decision Making process creates opportunities to look at alternatives that address their values and objectives.

Structured Decision Making helps make better decisions because it uses two types of information:

- Technical information (data, expert judgment, science), which gives answers to questions such as “What was ‘it’? What is ‘it’? What could ‘it’ be?”
- Values information, which gives answers to questions such as “What should ‘it’ be? What do you think about the impacts or changes? Is ‘it’ worth it?”

Both technical information and values need to be assessed, but clearly separated and used appropriately in a structured process.

Most importantly, the process greatly improves transparency around why decisions are being made, by documenting each stage of the process and accounting for decisions and choices made by Working Groups during the process. This is important both for the broader Skeena Watershed community that will look at the draft Angling Management Plan in the fall but also for Director of Fish and Wildlife who will ultimately be charged with assessing, approving and implementing the plan. In effect, the process makes the outcomes become much more defensible. To draw an analogy from mathematical problems, Structured Decision Making is a way of “showing your work.”

4.2.2 Building the structure

One of the ways that the Structured Decision Making process provides transparency around choices and decisions is through the use of a consequence table. The main elements of the consequence tables — problems and issues, objectives, and evaluation criteria — were developed and used for all priority waters.

The table below shows an example of a basic consequence table:

4.2.3 Basic consequence table

Problem / Issue	Objective	Evaluation Criteria (1 is worst; 5 is best)	Mgmt Element 1 status quo	Mgmt Element 2	Mgmt Element 3	Mgmt Element 4 ...
Reduced quality of experience due to crowding	1. To maximize the quality of the angling experience	very poor-1/ poor-2/ moderate-3/ good-4 /excellent-5				
Concerns around allocation to resident anglers (resident angler priority)	2. To maximize resident angling opportunities	low-1/ med-low-2/ medium-3/ med-high-4/ high-5				
Concerns around allocation to non-residents who, directly or indirectly, make a significant contribution to the local economy	3. To maximize non-resident angling opportunities	low-1/ med-low-2/ medium-3/ med-high-4/ high-5				
Concerns around allocation to guided anglers to ensure a strong licensed guiding industry	4. To maximize angling opportunities for guided anglers	low-1/ med-low-2/ medium-3/ med-high-4/ high-5				
Ministry has limited budget, which is unlikely to increase	5. To minimize the ministry's management and enforcement costs	very high-1/ high-2/ moderate-3/ low-4/ very low-5				
Too many regulations could be confusing and could limit effectiveness	6. To minimize regulatory complexity	very high-1/ high-2/ moderate-3/ low-4/ very low-5				

Each of the objectives is worded in a very definitive way as though it were being addressed independently, but in reality the objectives need to be considered simultaneously. The challenge is to find a management alternative that best addresses all the objectives.

For the first objective, the problem or issue was the quality of angling, defined primarily in terms of crowding. The objective is written as “To maximize the quality of the angling experience.” so that it is clear what we are trying to measure when we assess different management alternatives against this particular objective. Evaluation criteria for this objective use a subjective, relative scale, from 1 to 5, where 1 is the very poor quality and 5 is excellent quality. The rest of the objectives were developed in the same manner.

Note that in the evaluation criteria for objectives 5 and 6, high costs or high regulatory complexity score low on the scale.

Working Groups discussed regulatory tools outlined in the Tool Box to identify potential management elements that could contribute to meeting the various objectives. The most effective management elements were then packaged as management alternatives for further discussion and analysis.

The Structured Decision Making process then involved considering a particular management alternative and using the evaluation criteria to measure how well it “scored” at achieving a particular objective. This scoring exercise was done for each objective and for each management alternative. Once all the management alternatives were scored, they were compared and “mixed and matched” to create a recommended management alternative. In the process of doing this, many “trade offs” were made. For example, the selection of certain management alternatives may have required trade-offs such as sacrificing some level of quality in order to accommodate all the different anglers, or not giving residents the priority that some would have liked because there was a need for a sufficient number of non-residents to keep the local economy going, or not being able to bring in fairly complex regulations to deal with angler density and quality of fishing because the management costs to the Ministry of Environment would have been too high.

5.0 The Plans

This section of this plan documents the process considerations for the three Working Groups in developing their recommended management alternatives for each of the priority waters.

The report is organized by Working Group and then by priority water. Each priority water section is usually divided into the following sub-sections:

- Background information – brief description of the river
- Problems and issues - management and other issues identified on the river
- Management Elements considered – different management tools from the tool box that were considered by the Working Groups
- Management Element analysis – summary of why certain management elements were used and why others were not in the development of a recommended management alternative
- Target calculation – summary of how target number of anglers were calculated on certain rivers
- Recommended Management Alternative – final recommended management approach for a river

5.1 Preliminary remarks: Problems and solutions

Following consultation with a broad range of stakeholders and members of the public as well as discussions with members of the Working Groups, the essence of the problem with steelhead angler use on the Skeena River system became clear. Some rivers at some times of year get very crowded. The most crowded parts of the season are usually the last two weeks in September and the first two weeks in October.

In the areas and times where angler-use issues are a problem, the Angling Management Plan relies on one main regulatory measure — the combination of a limited-day licence with a lottery system to allocate those licences evenly over the classified water period.

Working Groups considered a range of management options, but most of those options did not address the principal issue of trying to level out angling use over the entire Classified Water period, so that there were not extreme peaks of angler use that caused crowding and poor quality angling at specific times in certain places.

The limited-day licence and lottery system is applied to the non-guided, non-resident sector of the sport fishery. There are several reasons for this:

- Consultations with stakeholders and the public indicated that the number of non-guided, non-residents fishing in some waters has increased considerably in the past few years and in many cases, that sector is a major component of the crowding problem.

- Many people cited specific examples of crowding caused by non-guided, non-resident anglers.
- The total number of guided anglers for each river is basically capped at specific levels. Ministry data as well as consultations with public and stakeholders suggest that guided anglers do not contribute to the crowding problem. There may be some situations where there are large numbers of guided anglers during peak times in the season, and changes to guiding regulations could be made to ensure that guided angler use was spread evenly over the entire Classified Water period. However, the number of guides and assistant guides usually places a limit on the number of guided anglers on a river at any one time.
- In many cases, public and stakeholder groups said that resident anglers were not participating in the sport fishery due to crowding. Therefore, regulating the number of BC residents, other than trying to find ways to create more opportunities, would not be appropriate.
- One of the over-arching principles of the Quality Waters Strategy states that resident anglers and guided anglers have a higher priority than non-resident anglers on Classified Waters.

The solution to the crowding problem is not so much to reduce the overall angling pressure by non-guided, non-resident anglers on the rivers over the Classified Waters period, but to spread angler use evenly over the entire Classified Water period.

In order to spread angler use over a period of time, two things need to be in place. The first is to create a limited-day licence. Working Groups for the most part chose an eight-day licence for two reasons:

- Average length of fishing trip for most non-residents on most waters is similar to this number of days
- Eight-day licence has already been used on the Dean River in BC and is established in regulation

The second thing that needs to be in place is a lottery system. A lottery system is the only way to fairly allocate eight-day licences evenly over a Classified Water period. There is a lottery system in place on the Dean River although it is an expensive process and involves a lot of ministry staff time. Lottery systems in the future could be integrated with the e-licensing system, but start-up costs may be high and so it is difficult to determine when the ministry might be able to implement this system.

Using past ministry data and local knowledge, the Working Groups developed an “ideal” number of anglers (sometimes referred to as carrying capacity) that can fish a particular water in one day. Those daily targets were expanded to produce targets for the entire Classified Waters period and then the number of eight-day licences that could be issued for that river was determined.

Some of the recommended management alternatives call for an immediate implementation of the eight-day licence and lottery based on the target number of non-resident anglers. Other call for a “trigger,” which means that if a target is reached twice

in a three-year period, then that would trigger an eight-day licence and lottery system to come into effect.

The lottery system will require modifications to the province's e-licensing system. Depending on the target number of non-resident anglers, a set of eight-day licences would be put into the e-licensing system such that they were spread over the entire classified water period for a particular river. For example, an angler could receive a licence for Sept 1-9, 2010 on the Kispiox River. All licence issuers would have access to this database until all the licences for each water were sold. A small number of licences could be "held back" for sale closer to the actual angling time. If demand for angling in a particular river were low, there could be the option of a second eight-day licence available to the same angler.

At a certain point in the angling year, the lotteries for each river would be opened. An angler could apply to be included in the lottery on more than one river. There could be a provision that if you were unsuccessful in a lottery on a particular river in one year, you would have priority in the lottery on that water in the following year.

This system is very similar in concept to the Limited Entry Hunting (LEH) lottery that has been running for a number of years for hunting big game in BC.

The end result is that some people may potentially not be able to fish for as many consecutive days on one water as they used to. Some people will not be able to fish precisely at the same time of year as they used to. Some people may have to fish on different waters than they have in the past. And some people may not have an opportunity to fish on all the waters that they choose. But by spreading effort over the Classified Water period, this approach has the least impact on the smallest number of non-resident anglers. And more importantly, it is the only way that the peaks of non-resident angler activity that contributes to crowding can be addressed.

It is important to note that all the statements in the sections below are based on discussions and conclusions by Working Group participants. Although there was considerable expertise around the tables, there are likely lots of differences of opinion on the factual information and many points-of-view on the recommendations made.

That's why this is a DRAFT Angling Management Plan and that's why there is an extensive Phase II consultation process in the fall of 2008 to gather input on this draft plan from other stakeholders and members of the public.

5.2 Central Working Group: Kitseguecla and Kitwanga Rivers

5.2.1 Background information

(from Morris and Eccles 1975; Grieve and Webb 1999)

The Kitseguecla River (see Figure 2) is a short river that enters the Skeena River at Kitseguecla Village, approximately 37 kilometres southeast of Hazelton. The river is approximately 46 kilometres in length and has a drainage area of 497 square kilometres. The headwaters are situated in swampy lowland between the Hudson Bay Range and Rocky Ridge. Landforms along the lower river consist of many canyons and sections of steep, unconsolidated soils of sand and gravel. Major tributaries include Deep Canyon Creek, Deep Gulley Creek, Juniper Creek and Kitsuns Creek.

Species present in the Kitseguecla River include chinook salmon, sockeye salmon, chum salmon, coho salmon, pink salmon, cutthroat trout, Dolly Varden, mountain whitefish, rainbow trout, steelhead and a number of non-game fish species.

The Kitwanga River is 54 kilometres long and enters the Skeena at Tyee, 180 kilometres upstream from the mouth of the Skeena. The Kitwanga has four main tributaries: Tea Creek, Moonlit Creek, Deuce Creek and Kitwancool Creek. The river drains Kitwancool Lake.

Other species in the Kitwanga include: chinook, sockeye, pink and chum salmon; cutthroat trout, Dolly Varden, rainbow trout, kokanee and mountain whitefish.

5.2.2 Problems and issues

1. Very easily overcrowded due to their small size and limited numbers of places to fish
2. Limited number of access points (Kitseguecla: bridge on Highway 16, bridge at 15 kilometres, confluence with Skeena or hike in; Kitwanga: bridge on Highway 16; confluence with Skeena)
3. "Blow out" easily
4. Effort may be transferred here in the future if more regulations on other waters (that was why Regional Committee included these two rivers as priority rivers)
5. Small populations of large fish (sensitive)

5.2.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Classified Water year round (April 1 – March 31)
 - b. Class II Classified Water
 - c. No guided rod-days allocated on these rivers

- d. Closed December 31 – June 15
- e. Steelhead Stamp mandatory from September 1 – October 31
2. Licence-class restrictions: resident-only angling
3. Limiting non-resident licences (eight-day) through a lottery with a cap
4. Adding guided rod-day quotas
5. Resident-only angling on Saturdays

Kitsequecla and Kitwanga Rivers

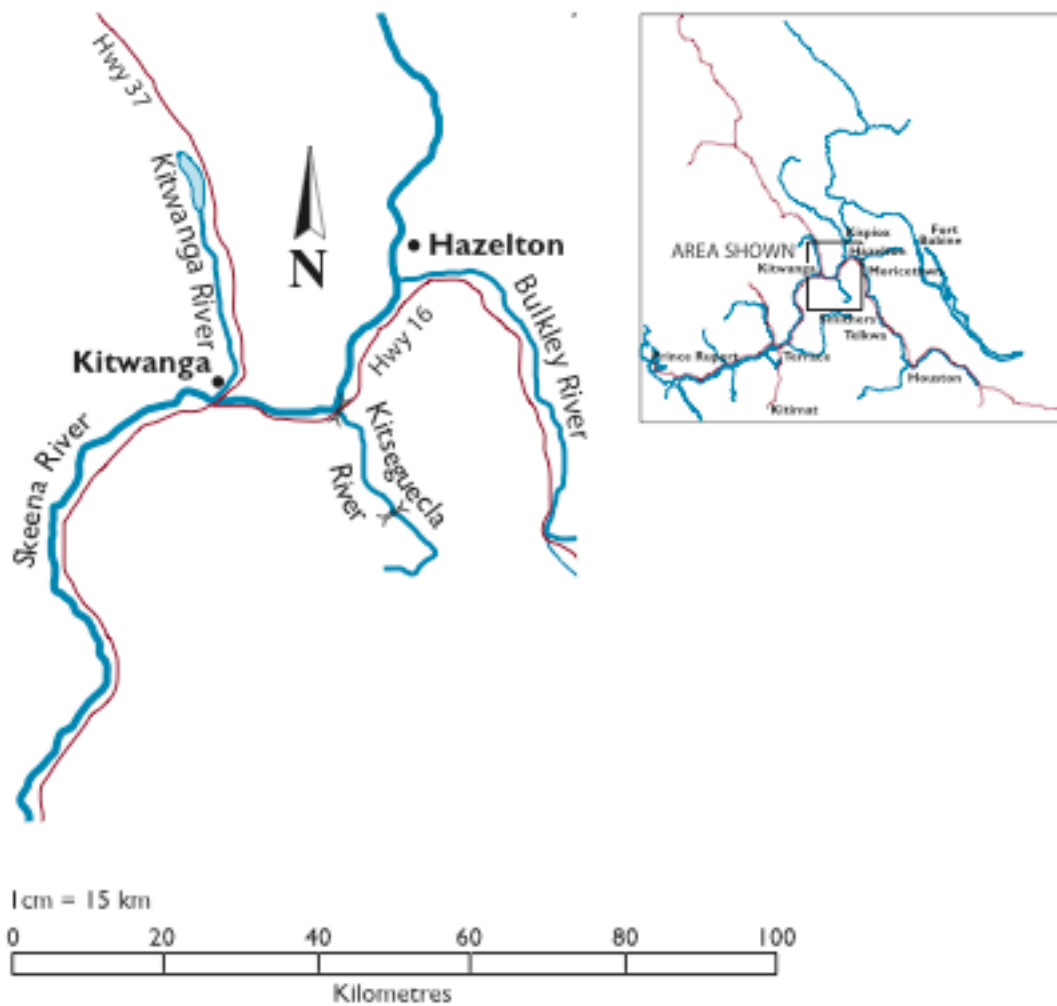


Figure 2 Kitsequecla and Kitwanga Rivers

5.2.4 Management Element analysis

The Kitsequecla and Kitwanga Rivers were considered together because they were similar in:

- Size
- Angler usage (mostly BC residents)

- Types of access

There was concern that if new regulations took effect on the Kispiox, that there would be an influx of anglers to these two small rivers and the Suskwa as well. However, many people plan their trips well ahead, and if they know what the situation is on the Kispiox or wherever they normally fish, they might not come at all rather than make a “spur of the moment” move to another river.

Management Element #1 (status quo) seems OK for now but adding residents-only on the weekend or one weekend day would better support resident priority.

Management Element #2 (resident-only) was considered but felt that it was not necessary at this point and not a very acceptable way of achieving resident priority because even though the number of angling opportunities is small, it sends a “bad signal” to tourism in BC.

Management Element #3 (non-guided, non-resident, eight-day licence with lottery) is not needed now because crowding is not seen as a problem, but could be considered in the future. A target number of anglers would need to be established as a trigger to establish a lottery for non-residents.

Management Element #4 (increasing guided rod-days) does not make sense because the original intent of the regulations was to have some rivers without guiding and these small rivers are not appropriate for guiding because they offer so few places to fish.

Management Element #5 (resident-only for one-day on the weekend) was considered a good idea. Saturday was chosen as a better day because non-residents who cannot fish could go and do other outdoor activities in the community, go to other tourist attractions, or shop at local stores, which are more likely to be open on a Saturday.

5.2.5 Target calculation

Using local knowledge from the Working Group, the carrying capacity for the Kitwanga is six anglers per day during the Classified Waters period. The trigger to establish a lottery would be 342 angler-days (six anglers per day x 57 days, the number of days in the Classified Waters period minus the Saturday resident-only days). The non-resident allocation would be two anglers per day or 114 angler-days for the Classified Waters season.

Using local knowledge from the Working Group, the carrying capacity for the Kitsequecla is four anglers per day during the Classified Waters period. The trigger to establish a lottery would be 228 angler-days (four anglers per day x 57 days, the number of days in the Classified Waters period minus the Saturday resident-only days). The non-resident allocation would be one angler per day or 57 angler-days for the Classified Waters season.

5.2.6 Recommended Management Alternative

- Start with resident angler-only fishing on Saturdays and leave everything else as status quo
- If total angling pressure by non-guided, non-resident anglers exceeds 342 angler-days two years out of three on the Kitwanga or 228 angler-days two years out of three on the Kitseguecla, that would trigger a move to an eight-day licence lottery for these anglers with caps of two anglers per day on the Kitwanga and one angler per day on the Kitseguecla, spread evenly over the Classified Waters period from September 1 – October 31

5.3 Central Working Group: Suskwa River

5.3.1 Background information

(from Chudyk 1978)

The Suskwa River (Figure 3) drains an area of approximately 1,869 square kilometres. A major tributary, Harold-Price Creek, contributes 90 per cent of the mean annual Suskwa discharge, which is 20,048 litres per second.

Chinook, coho, and pink salmon as well as steelhead cohabit the Suskwa. Other game fish include cutthroat trout, resident rainbow trout, Dolly Varden and Rocky Mountain whitefish.

5.3.2 Problems and issues

1. Easy access but all concentrated at one location
2. Short fishable area: 4-6 kilometres
3. Very easily overcrowded due to its small size and limited numbers of places to fish
4. Limited number of access points (access from forestry road bridge at 5 kilometres and bridge at 15 kilometres)
5. “Blows out” easily
6. Effort may be transferred here in the future if more regulations on other waters (that was why Regional Committee included this river as a priority)
7. Small populations of large fish (sensitive)

5.3.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Classified Water year round (April 1 – March 31)
 - b. Class II Classified Water
 - c. No guided rod-days allocated
 - d. Spring closure December 31 – June 15
 - e. Steelhead Stamp mandatory September 1 – October 31

2. Licence-class restrictions: resident-only angling
3. Limiting non-resident licences (eight-day) through a lottery with a cap
4. Limiting resident licences (eight-day) through a lottery with a cap
5. Resident-only angling on Saturday

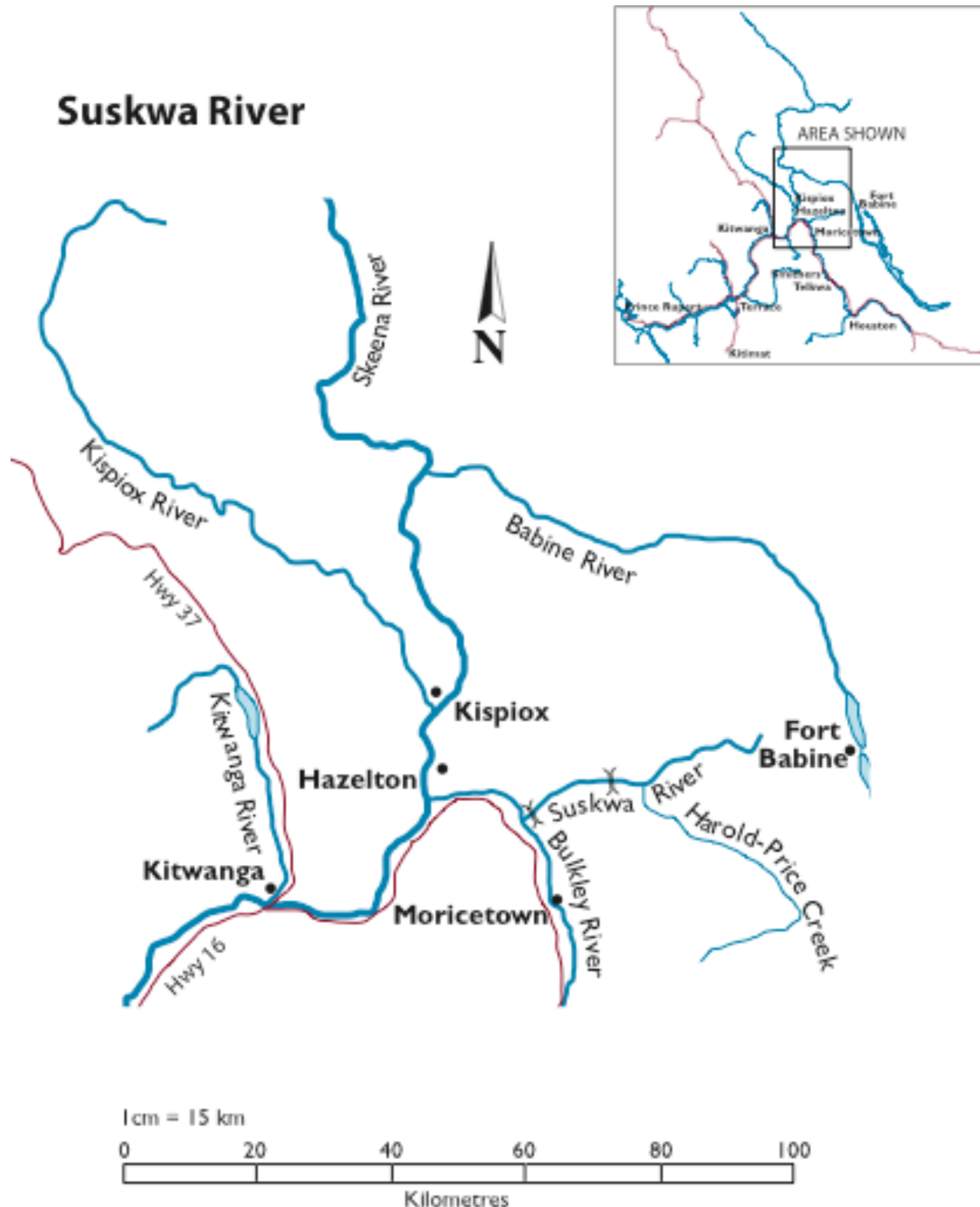


Figure 3 Suskwa River

5.3.4 Management Element analysis

Management Element #1 (status quo) - For the most part everything is OK on this river for now, but adding resident-only on weekends would support resident priority.

Management Element #2 (resident-only waters) was considered but, for the same reasons as for the Kitwanga and Kitseguecla, it was felt that it was not necessary at this point and not a very acceptable way of achieving resident priority because even though the number of angling opportunities is small, it sends a “bad signal” to tourism in BC.

Management Element #3 (non-guided, non-resident, eight-day licence with lottery) is not warranted given current levels of angler use, but could be considered with a trigger in the future.

Management Element #4 (lottery for residents) was put forward originally because there was the possibility that in the future, crowding may require restrictions on resident anglers in this resident-dominated fishery. The element was rejected because it is inconsistent with the other waters.

Management Element #5 (resident-only angling on Saturday) supports resident priority. As with the other rivers, Saturday is a better day because non-residents who cannot fish can go and do other things on a Saturday. The impact of this on non-residents would be minimal because they do not fish this river all that much and it is only one day of the week.

5.3.5 Target calculation

Using local knowledge from the Working Group, the carrying capacity for the Kitwanga is seven anglers per day during the Classified Waters period. The trigger to establish a lottery would be 399 angler-days (seven anglers per day x 57 days, the number of days in the Classified Waters period minus the Saturday resident-only days). The non-resident allocation would be two anglers per day or 114 angler-days for the Classified Waters season.

5.3.6 Recommended Management Alternative

- Start with resident angler-only fishing on Saturdays and leave everything else as status quo
- If total non-guided, non-resident angling pressure exceeds 399 angler-days two years out of three, that would trigger a move to an eight-day licence lottery for these anglers with caps of two anglers per day on the Suskwa, spread evenly over the Classified Waters period from September 1 – October 31

5.4 Central Working Group: Skeena IV (upstream from the Kitwanga Bridge)

5.4.1 Background information

(from Paish and Associates 1985)

See Skeena IV (downstream of the Kitwanga bridge) for a general river description.

This section of main stem river (see Figure 4) is approximately 368 kilometres in length and extends from directly upstream of the Kitwanga bridge to the headwaters near Mount Klappan approximately 305 kilometres northeast of Terrace.

Species present in the Skeena River include bull trout, burbot, chinook salmon, chum salmon, coho salmon, pink salmon, sockeye salmon, cutthroat trout, Dolly Varden, eulachon, green sturgeon, longfin smelt, mountain whitefish, rainbow trout, steelhead, white sturgeon and a number of non-game fish species.

5.4.2 Problems and issues

- Crowding (September – October peak)
 - Confluence of Kispiox
 - Confluence of Bulkley
 - Near mouth of Kitwanga
 - Near mouth of Kitsequecla
- Illegal guiding
- Increased use of jet boats
- Pressure points at boat launches
 - Hazelton
 - Kispiox
 - Glenvall
 - Kitwanga
- Salmon River road access in future
- Salmon sport fisheries compound issue

5.4.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Classified Water July 1 – October 31
 - b. Class II Classified Water
 - c. Steelhead stamp – not mandatory
 - d. Spring closure above Cedarvale December 31-June 15
 - e. Guides
 - i. 414 rod-days allocated
 - ii. 327 rod-days used (based on guide reports)
 - iii. 1,000 rod-days in B.C Regulation 125/90 (this is the total allowable guided rod-days)
2. Limited Licence – lottery for non-guided, non-resident anglers with eight-day licences in the following zone:
 - a. From mouth of Salmon River to mouth of Kitwanga River excluding between Four-Mile Bridge and the triangular markers below the mouth of the Bulkley River (this excluded zone would be status quo)
3. Steelhead Stamp September 1 - October 31
4. Resident only for one day on the weekend

5.4.4 Management Element analysis

Several Management Elements that were originally developed at the May meeting of the Working Group were removed because they were not deemed appropriate, were far too intrusive, or were not clearly described. These included zoning by time of year and changing the rod-days allocated to guides in the zone proposed in Management Element #2.

Management Element #1 (status quo) does not address crowding and other issues at specific locations on the river.

Management Element #2 (lottery of eight-day licences for non-guided, non-resident anglers in a defined zone) appears to address the main issues on this part of the Skeena. The zone is a small percentage of total fishable waters on Skeena IV, so the majority of waters outside the zone are status quo with no new restrictions.

Management Element #3 (mandatory Steelhead Stamp from September 1- October 31) makes the Skeena more consistent with other parts of the watershed, provides better management information through Steelhead Harvest Analysis, and makes enforcement easier.

Management Element #4 (resident-only for one day on weekends) was considered and rejected because if this regulation were adopted on the Kispiox, Kitwanga, Kitsequecla and Suskwa, there would be a need for somewhere else for both guided and non-guided non-residents to fish.

If MOE allocates rod-days to guides in Skeena IV, there is a concern that those rod-days should not be allocated to the new zone proposed in Management Element #2.

MOE should consider creating a Skeena V area that includes the upper parts of the Skeena (presently all Skeena IV) above the Salmon River. A portion of present rod-day allocations could be put into that new zone and additional rod-days could be allocated to that zone. Hence the total potential allocation in regulation of 1,000 rod-days would be divided between Skeena IV and Skeena V.

5.5.5 Target calculation

It was too difficult to calculate carrying capacity with MOE data for several reasons

- Given available data sources, it is not possible to differentiate between angler use above and below Kitwanga Bridge
- The Steelhead Harvest Analyses combines data for Skeena II and Skeena IV, so it is not possible to separate just the data for Skeena IV
- Very little creel data available

Based on local knowledge, it was estimated that the carrying capacity of Skeena IV in the zone established in Management Element #2, is 30 anglers. That would result in $30 \times 123 \text{ days} = 3,690$ angler-days during the Classified Waters period.

Historical allocation, based on combined Skeena II and IV data, which is all that was available, is 11% guided, 50% resident, and 39% non-guided, non-resident. Using this allocation formula, the angler-days allocated to non-guided, non-residents: $3,690 \times 39\% = 1,439$. This equates to 180 eight-day licences.

5.5.6 Recommended Management Alternative

- Combination of Management Element #2 and #3
 - Limited-day licence lottery for non-guided, non-resident anglers with a total of 180 eight-day licences spread evenly over the Classified Waters period (July 1 – October 31) in the following zones:
 - From mouth of Salmon River to Four-Mile Bridge
 - From triangular markers below the mouth of the Bulkley River to the Kitwanga Bridge (Note: the Central Working Group originally set this boundary at the mouth of the Kitwanga River, but the mouth falls under the West Working Group, so further discussions are needed)
 - Rest of Skeena IV outside zones is status quo
 - Mandatory Steelhead Stamp from September 1 - October 31

5.6 Central Working Group: Kispiox River

5.6.1 Background information

(from Morten and Giroux 2006 and Baxter 1997)

The Kispiox River (Figure 5) flows for about 140 kilometres into the Skeena River at the Village of Kispiox, 16 kilometres north of Hazelton. It drains a total of 2,086 square kilometres and is highly responsive to flood events because it has a minimal amount of lake influence. The fishable length of the Kispiox is about 100 kilometres. Kispiox River steelhead are known for their world record size.

The Kispiox River is accessible by road from both sides for most of its length and the valley is populated and well developed agriculturally. Power boats are prohibited on the river but drift boats are permitted and commonly used by anglers and non-angling recreationists. Most of the anglers are concentrated in the lower 30 kilometres of the river. The Kispiox is a Class II Classified Waters (Morten and Giroux 2006).

Other fish species found in the system include: pink, chum, coho, chinook, and sockeye salmon; mountain whitefish; bull trout; Dolly Varden; longnose sucker; cutthroat trout; northern squawfish; rainbow trout; and sculpins.

5.6.2 Problems and issues

1. Large number of non-residents are arriving earlier and staying later
2. Non-residents customers are the mainstay of B&Bs and other accommodations
3. Local accommodations people do most of their business in a very short period of time and so hire staff accordingly. If anglers were spread out over a longer season, staff would need to be hired for longer periods and some accommodations would be operating below capacity
4. Crowding from Resthaven to Skeena (September – October peak)
5. Illegal guiding
6. Etiquette (related to pressure) especially a problem in last few years
7. Non-residents camping at 41 and Sweetin forestry sites stay longer than 14 days because it is not enforced
8. If regulations are applied to the Kispiox, it could push anglers to other waters

Kispiox River



Figure 5 Kispiox River

5.6.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Classified Water September 1 – October 31

- b. Class II Classified Water
 - c. Guides
 - i. Maximum allowable of 4 (3 actual)
 - ii. 393 rod-days
 - d. No limitations in Classified Waters period
- 2. Non-guided, non-resident eight-day licence
 - a. Lottery (based on target)
 - b. Water-specific
 - c. More than one licence per angler if available
- 3. Non-guided, non-resident eight-day licence
 - a. First come, first served based on limited number (target)
 - b. Start registration on November 1 for following year
 - c. Water-specific
- 4. Angler Use – Zoning
 - a. Middle zone – area of the river from 20.2 kilometres along Kispiox Valley Road to 29.5 kilometres along Kispiox Valley Road (leave as status quo)
 - b. Rest of river not in zone – as per Management Element #2 above
- 5. Extend Classified Waters period to August 15 – November 15
- 6. Angler Use – Zoning by time (2 – 4 zones)
 - a. Increasing number of licences as season progresses
 - b. Based on changing target as fish move into system
- 7. Licence-Class Restrictions – residents-only on one weekend day, Saturday (no guided anglers on that day)
- 8. Angler Use – Zoning by area
 - a. Resident-only zone (no guided anglers)
 - b. Rest as per Management Element #2
- 9. Angler use – guided only for non-residents

5.6.4 Management Element analysis

Management Element #1 (status quo) was rejected because there is crowding and poor quality angling on the Kispiox in certain places at certain times and there is very little angling by residents, so something needs to be changed to improve the situation.

Management Element #2 (non-resident lottery) - After discussions around Management Element #3, there was a desire to incorporate some of the features of Management Element #3 into Management Element #2. In particular, there was interest in having some of the licences available through a lottery at an earlier date (to help trip planning for non-residents) and others available closer to the actual fishing time (for people who happen to be in the area, changing conditions on other rivers, etc.).

Management Element #3 (first come, first served, limited entry fishery for non-residents) was removed because the lottery system (Management Element #2) is:

- Already established on the Dean River
- Cheaper than this option
- Fairer than first come, first served because certain clubs, groups or businesses may buy up blocks

The idea of having some of the eight-day licences available early on and others near the actual time of fishing was incorporated into #2.

Management Element #4 (status quo zone) takes a popular part of the Kispiox River near a number of accommodation providers and makes it status quo — i.e., no limited-day licence lottery for non-residents. This provides additional opportunities for non-residents, if the rest of the river is regulated as per Management Element #2.

Management Element #5 (extend classified period) was removed because it:

- Does very little to satisfy objectives on its own
- Adversely affects both residents and non-residents who fish salmon for food, because they have to buy a Steelhead Stamp for an even longer period
- Negatively affects guides with not enough rod-days in classified season, who presently do some guiding in the non-classified times (August and November)

This element does have the ability to spread angling pressure out over the season.

Management Element #6 (temporal zoning) was removed because it is too complicated to understand or enforce.

Management Element #7 (resident-only on Saturday) supports resident priority, which is a key principle of the Quality Waters Strategy. Saturday was chosen as a better day because non-residents who cannot fish can go and do other outdoor activities in the community, go to other tourist attractions, or shop at local stores, which are more likely to be open on a Saturday. Guides could work with a “resident angler-only” Saturday, but it means that depending on when a client trip begins, one day of the span of time will need to be spent fishing somewhere else or doing something else in the watershed. It is recognized that diversification is important for the tourism industry in the Kispiox Valley and Hazelton area as it is anywhere else.

Management Element #8 (resident-only zone) was removed because:

- It is too complicated to enforce and for anglers to understand
- Other options are being considered for resident-only possibilities

Management Element #9 (guided only for all non-residents) was removed because it would have large negative impacts for small businesses (mostly accommodation providers but also restaurants, bait and tackle stores and other provisioners) that rely almost exclusively on non-residents for revenue.

One member of the Central Working Group, David Larson, did not agree with the idea of an eight-day licence.

There was discussion of effects several Management Elements would have on anglers who are non-resident property owners and the possible effects of regulations on property values.

5.6.5 Target calculation

As determined from the knowledge of the members of the Working Group, the carrying capacity of the Kispiox River was calculated to be 53 anglers per day for the fishable length of the river (100 kilometres). It was felt that this estimate is low because:

- The angler density, 0.53 anglers per kilometre, is below the angler density on the Dean River, most of which is a Class I Classified Waters river
- The group calculated the number of non-guided, non-residents likely to be fishing on the Kispiox River at peak times to be over 100 anglers per day.

The estimate (53 anglers per day) was used and 12 anglers per day (the carrying capacity of the status quo zone) was subtracted from the 53 to give a total of 41 anglers per day outside the zone. The projected allocation for non-residents, based on an average of Working Group members' suggestions of 35% (all Working Group members were asked what they thought an ideal allocation — residents, non-guided non-residents, guided anglers — of the steelhead sport fishery would be, yields 14 anglers per day. Multiply that number by 53 days of the Classified Waters period (note eight Saturdays removed as they will be resident-only) = 742 angler-days, which equates to 93 eight-day licences, spread over the Classified Waters period.

5.6.6 Recommended Management Alternative

- Combination of Management Elements #2, 4, and 7
- Non-guided, non-resident, eight-day licence lottery based on a target of 795 angler-days for non-residents in the Classified Waters period, which equates to 99 eight-day licences spread evenly over the season (on entire river except status quo zone)
- Status quo zone in an area of the river from 20.2 kilometres along Kispiox Valley Road to 29.5 kilometres along Kispiox Valley Road
- Resident-only angling on Saturdays on entire river including status quo zone (Hence no guided anglers on Saturdays during the Classified Waters period)

5.7 Central Working Group: Non-regulatory recommendations

The Central Working Group looked at non-regulatory recommendations that would address some of the problems and issues identified for all their priority waters. Many of these ideas were expressed during the public consultation process earlier in the year.

5.7.1 River Guardian program

In the past, for a number of years, the Ministry of Environment operated a River Guardian program on the Kispiox River. The guardians did surveys, provided information on everything from fish identification to proper catch and release techniques, and most importantly acted as a much-needed presence for the ministry on the river.

The Working Group felt strongly that a River Guardian program should be reinstated:

- Help monitor the implementation of the Angling Management Plan

- Collect survey data or conduct creel censuses
- Provide information and education on fish identification, proper handling techniques and proper angler etiquette
- Assist Conservation Officers in identifying enforcement problems

Members felt that the ministry should look “outside the box” for funding of the program including special fees that stayed in the community for River Guardians or running the program in cooperation with local First Nations, which may also provide additional financing opportunities.

5.7.2 Enforcement

Working Group members, along with many members in the community, asked that more enforcement be provided, both now and in the future, to deal with issues like illegal guiding and fishing without the proper licence.

5.7.3 E-licensing

Coupled to the regulatory recommendations, Working Group members realized that the only way that steelhead angling can be effectively managed is to be able to spread anglers out over the whole fishable period and “cap” their overall numbers. The best way to do that is to ensure that the province’s e-licensing system is capable of handling targets, caps, time-limited licences, and spreading licences over the season, for each of the different waters.

5.7.4 Resident priority

Members felt that resident priority needs to be clearly defined in the Quality Waters Strategy.

5.7.5 Public education

Education on etiquette, proper catch and release techniques and fish identification are desperately needed on all waters. Delivery of these education initiatives could be achieved through signage at access points, on the website, as part of licence purchase, information directly on the angling licences, and even a test, similar to what is used in hunting licences, which people need to take before they receive their licence. As already indicated, the River Guardian program could play an important role in public education.

5.7.6 Process

Members believe that better criteria for selection of Working Groups should be in place so that Working Groups do not include past members of the Regional Committee, do not include resident anglers who have guided in the past, and have broader representation from other stakeholders in the community, particularly those in the non-guiding local economy.

5.8 East Working Group: Babine River

5.8.1 Background information

(from Morten 1998; MoE 1989)

The Babine River (Figure 6) is a Class I Classified Water that flows approximately 98 kilometres from Nilkitkwa Lake into the Skeena River about 63 kilometres north of Hazelton. About 60 kilometres of the Babine is fishable.

Just above Nilkitkwa Lake, the 160-kilometre-long Babine Lake heavily influences the river, acting as a buffer that moderates flows.

The upper Babine River (upstream from Gail Creek) is where most angling occurs, while the lower Babine (from Gail Creek downstream to the confluence with the Skeena) is not angled very much due to the morphology of that part of the lower river. Two of the guiding operations exclusively guide the upper 20 kilometres of the Babine River. One additional operation exclusively guides the section of river downstream of the canyon to an area near Grizzly Drop.

Other than by jet boat, access to the upper river on foot is limited to one logging road and bridge crossing and some angler trails along the shores of the upper river, which concentrates the non-guided anglers in the parts of the river upstream from the Nilkitkwa River confluence. Drift boat use is limited by the lack of accessible pull-outs, however excursions do occur frequently, drifting down the Babine and floating the full length of the river into the Skeena and pulling out at Kispiox Village. Some rafts will drift down the Babine to the Gail Creek confluence and be extracted by helicopter.

The Babine River Corridor Provincial Park was formed in 1999 and protects 85 kilometres of the Babine River. Fishing and hunting are allowed in the park and there are also active recreationists involved in both commercial and non-commercial river kayaking and rafting operations as well as other sorts of back country recreation.

5.8.2 Problems and issues

- Concentration of non-guided use primarily at top section (five kilometres) due to ease of access relative to the rest of the river, which can only be accessed by experienced recreationists utilizing boats or by anglers using the services of a guide operation access
- Transfer of effort from Nilkitkwa River
- Increased use of float craft leads to concentration of effort in the upper end
- Private aircraft: Concern about current use and future potential for increased use of private aircraft bringing in anglers and increasing crowding
- Limited access by road limits casual angler use – implications for distribution of effort (concentrated angling effort)
- Poor angler etiquette has been reported in the upper river during the sockeye fishery
- Poor etiquette by upper river guides has been reported

- Style of guiding
- Chasing some anglers
- Illegal guiding near the Nilkitkwa River confluence has been reported (in the upper five kilometres of the Babine)
- Size of fishable runs are fairly small and can fill up quickly
- Oversubscribed to guides (rod-days)
- Long-term campers on the upper river increase congestion in some areas during peak fish periods

5.8.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Class I waters 80 metres downstream of the juvenile fish counting weir located at the outlet of Nilkitkwa Lake to the confluence with Skeena River (Class I waters September 1 – October 31)
 - b. Steelhead Stamp September 1 – October 31
 - c. Closed all year between signs posted about 100 metres above and 80 metres below the adult fish counting fence, located approximately 1.8 kilometres downstream from Nilkitkwa Lake
 - d. Open all year in the channel between Babine and Nilkitkwa lakes
 - e. Fly-fishing only June 16 – September 30
 - i. from a point 100 metres above Fort Babine Bridge to 100 metres above the adult fish counting fence (including Nilkitkwa Lake), during open times
 - ii. from signs about 80 metres below the adult fish counting fence to Nichyeskwa Creek
 - f. Bait ban
 - g. No angling from boats below adult fish counting fence
 - h. Total number of guided rod-days allocated = 1,718 (although 1,798 is the maximum allowed as per BC Regulation 125-90)
 - i. Three licensed guides have rod-days allocated on the Babine during the Classified Waters period
 - j. Entire river resides within a Class A Provincial Park
2. Area Zoning plus Licence-Class restriction (resident-only weekend or season)
3. Angling Guide Rod-Day Quotas
4. Area Zoning plus Guide-Use Regulation (no guiding for a weekend or season)
5. Mandatory guiding for non-residents
6. Non-guided, non-resident, limited-day licence linked with a lottery style selection of a limited number of rod-days
7. Extend Classified Waters period
8. Tiered licence
9. Client and assistant guide restrictions

10. Area Zoning plus Licence-Class Restrictions (resident only weekend or season, or guided angler restrictions)

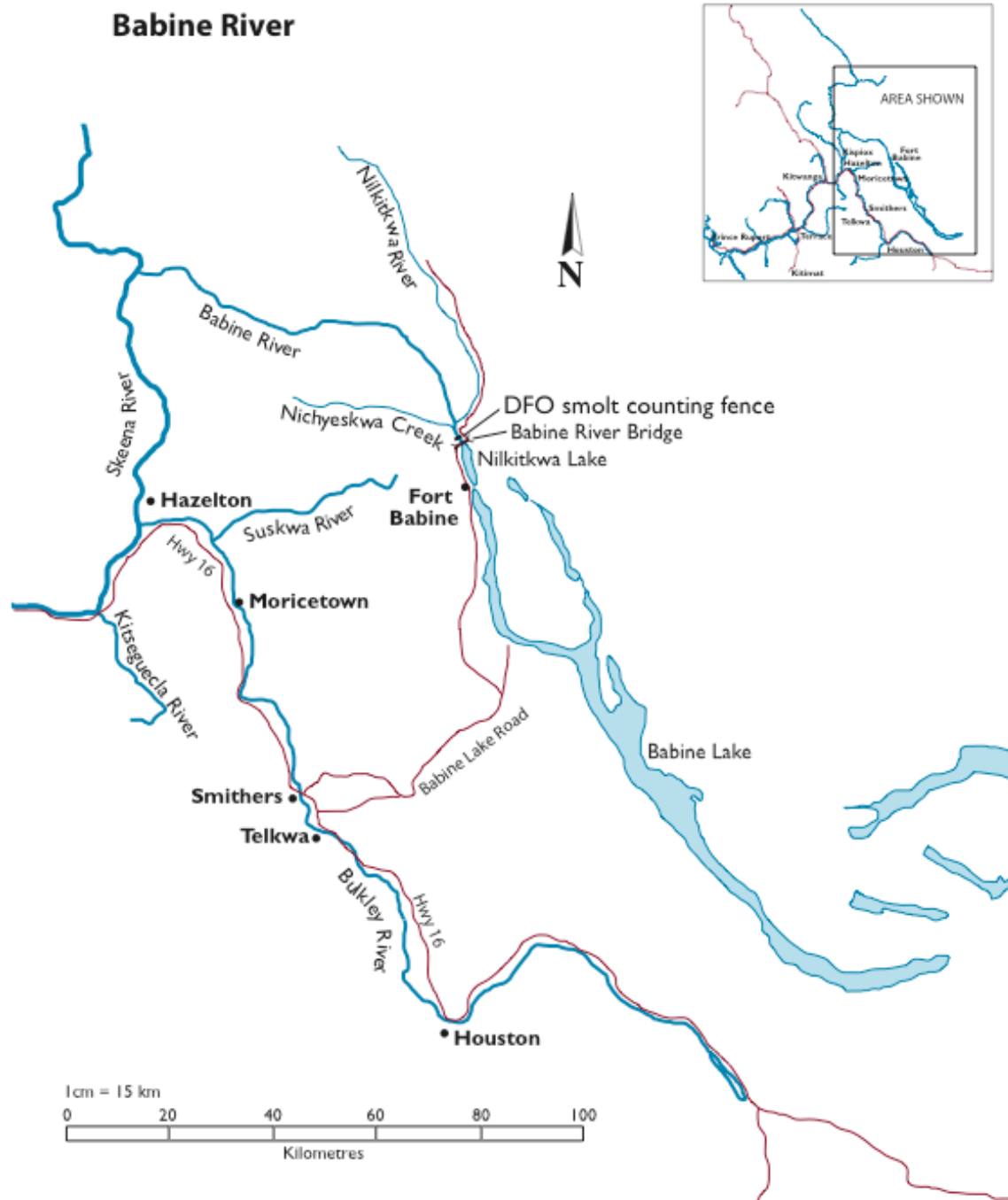


Figure 6 Babine River

5.8.4 Management Element analysis

Management Element #1 (status quo) - A number of issues detract from the quality of angling under the status quo:

- Concentration (crowding) at the top end of the river (but higher densities of fish)
 - Where: From the old DFO smolt-counting fence to the confluence of the Nilkitkwa River
 - When: All the time. However, guides use this area more when the Nilkitkwa River is “out, which in turn affects the Babine downstream of the Nilkitkwa confluence
 - Who: All angler classes
- Potential over-subscription to guides
 - Concern was expressed by participants regarding the fourth non-active guide on the Babine and the potential for additional guided effort on the Babine. Only three guide operations currently have a Park Use Permit to operate on the Babine River.

Management Element #2 (zoning and resident angling only) was a recommendation for a resident-only zone from the DFO smolt-counting fence to the Nilkitkwa River. This measure provides an improved opportunity for resident anglers. Concern was expressed regarding the loss of guiding and non-resident options when the Nilkitkwa “goes out” and takes the Babine downstream of the confluence with it. This measure is more intrusive than a zone that allows both resident and guided anglers. It would also result in a higher concentration of guided anglers fishing downstream of the Nilkitkwa River confluence.

One of the positive aspects of this element is that it helps offset the concern about the large number of guided rod-days and associated reduced quality angling experience on the Babine, particularly in the upper reaches of the river. The zone is proposed in the upper five kilometres of the Babine due opportunities for access in that section of the river.

After discussions the Working Group proposed three zones on the Babine River:

- Resident and non-resident anglers permitted on the Babine upstream of the Nichyeskwa Creek confluence to 80 metres downstream from the fish counting fence (no guiding permitted)
- Resident angler use only on the Babine between Nichyeskwa Creek and Nilkitkwa River (no guiding permitted)
- Babine River open to all angling licence classes below the Nilkitkwa River confluence (status quo)

Management Element #3 (reduce guided rod-day quotas) The primary area that requires angling guide rod-day allocation reductions is in the “upper river.” The lower river is less crowded, but crowding is occasionally a concern and is usually associated with rafting excursions (although very few resident anglers utilize this section of river). This is a more intrusive tool than zoning with resident angler use only.

One of the problems with crowding for resident anglers is that if the 500 allocated but unused guided rod-days were used, this would add to higher angler densities and crowding. Crowding caused by “turnaround” of guides (the fact that many guided anglers finish their stay at the same time and leave the river at the same time, can create a “pulse” in the number of guided anglers on the river) also affects the top 15 kilometres of the Babine.

Participants recommended that the ministry review guided rod-days on the Babine (used and unused) and seek to reduce where possible.

Management Element #4 (zoning and no guiding) - This measure was discussed in Management Element #2 above.

Management Element #5 (mandatory guiding for non-residents) - This tool would “give something back” to the guides. It was considered for a zone below the Nilkitkwa River, but there was concern this may result in increased concentration of guided use in the upper river. However, the numbers of non-guided, non-resident anglers is very low now and shifting to the fishery via a guide service may be inaccessible to some anglers due to cost. So this element may not affect the guided angler effort in that area very much. If numbers of non-guided non-resident became too high in the future, the ministry could consider this tool.

Management Element #6 (limited-day licence) - With only a limited-day licence, there is still the potential to concentrate use during the peak time in the Classified Waters period. There was discussion whether this element alone would actually make any sense. Limited-day licence and lottery and tiered licences were considered together in relation to addressing long-term campers and rafters. There was some desire to limit the opportunities for long-term camping groups.

Management Element #7 (extend Classified Waters period to December 31) - This option might allow for a resident angler-only opportunity outside the current Classified Waters period (November and December). BC Parks restricts fishing outside of the Classified Waters period for guides and can limit the number of guides that have access to the resources in the park under the *Parks Act*. Extending the Classified Waters period could require additional guided rod-days.

There was not full agreement regarding the benefits of an extended Classified Waters period. Some thought that the later non-classified portion of the steelhead season (November and December) would become very popular when other areas or periods were restricted further. Others thought that the weather in that later portion of the steelhead season would ward off all but the heartiest anglers and hence crowding would be less likely then. Guides would likely be affected by loss of opportunity during this time period as one operation currently offers a late-season discounted steelhead package.

Concern was expressed regarding the negative effect of increased associated costs to non-resident anglers by extending the Classified Waters period. Without a creel survey, it would be more difficult to acquire data during this late season, non-classified period to provide information for a trigger that would lead to the implementation of this element. Participants did not come to agreement on utilizing this element as part of the recommended management alternative.

Management Element #8 (lottery for non-guided, non-residents) - Limited-day licence and lottery and tiered licences were considered (together) in relation to addressing long-term campers on the river (as per Management Element # 6 above). These measures may help to address long-term campers and overcrowding of future downstream users, and could address float craft and long-term use. This was not agreed on as a tool that would likely reduce the non-resident crowding on the Babine.

Other options discussed to address crowding and long-term camping were outside the scope of this planning initiative including increased management of rafting parties by BC Parks (spreading over time). The group thought that additional regulatory control of non-commercial rafting groups or improved non-regulatory approaches to managing the rafting excursions may achieve the same objectives. Participants acknowledged that there are very few non-guided, non-residents on the Babine. The recommendation was that a lottery system would not meet the objectives on this river.

Management Element #9 (tiered licence) - Limited-day licence and lottery and tiered licences were considered (together) in relation to long-term campers (as per Management Element # 6 above). Tiered licensing involves setting a different fee for different anglers so that non-residents pay the most and BC residents pay the least. The ministry representative indicated that MOE would not entertain increasing licence fees under this process, as this is not something that is done regionally. Although acknowledged by some as a good option, this measure was rejected.

Management Element #10 (client and angling guide restrictions) - There is a need for guides to spread out their rod-days evenly over the full Classified Waters period. The option to manage the number of clients per boat and the number of clients per week was discussed. As a condition of licence, this measure could manage the “ballooning effect” by ensuring that the current pattern of use and effort continues. There is a desire to maintain the status quo (numbers per boat, etc.). The current practice of four clients per boat can be problematic when they get dropped off (clients can fill an area quickly).

Implementing any further reductions would functionally reduce the number of rod-days because most guides already have the same number of clients per week throughout the Classified Waters period. Some guides noted that operational limitations of most camps (number of beds, etc.) require that the guided days be spread out over the entire Classified Waters period.

Management Element #11 (zoning and resident angler only and guiding) - This element is less intrusive than zone and resident angler only. There is a desire to focus on

resident anglers only (address non-residents) rather than guides right away. This tool was rejected as it would only address the non-guided, non-resident anglers who make up very little of the Babine total angling effort.

5.8.5 Target calculation

Participants felt that estimating a target for non-guided, non-resident anglers was not required on the Babine River. Other alternatives were used that didn't necessitate a trigger or target.

5.8.6 Recommended Management Alternative

The recommended Management Alternative is a combination of Management Elements #2, #3, and #4.

The Working Group recommended the creation of three zones on the Babine River during the Classified Waters Period:

1. Resident and non-resident anglers permitted upstream of Nichyeskwa Creek to 80 metres below the fish counting fence under status quo regulations but no guiding will be permitted in that zone
2. Resident anglers only will be permitted to angle between Nichyeskwa Creek and Nilkitkwa River. No guiding will be permitted in that zone
3. Open to all licence classes and permitted guides downstream of the Nilkitkwa River confluence with the Babine

It is recommended that the ministry review and rationalize guided rod-days on the Babine (used and unused) and seek to reduce the total allocation. Participants recognized that the unused days are primarily from guides not sitting on the Working Group.

5.9 East Working Group: Bulkley River

5.9.1 Background information

(from Mitchell 2001 and Morten 1999)

Originating in a high lake system, the Bulkley and Morice River watershed (Figure 7) drains an area of 12,173 square kilometres. The drainage of these two rivers, with an average flow of 911 cubic metres per second, accounts for 15 per cent of the total discharge of the Skeena River system.

Access to the Bulkley, particularly when compared to other parts of the Skeena River system is excellent. There are five main communities in the Bulkley River valley — Hazelton, Moricetown, Smithers, Telkwa and Houston — and Highway 16 follows much of the river's length and provides many access points.

The Bulkley River is a Class II water, 141 kilometres in length with 116 kilometres of fishable water (MoWLAP 1998).

The Bulkley generally has good water conditions throughout most of the steelhead-angling season. During high run-off periods, the Telkwa River tributary contributes most of the turbidity to the Bulkley making angling conditions poor on the lower Bulkley. Under these conditions many anglers move upstream of the Telkwa River confluence, which can exacerbate crowding conditions on the upper reaches of the Bulkley and Morice Rivers.

Other fish species in the Bulkley include four of the five species of Pacific salmon — coho, pink, sockeye and chinook – cutthroat trout, resident rainbow trout, bull trout, Dolly Varden char, mountain whitefish, Pacific lamprey and sculpins.

5.9.2 Problems and issues

- Poor weather and turbidity elsewhere in the region often results in transfer of angling effort to the upper Bulkley River
- Camping at put-ins - Anglers that camp at put-ins for extended periods often dominate certain sections of river and in some cases are involved in alleged illegal guiding. They don't move on creating space and opportunities for other anglers
- Use of float craft on some reaches of the river
- High density of anglers is an issue on some reaches due to good access
- Illegal guiding has been reported
- Proliferation and etiquette of jet boat use (too big and too fast for small rivers; impacts quality of the experience; impact habitat and other ecological features)
- General downward trend in the abundance of fish
- Loss of historical boat access (launches) such as at Telkwa
- Concentration of guided use during the peak period
- Other:
 - Increased effort – growth outside of the season
 - Etiquette issues – opportunity for education
 - Reduction of road and trail access to the Bulkley (often associated with private land ownership)

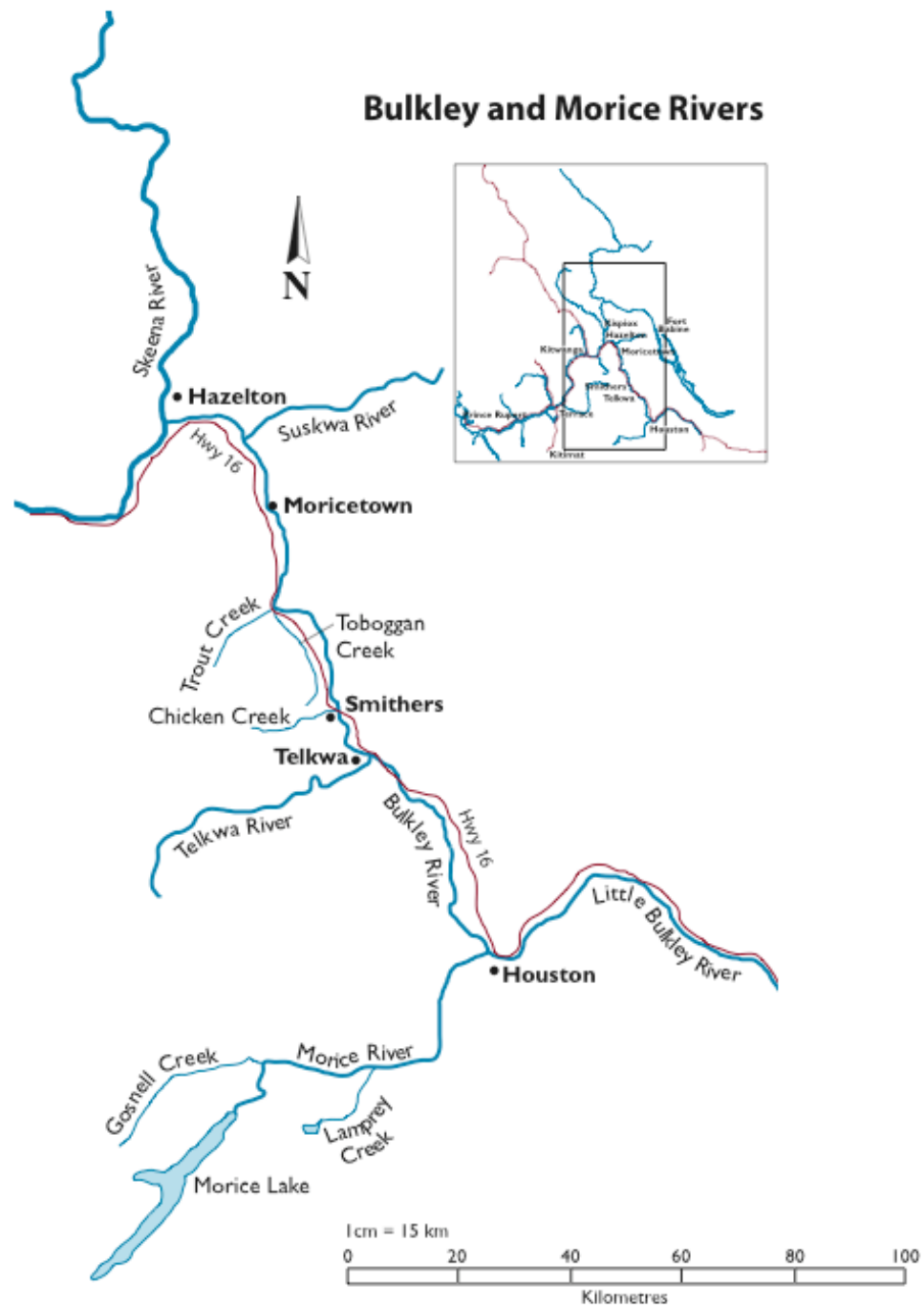


Figure 7 Bulkley and Morice Rivers

5.9.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Class II Classified Water, Classified period September 1 – October 31
 - b. Conservation surcharge (Steelhead Stamp); differential pricing by licence type
 - c. Seven guides (1,504 rod-days allocated)
 - d. Closed to angling January 1 – June 15: This angling closure applies to the Skeena River and all its tributaries upstream of Cedarvale
 - e. Bait ban (August 1 – December 31)
 - f. No angling from boats from the Morice River confluence to the CN Rail Bridge at Barrett (August 15 – December 31) and in Moricetown Canyon or within 100 metres downstream, all year
 - g. Provisions for guiding:
 - i. Client and assistant guide restrictions
 - ii. Limited guide authorizations
 - iii. Maximum number of guides is seven
 - iv. No limits to assistant guides (but the proposed number must be as designated within the Angling Guide's Operating Plans)
 1. Guide plans include projected daily use (number of boats, assistant guides, etc.)
 - v. Current total rod-day quota for the Bulkley is 1,504 days
2. Non-guided, non-resident, limited-day licence
3. Area Zoning plus Guide-Use Regulation (no guiding for a weekend or season)
4. Area Zoning plus Licence Class restriction – resident-only weekend or season
5. Lottery linked with non-guided, non-resident, limited-day licence
6. Angling guide Rod-Day Quotas
7. Client and Assistant Guide restrictions
8. Extend Classified Waters period
9. Tiered or graduated price licensing

5.9.4 Management Element analysis

Management Element #1 (status quo) - Participants identified a number of issues associated with the status quo (see problems and issues above). These issues have detracted from the quality of the angling experience on the Bulkley River.

Management Element #2 (limited-day licence) - There was concern that many of the non-guided, non-resident anglers would choose a limited-day licence block (number of days to be determined) during the peak period of the Classified Waters period if a lottery was not initiated that would help distribute effort over the season.

A range of days for the limited-day licence was considered: eight, 12 and 14 days. A 10-day licence may be less intrusive. One participant expressed a preference for a longer length of licence, with the concern that an eight-day option would affect more non-

residents than 12 or 14 days. Concerns were expressed regarding the potential impact on local business. This management element was rejected as a recommendation on its own, and was paired with the lottery (see Management Element #5). It was identified that simply having a limited-day licence for non-resident anglers would not effectively reduce the total annual number of angler-days on the river and in fact this element alone would likely exacerbate the crowding problems.

Management Element #3 (zoning plus restricted guiding, weekend or season) - This management element was discussed for several small, vehicle accessible areas (see Management Element #4). There was a desire to “keep certain areas status quo.” The zones and times (season or weekend) were not clearly defined and this element was not finalized. Concern was expressed that if guiding were restricted for the weekends, airlines would be unable to facilitate all the guide/client changeovers that would occur on the same days (i.e., Saturday out and Sunday in) The notion of a “no guide weekend” was rejected.

Management Element #4 (zoning plus licence-class restrictions, resident angler only, no non-residents on weekend or season) - Participants discussed the increased crowding in smaller areas with easy access for September coho fishing. For the purposes of further analysis, the small areas were identified as:

- Chicken Leg (or Chicken) Creek confluence area
- Toboggan Creek confluence area
- Telkwa River confluence area.

These areas will have to be clearly delineated by the Working Group. They will only apply to the Classified Waters period (September 1 to October 31). Participants felt that this element would create a resident-angler refuge during the Classified Waters period.

A section of river from Telkwa to Smithers was also considered as an option for a resident angler only zone for the peak period, allowing non-residents to use the shoulder season. The group also recommended making the Telkwa River resident angler only for the Classified Waters period.

In response to requests for a “status quo zone” to cater to non-residents (e.g., Telkwa to Smithers, and other areas that are easy to walk to), participants felt that a “rubber tire allocation” as described in Management Element #5 may address these concerns. They felt that implementing a resident angler only zone would not impact guides as these “coho patches” are at the beginning or end of drifts.

Concern was expressed that creating resident-angler only zones in these areas would affect “walk-in tourists” who also look for easily accessible areas. The length of time was also a concern because of potential impacts on the fishing preferences of non-residents. Participants felt that a resident angler weekend would have less impact on non-residents.

The option of shortening the Classified Waters period from September 15 – October 31 for these areas was briefly discussed but it was agreed that declassification of portions of the river is administratively more complex.

Management Element #5 (lottery) - The lottery does not apply to resident anglers. It was agreed that the lottery approach would likely provide and maintain the highest quality angling experience. Used with a limited-day licence, it would provide the most control. This is the only way to ensure the distribution of effort through the Classified Waters period (i.e., manage the “bulge” during the peak period and fill the lower use periods at the beginning and end of the Classified Waters period). There is a desire to reserve a limited number of days for non-residents that are not in the lottery, to address the “rubber tire” traffic on a “first come, first served” basis. Concern was expressed that non-residents who own homes locally may be more restricted by this provision than currently, however opportunities may still exist on other nearby waters (i.e., Kispiox, Babine, Morice, Kitwanga, Suskwa, etc.) or on the Bulkley via the many days available through local licensed guides. It was acknowledged that angler effort in the late 1990s and early 2000s was higher now. During the last couple of years, angler densities have been more tolerable by most anglers’ standards, but there does continue to be high-use concentrations in certain areas of the river that are linked to specific access points or certain river conditions.

There is a need for “trigger” numbers or “threshold” numbers of anglers that signal the need to use a lottery system — e.g., how busy would it need to be before a lottery were implemented? Hence time was spent on estimating the non-resident carrying capacity for the river.

One participant was unable to agree to an eight-day licence and recommends the use of a 10-day licence for non-residents. Under current resource limitations and the inability to more precisely count non-resident anglers (for example, via e-licensing) it would be difficult to implement the lottery currently because there is no electronic system in place to facilitate it. The Working Group highly recommends that an electronic system be developed to enable an e-lottery system and to increase the ability to monitor angler effort.

The Working Group recommended that the initial trigger be set low enough so that a lottery would be implemented before overcrowding and the deterioration of the angling experience occurs. There was a discussion of triggers versus flags. A flag is when the threshold is met or exceeded twice in a three-year period. If that happened, it would then trigger the implementation of a lottery-based angler management system for non-guided, non-resident anglers.

The Working Group acknowledged the value of non-resident anglers to the community but recognizes the need to manage numbers of non-residents at certain times during the Classified Waters period.

Management Element #6 (rod-day quotas) - This tool provides an opportunity to address unused guided rod-days. If rod-day quotas for guides were reduced, there would likely be no changes in the present quality of angling because a large portion of the rod-day quota is presently not used. There are 457 unused rod-days (30%). There is a concern that if these days were used, it would contribute to poor quality due to crowding. The idea of reducing rod-day quotas was rejected.

Management Element #7 (client and assistant guide restrictions) - There may be a need in the future to address problems around too much guiding during the peak times. That is not a problem right now. Changing the number of clients per boat or the number of assistant guides is administratively easier than reducing rod-day quotas. There is a desire by the Working Group to maintain the current practice of 2-3 clients per guide or assistant guide. There was discussion about adding as a condition of licence a requirement that 50% of a guide's rod-days be used outside the peak period.

There is a need to define the maximum number of guided anglers on the river per day. This is a potential tool for the future, to be implemented in the event that guides begin to have more clients in one boat, or begin to unduly concentrate their angler-days. This tool does not address the problems and issues initially identified by this process. There was a recommendation that Angling Guide Operating Plans stipulate that a guide's rod-days will be used evenly over the whole period and not concentrated during the peak of the Classified Waters period.

Management Element #8 (extend Classified Waters period) - This measure was considered as an option to prevent the November 1 rush to fish steelhead that occurs when the Classified Waters Season is over and fewer licences are required. Guides expressed the concern that they can currently market reduced costs for the shoulder season due to shorter days and colder temperatures. Extending the Classified Waters period would have an impact on this opportunity. This measure would also have an impact on non-residents, due to the increased cost during that period of the season. The level of effort in November and December is largely controlled by the weather conditions. Currently, only 8-10% of effort occurs during the shoulder season. Higher costs associated with extending the Classified Waters period would reduce the opportunities for some businesses and anglers. This is a tool that could potentially be used in the future in response to a significant change in effort during this time period.

Management Element #9 (tiered licence) - This element involves a graduated increase in the cost of time-limited licences. Tiered licence would apply to guided anglers. There was discussion as to whether we want to follow the example on the Dean River and include the increase to guide's clients for their second time-period licence and it was agreed that a second and third limited-day licence would cost more if you were guided or not. This tool would result in anglers "moving around" and would have an impact on non-resident visitors. This element was rejected.

5.9.5 Target calculation

The group felt it was important to provide two options for non-resident angler-day allocations to be managed under a lottery system on the Bulkley River. The first option would be an allocation based on the highest estimate of the total non-resident angler-days fished on the Bulkley (similar to 2000) and the second option would be based on the estimated average number of non-resident angler-days over the past decade.

Once the allocations were determined, then the total angler-days allocated to guides would be removed from the estimated total non-resident angler estimate and the remaining days would be made available to non-guided, non-residents via the proposed lottery. This concept would still encourage approximately the same number of non-residents to the valley, but those non-guided, non-resident anglers would have to access the fishery via the lottery. Those anglers who are not successful via the lottery are still welcome to access the fishery via the many rod-days available from licensed guides.

High effort option - The highest effort estimate over the last decade is 6,440 angler-days (in 2000). Using an estimate of 42% of the total angling effort as non-resident on the Bulkley, the maximum estimated annual allocation of non-resident angler-day effort on the Bulkley would be 3,220 angler-days. The vast majority of the current guided effort is from non-residents so the total guided rod-day allocation (1,504) was subtracted from the total estimated non-resident figure ($3,220 - 1,504 = 1,716$). Using this approach, a lottery on the Bulkley would allow 1,716 angler-days to be allocated to non-guided, non-resident anglers via lottery system.

Average effort option - Average total angler effort per season over the last decade is 5,021 angler-days. Using the same approach as above, a lottery on the Bulkley River would allow 814 angler-days to be allocated to non-guided, non-resident anglers via lottery system.

5.9.6 Recommended Management Alternative

- Combination of Management Elements #4 and #5 was recommended by the Working Group that will encourage many non resident anglers to the community, however those anglers will be managed differently (via a lottery management system and guides) to disperse the non-resident effort out more evenly throughout the Classified Waters period. In addition refuge zones are proposed to ensure BC Residents maintain angling priority with regard to accessing a quality angling experience.
- Zoning for resident-only use during the Classified Waters period for the following small, easily accessible areas near and around the confluences of the following Bulkley River tributaries: Chicken Creek, Toboggan Creek, and the Telkwa River
- Make Telkwa River a resident-only zone for the Classified Waters period
- Allocate limited-day licences for non-residents in a lottery if a non-guided, non-resident angler-day threshold is exceeded twice in three years. The licences would be spread evenly over the Classified Waters period. There are two threshold target options that will be presented to the public:

- Option 1 (high use) – The lottery would allocate 1,716 angler-days in limited-day licences to non-guided, non-resident anglers.
- Option 2 (average use) – The lottery would allocate 814 angler-days in limited-day licences to non-guided, non-resident anglers.
- One participant was unable to agree to an eight-day limited-day licence and prefers a 10-day limited day licence. The number of days for limited-day licence will be determined either provincially or regionally. The licences will be allocated so they are spread over the entire Classified Waters period.

5.10 East Working Group: Morice River

5.10.1 Background information

(from Saimoto 2005)

The Morice River (Figure 7) is a major tributary to the Bulkley River, contributing 90 per cent of its average flow. The Morice joins the Bulkley about 6.75 kilometres west of Houston. The Morice drains a catchment area of 4,349 kilometres.

The Morice River originates at Morice Lake, the largest lake in the watershed, and drains over a distance of approximately 88.5 kilometres. Major tributaries include Houston, Tommy, Owen, Lamprey, and Gosnell Creeks.

Fish species in the Morice include nine species sought by recreational anglers: coho, chinook, sockeye, kokanee, pink, rainbow trout, cutthroat trout, bull trout, Dolly Varden, and lake trout.

Recreational anglers access the Morice River by boat or on foot. Both motorized and non-motorized boats are currently permitted on the Morice.

The Morice River generally provides among the best fall angling conditions in the Bulkley Watershed due to consistent water clarity. Historically, the Morice has remained fishable when other steelhead rivers in the region such as the Telkwa or the Bulkley, are “out.”

5.10.2 Problems and issues

1. Crowding near campsites during peak season
2. Crowding on Bulkley River transfers effort to the Morice River
3. Personal water craft are capable of spreading out over large sections of the river and dominate the sport fishery
4. Long term campers (some without licences)
5. Illegal fishery by resident anglers during gear closure
6. Perception of an illegal guiding on section of river where licensed guides are not active
7. Concern re: larger, powerful boats (safety concerns)

8. Shuttling of guests – concern about encroaching on the definition of guiding (moving someone more than once a day for some compensation or reward)
9. Insufficient signage regarding dangers on the river and unprepared visitors

5.10.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Class II waters, Classified period: September 1 – October 31
 - b. Conservation surcharge (Steelhead Stamp); differential pricing by licence type
 - c. Two licensed guides with three boats
 - d. 433 total rod-days allocated
 - e. Regulations calls for three guides (currently one vacant licence)
 - f. Morice Lake – Gosnell Creek section closed January 1 – September 30 (opens to gear fishing October 1)
 - g. Closure: Gosnell Creek to Lamprey Creek (January 1 – August 31) to protect chinook spawning area
 - h. Bait ban on all parts of the river (August 1 – December 31)
 - i. Fly-fishing only from Gosnell Creek to Lamprey Creek (September 1 – September 30)
 - j. No angling from boats on all parts of the river (August 15 – December 31)
2. Limited entry – non-guided, non-resident, limited-day licence
3. Area Zoning plus Guide-Use Regulation (no guiding for a weekend or season)
4. Area Zoning plus Licence-Class restriction - resident only weekend or season
5. Lottery linked with non-guided, non-resident, limited-day licence
6. Angling guide Rod-Day Quotas
7. Client and Assistant Guide restrictions
8. Extend Classified Waters period
9. Tiered or graduated price licensing

5.10.4 Management Element analysis

Management Element #1 (status quo) - There are a number of issues that detract from the quality of the angling experience on the Morice River (see problems and issues above).

The same issues exist on the Morice River as on the Bulkley. Hence the same potential management elements were chosen for the Bulkley and much of the analysis of the management elements follows the same thinking.

Management Element #2 (limited-day licence) - There was concern that many of the non-resident, non-guided anglers would choose a limited-day licence block (number of days to be determined) during the peak period of the Quality Waters period if a lottery

were not initiated that would help distribute effort over the season. This tool was rejected as a stand-alone measure (as per the Bulkley River).

A range of days for the limited-day licence was considered: eight, 12 and 14 days. A 10-day licence may be less intrusive. One participant expressed a preference for a longer length of licence, with the concern that an eight-day option would affect more non-residents than 12 or 14 days. Concerns were expressed regarding the potential impact on local business. This management element was rejected as a recommendation on its own, and was paired with the lottery (see Management Element #5). It was identified that simply having a limited-day licence for non-resident anglers would not effectively reduce the total annual number of angler-days on the river and in fact this element alone would likely exacerbate crowding problems.

Management Element #3 (zoning plus restricted guiding, weekend or season) - Concern was expressed that if guiding were restricted on the weekends, airlines would be unable to facilitate all the guide/client changeovers that would occur on the same days (for example, Saturday-out and Sunday-in). The notion of a “no guide weekend” was rejected. This tool was also rejected.

Management Element #4 (zoning plus licence-class restrictions, resident angling only, no non-residents on weekend or season) - A resident angler only zone is not needed on the Morice.

Management Element #5 (lottery) - A lottery to allocate time-limited licences would be triggered in the future if the number of non-resident rod-days exceeded 433. For further discussions of lotteries, see under the Bulkley River.

Management Element #6 (rod-day quotas) - Ministry of Environment should conduct an Angling Guide Management Review to look at and rationalize the number of rod-days allocated, used, and unused.

Management Element #7 (client and assistant guide restrictions) - There may be a need in the future to address problems around too much guiding during peak times. That is not a problem right now. Changing the number of clients per boat or the number of assistant guides is administratively easier than reducing rod-day quotas. There is a desire by the Working Group to maintain the current practice of 2-3 clients per guide or assistant guide. There was discussion about adding as a condition of licence a requirement that 50% of a guide's rod-days be used outside the peak period.

There is a need to define the maximum number of guided anglers on the river per day. This is a potential tool for the future, implemented if guides begin to have more clients in one boat, or begin to unduly concentrate their rod-days. This tool does not address the problems and issues initially identified by this process. There was a recommendation that Angling Guide Operating Plans should stipulate that a guide's rod-days would be used evenly over the whole period and not concentrated during the peak of the Classified Waters period. This tool was rejected.

Management Element #8 (extend Classified Waters period) - This measure was considered as an option to prevent the November 1 rush to fish steelhead that occurs when the Classified Waters Season is over and fewer licences are required. Guides expressed the concern that they can currently market reduced costs for the shoulder season due to shorter days and colder temperatures. Extending the Classified Waters period would have an impact on this opportunity. This measure would also have an impact on non-residents, due to the increased cost during that period of the season. The level of effort in November and December is largely controlled by the weather conditions. Currently, only 8-10% of effort occurs during the shoulder season. Higher costs associated with extending the Classified Waters period would reduce the opportunities for some businesses and anglers. This is a tool that could potentially be used in the future in response to a significant change in effort during this time period. The tool was rejected for now.

Management Element #9 (tiered licence) - This element involves a graduated increase in the cost of time-limited licences. Tiered licence would apply to guided anglers. There was discussion as to whether we want to follow the example on the Dean River and include the increase to guide's clients for their second time-period licence and it was agreed that a second and third limited-day licence would cost more if you were guided or not. This tool would result in anglers "moving around" and would have an impact on non-resident visitors. This element was rejected.

5.10.5 Target calculation

The group felt it was important to provide two options for angler-day allocations to non-residents. The first option would be an allocation based on the highest estimate of the total non-resident angler-days fished on the Morice and the second option would be based on the estimated average number of non-resident angler-days over the past decade. Once the allocations were determined, then the total angler-days allocated to guides would be removed from the total and the remaining days would be made available to non-guided non-residents via the proposed lottery.

This concept would still encourage approximately the same number of non-residents to the valley, but those anglers would have less opportunity to access the fishery unguided (via the lottery). For those who cannot access the fishery via the lottery, opportunities would still exist through a licensed guide.

High effort option - The highest effort estimate over the last decade is 2,100 angler-days (in year 2000). Using an estimate of 50% of the total angling effort as non-resident on the Morice based on historical data, the maximum estimated annual allocation of non-resident angler-day effort on the Morice would be 1,050 angler-days. The vast majority of the current guided effort is from non-residents so the total guided rod-day allocation (433) was subtracted from the total estimated non-resident figure ($1,050 - 433 = 617$). Using this approach, a lottery on the Morice would allow 617 angler-days to be accessed by non-guided, non-resident anglers via a lottery system.

Average effort option - Average total angler effort per season over the last decade is 1,764 angler-days. Using the same approach as above, a lottery on the Morice River would allow 449 angler-days to be accessed by non-guided, non-resident anglers via a lottery system.

5.10.6 Recommended Management Alternative

- Working Group members did not recommend the immediate implementation of any management elements. However, they did propose a target if a limited-entry lottery were needed in the future.
- Allocate limited-day licences in a lottery if a non-guided non-resident angler-day target is exceeded twice in three years. There are two threshold target options that will be presented to the public:
 - Option 1 (high use) –The lottery would allocate 617 angler-days in limited-day licences to non-guided, non-resident anglers.
 - Option 2 (average use) – The lottery would allocate 449 angler-days in limited-day licences to non-guided, non-resident anglers.
- Request that Ministry of Environment conduct an Angling Guide Management Review to look at the number of rod-days allocated, used, and unused.
- Allocate limited-day licences in a lottery if a non-guided, non-resident angler-day target is exceeded twice in three years. The licences would be spread evenly over the Classified Waters period. There are two threshold target options that will be presented to the public:
 - Option 1 (high use) –The lottery would allocate 617 angler-days in limited-day licences to non-guided, non-resident anglers.
 - Option 2 (average use) – The lottery would allocate 449 angler-days in limited-day licences to non-guided, non-resident anglers.
- Request that Ministry of Environment conduct an Angling Guide Management Review to look at the number of rod-days allocated, used, and unused.

5.11 East Working Group: Non-regulatory recommendations

The East Working Group looked at non-regulatory recommendations that would address some of the problems and issues identified for all their priority waters. Many of these ideas were expressed during the public consultation process from January to March 2008 and summarized in Dolan (2008).

5.11.1 Education on etiquette

An angler education program needs to be set up that includes information on driving boats, angler etiquette and fish handling. Possible delivery mechanisms include brochures such as those produced by the North Coast Steelhead Society, signage on the rivers, information available at the licence sellers, and local workshops. There is a specific concern for etiquette problems on the Babine River and the need for signage there.

5.11.2 Manage and maintain access

There is a need to ensure that existing access points remain functional, because access is critical to distributing angler effort along the rivers. The Ministry of Environment along with the Integrated Land management Bureau should work together to ensure that both existing and potential access points are mapped, maintained and managed.

Historically, the Babine River had considerably better access. Some Working Group members saw a need for improved access including recommending changes through BC Parks, but others felt that it would be difficult to maintain the Babine's Class I status if access were opened up more.

5.11.3 Enforcement

There is a need for improved enforcement of management regulations.

5.11.4 Data collection

More funding is needed so that data collection could be improved. The most pressing need is for more regular creel censuses.

5.11.5 Long-term camping on the Babine

There is a need to work with BC Parks to address issues around long-term camping along the Babine River. In the same way that it regulates river rafters, the park could implement rules around length-of-stay, timing of visits, and location and distribution of campsites.

5.11.6 Illegal guiding

There is a need for signage on the boats of licensed guides so everyone knows who they are and to distinguish them from illegal guides. Increased education is required to let anglers know the potential implications of being involved in illegal guiding. Additional enforcement is also needed.

5.11.7 Floatcraft

There is a need to regulate both recreational rafts and boats, and angling boats including powerboats, so that the river is a safer place, conflicts are minimized, and the quality of the experience improved.

5.11.8 Guiding

Unused rod-days could be distributed to local businesses or First Nations. Communications between upper Babine guides needs to be improved so that use of the river is better coordinated.

5.12 West Working Group: Zymoetz I River

5.12.1 Background information (Zymoetz I and II)

(from Morten 2000)

The Zymoetz River (Figure 9), known locally as the Copper River, has a total length of 109 kilometres, and originates in the McDonnell Lake chain. The Zymoetz meets the Skeena River eight kilometres northeast of the community of Terrace. The Clore and the Kitnayakwa rivers are the two main tributaries of the Zymoetz, which has a total watershed area of 3,080 square kilometres.

The Zymoetz River is renowned for its summer steelhead and their willingness to take a fly or lure. The Zymoetz is also suspected of supporting a small run of spring run steelhead in addition to pink salmon, sockeye salmon, chinook salmon, coho salmon and chum salmon. Resident rainbow and cutthroat trout, Dolly Varden char, bull trout and mountain whitefish are all found in the system.

The section from the uppermost angling boundary near McDonnell Lake downstream to Limonite Creek is a Class I Classified Water. The section downstream from Limonite Creek to the confluence with the Skeena is a Class II Classified Water. The two sections of the Zymoetz are managed as separate classified waters under the Quality Waters Strategy.

The primary access to Zymoetz II is by a forestry road that runs parallel to most of its length. Zymoetz I is accessed partly by forestry road but also by raft and by helicopter in its remote sections.

5.12.2 Problems and issues

- More and more non-resident aliens are finding out about the Class I section of the Zymoetz River and this is leading to crowding issues. There are more non-resident aliens fishing in this part of the river.
- Due to its small size, this section of the Zymoetz River has a low capacity to support a lot of angling effort.
- In the lower reaches of this section, there is more access due to road development related to forestry, which provides walk-in access and camping near the river. In the upper most reaches (remote sections), access is primarily by helicopters for both private anglers and guided anglers.
- Concerns were expressed that access to the river in the lower reaches is more difficult now due to reduced logging activity, which has produced spur roads overgrown with vegetation. The main road is poorly maintained.
- Considerable concern was expressed that illegal guiding is taking place on Zymoetz River I.
 - While difficult to quantify, illegal guiding is suspected to contribute to the crowding problem as more non-resident anglers are exposed to the river through the activities of illegal angling guides. The proliferation of website-

based marketing of the river by European guiding operations adds to the problem.

- There is a need to define better what is meant by the term “guiding” because otherwise it is very difficult to catch or prosecute someone who is illegally guiding
- The current angling guide rod-day allocation requires review. The key issue is that Schedule A of BC Regulation 125/90 allows a maximum of 250 angler-days and three angling guides on Zymoetz I and this may exceed the capacity of the system.
 - Currently only 58 of the 250 angler-days have been allocated to the three licensed angling guides and a key issue is to determine an appropriate number of guide days for Zymoetz I.
- Concerns were identified around the increased use of private helicopters for access to Zymoetz I by both non-guided resident anglers and non-guided, non-resident anglers.
- Terrain and access from both Terrace and Smithers make it difficult to conduct angler licence checks in the upper reaches of the Zymoetz River

5.12.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Class I Classified Water – September 1 – October 31
 - b. Closed to angling January 1 – June 15
 - c. Guided fishing occurs from early August to the end of November
 - d. A maximum of 250 guided rod-days is available. A total of 58 rod-days are currently allocated
 - e. There are three licensed guides, which is the number allowed under BC Regulation 125/90; one from Smithers; two from Terrace
 - f. Bait ban is in place year-round
2. Water Designation
 - a. Extend Class I Classified Waters period to encompass the entire period from July and December
 - i. Note that this classified period should mirror any changes proposed for Zymoetz II
 - b. Extend the period when a Steelhead Stamp is required to August 1 to December 31
 - i. Note that the change in period for the Steelhead Stamp should mirror any changes proposed for Zymoetz II
3. Licence Class Restrictions
 - a. Lottery for non-resident anglers that would include a trigger for implementation
 - b. When a second trigger is reached, residents may be restricted when and if the system reaches its carrying capacity
4. Guide-Use Restrictions

- a. Restrict number of clients that a guide or assistant guide may guide on any single day
 - b. Restrict number of boats that a guide may use
- 5. Angler-Use Restrictions
 - a. Non-residents must be guided
 - b. No fishing from boats

Zymoetz River

(Classified Water Sections I and II)

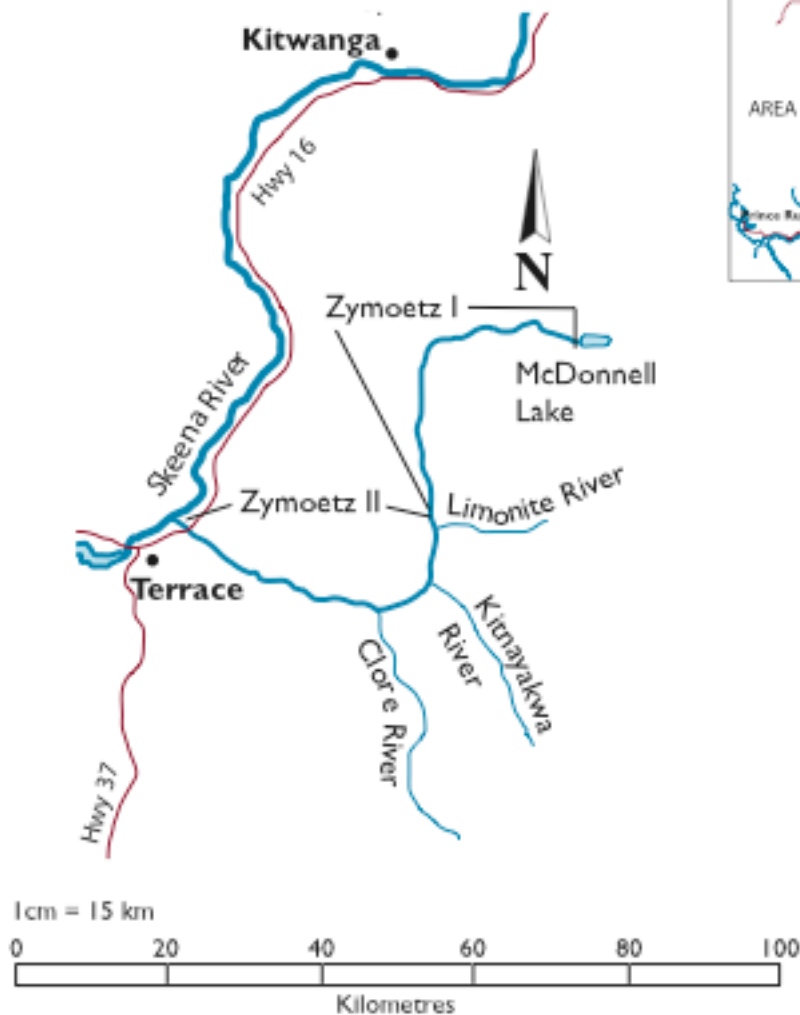


Figure 8 Zymoetz I and II

5.12.4 Management Element analysis

Management Element #1 (status quo) Due to the remote nature of this water there is still a high value angling experience under the status quo. There are no real restrictions on resident and non-resident anglers but few guided opportunities are available.

Management Element #2a (extend classified period) At the time of initial classification (1990) most anglers and managers believed that the most crowded time on the waters was during the months of September and October. As anglers explored the river it became evident that steelhead were present during the months of August and November as water conditions and weather allowed anglers to access the river and fish. The tool was rejected as a stand-alone option but was considered as a component of a more comprehensive option. The key consideration was that the classified period should cover the period when steelhead are in the river (August – December 31).

Management Element #2b (Steelhead Stamp required August – December 31) Currently a steelhead stamp is only required during the months of September and October. This does not reflect the true duration of the steelhead fishery and an extension of the stamp requirement would parallel the lengthening of the classified waters period. The tool was rejected as a stand-alone option but was considered an important component of a more comprehensive alternative.

Management Element #3a (lottery access for non-resident anglers) – This tool was seen to have merit in addressing some of the crowding issues but it was rejected as a stand-alone option.

Management Element #3b (lottery access for resident anglers) – This tool was rejected as a stand-alone option at this time although the Working Group did acknowledge that there is a limit to the carrying capacity of Zymoetz River I and when it is reached, then BC resident anglers may also need to be restricted in some way.

Management Element #4a (limit the number of clients an angling guide or assistant angling guide may accompany at any time) This was rejected as a stand-alone option. However it was seen to be a useful tool in a more comprehensive management option.

Management Element #4b (limit the number of boats that an angling guide may use) This was rejected as a stand-alone option. However it was seen to be a useful tool in a more comprehensive management option.

Management Element #5a (non-residents must be guided) This was rejected as a stand-alone option however it was viewed to have merit in a more comprehensive management option. It was recognized that additional guided rod-day quotas would be necessary to accommodate increased demand by non-resident anglers. This would reduce some of the illegal guiding issues on this water.

Management Element #5b (no fishing from boats) This was rejected as an option as it was agreed that this is not an issue in this reach of the Zymoetz River.

5.12.5 Recommended Management Alternative

The recommended Management Alternative for the Zymoetz I River combines elements of many of the individual Management Elements. The Working Group recommended that these elements be implemented immediately.

- Extend Classified Waters period to begin on August 1 and continue until the close of the steelhead season on December 31. This accurately reflects the time that summer steelhead are in the river and when the river is open to fishing
- A Steelhead Stamp would be mandatory during this period (August 1 – December 31). Both of these elements would facilitate the distribution of guided and non-guided effort throughout the open water season and it would increase the Ministry of Environment's data collection abilities through the Steelhead Harvest Questionnaire.
- Limit the three existing guides to the use of one boat per guide per day. This would put a maximum of three guided parties on this section of water on any day. This would be implemented as a condition on the angling guides' licences.
- Limit the three existing guides to a maximum of three anglers per boat. In conjunction with the previous element there would only be nine guided anglers on the class I section of the Zymoetz River on any given day.
- All non-residents must be guided. This element was viewed by the Working Group as key to ensuring that the capacity of this small river is not exceeded. Additionally, it addressed a perceived illegal guiding issue. It was acknowledged that increased demand by non-resident anglers could be accommodated in the guiding industry.
- The three existing guides currently hold 58 rod-days. Their allocation will be increased by 10 rod-days each for a total of 30 additional rod-days to accommodate increased demand brought about by the requirement that all non-residents be guided. This would raise the total guided rod-day allocation to 98 rod days (three guides) on Zymoetz I and Schedule A of BC Regulation 125/90 would need to be amended to reflect this recommendation. Currently Zymoetz I is capped at 250 rod-days and three guides in Schedule A. The Working Group considered the impacts to local economic interests and that there was capacity in this reach to increase the guide allocation to compensate for increased non-resident demand.
- The Working Group also recognized that, in the future, BC Residents may need to be restricted if the carrying capacity of the upper Zymoetz is exceeded. The Working Group recommends that the Ministry of Environment establish an effort level target for this trigger, which is consistent with the concept that the levels must be exceeded two times in three years before any restrictions are put in place.

5.13 West Working Group: Zymoetz II River

5.13.1 Background information

(See description for Zymoetz I) (Figure 8)

5.13.2 Problems and issues

- Illegal guiding was raised as a concern by the Working Group and in the regional consultation workshops held in January and February 2008.
- Greater access to this section of the Zymoetz has increased the angling effort on Zymoetz II.
- Boating traffic (via float craft such as rafts and pontoon boats) has increased as boats are being used by anglers to access previously inaccessible sections of Zymoetz II. The use of boats has increased for all residency classes of anglers.
- The months of August and November are currently not classified and guiding is largely unrestricted during this time as the five licensed guides can operate without any limits on number of days or clients. The expansion in effort during the month of August has occurred in the past decade and was not contemplated during the initial time of classification in 1990.
- Guided effort in the most recent years has been as high as 160 rod-days in August and 30 rod-days in November. The onset of winter during November generally limits the guided effort. This level of shoulder season guiding exceeds the current allocation of 117 rod-days for the peak months of September and October.
- Crowding was identified as the major issue and no specific class of anglers was identified. Over-use by all classes of anglers was cited as the pivotal issue facing Zymoetz II. Crowding was identified during the
 - Shoulder season: August and November
 - And during the peak season: September and October by both non-residents and resident anglers
- The Working Group believed that anglers are much more knowledgeable of the Zymoetz River and this contributed to the increasing angling effort.
- There was concern that some resident anglers and non-resident anglers now camp on sections of the river for the entire season or at least for extended periods and monopolize angling opportunities.
- The Working Group cited that the river has a reduced carrying capacity to support anglers than in the past as recent environmental events such as land slides and flood events have reduced the amount of fishable water in this section.
- The Working Group considered the major tributary stream, the Clore River, to determine whether it should remain as part of Zymoetz II or whether it should be managed as a separate classified water.

5.13.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. This section of the Zymoetz River is a Class II Classified Water between September 1 and October 31. A Steelhead Stamp is required during these months.
 - b. The river is subject to a year-round prohibition on the use of bait.
 - c. The licensed guiding activity is currently restricted to five angling guides who are allocated 117 rod-days. Schedule A of BC Regulation 125/90 establishes a maximum of five guides and 200 rod-days.
 - d. There is no fishing allowed between the signs demarcating the Lower Zymoetz Canyon.
 - e. The river is closed to angling above the five-kilometre mark at the Lower Canyon from January 1 to June 15 to protect overwintering summer steelhead.
2. Water Designation
 - a. Extend Classified Water period to include July/August to December
 - b. Make Steelhead Stamp mandatory for this Classified Water period
3. Licence-Class Restriction
 - a. Lottery access to fishery for non-resident anglers
 - b. Limit non-guided, non-residents to two, four-day licences, or two, eight-day licences
4. Guide-Use Restrictions
 - a. Limit number of clients per guide
 - b. Area Zoning - temporal and spatial zoning to limit guide access
5. Angler-Use Restrictions
 - a. Guiding-only for non-residents during the classified period
 - b. No angling from boats

5.13.4 Management Element analysis

Management Element #1 (status quo) - More effort from August to November than other months.

- The September 1 – October 31 classified period was acknowledged to be inadequate because of the expansion of angling pressure to the months of August and November. No specific residency class was identified, as all appear to participate during these times.
- The Working Group acknowledged that this issue must be addressed but it was not satisfactorily addressed under the status quo management alternative.
- MOE acknowledged that the Zymoetz II crowding issue is one of the high priority planning issues for the watershed.

Management Element #2a (extend Classified Waters period to between July-August and December

- This element was acknowledged by the Working Group as seminal to addressing the crowding issues on Zymoetz II. The group debated when the classified period should begin and end. There was agreement that the river should be classified for the entire steelhead fishery (or when steelhead are present in the river and

the river is open to angling). August 1 was set as the start date because there was agreement that few steelhead were present during the month of July. The end date of May 31 was discussed and agreed to as the lower five kilometres of the river are open year-round for steelhead angling. This end date would capture this part of the fishery.

- The tool was rejected as a stand-alone option but was considered a component of a more comprehensive option.

Management Element #2b (Steelhead Stamp mandatory for any Classified Waters extension)

- The Working Group agreed that any changes to the classified period should be accompanied by the requirement for a Steelhead Stamp.
- Key considerations were that this would ensure that all anglers (especially shoulder-season anglers) would be part of the Steelhead Harvest Questionnaire program. This requirement would not be a great burden to the steelhead angling public.
- The tool was rejected as a stand-alone option but was considered a component of a more comprehensive option.

Management Element #3a (lottery access for non-residents)

- This tool was seen to have merit in addressing some of the crowding issues, but it was rejected as a stand-alone option.

Management Element #3b (limit non-guided, non-resident anglers to two, four-day licences or two, eight-day Classified Water licences)

- The tool was rejected as a stand-alone option for Zymoetz II.

Management Element #4a (limit the number of clients per guide)

- This element could address the issue of guided effort being concentrated during the peak of the season.
- This tool was seen to have merit in addressing some of the crowding issues, but it was rejected as a stand-alone option.

Management Element #4b (temporal and spatial area zones for guiding)

- This element could address issue of concentration of guided effort in specific areas and times such as during the peak of the season.
- This tool was seen to have merit in addressing some of the crowding issues, but it was rejected as a stand-alone option.

Management Element #5a (mandatory guiding for non-resident anglers)

- The Working Group considered this element as a potential candidate to address the uncontrolled participation by non-guided, non-resident anglers.
- While it was believed that this would address the crowding issues and also respect that BC residents should have priority access to the fishery, the Working Group acknowledged that this option could have a significant impact on the local tourism economy.

- For this reason, the tool was rejected as a stand-alone option.

Management Element #5b (no angling from boats)

- The tool was rejected as a stand-alone option as the Working Group did not consider that it was a problem.

5.13.5 Recommended Management Alternative

The recommended Management Alternative for the Zymoetz II River combines elements of many of the individual Management Elements.

- Extend the Classified Waters period from August 1 to May 31 and retain Class II status. This reflects the time that steelhead are in the river and covers both the summer and winter runs. A Steelhead Stamp will be mandatory during this period. This would allow angling effort to be controlled during the entire fishery and not just during the months of September and October.
- The Working Group recommended that the Clore River be managed under the umbrella of Zymoetz II Classified Water.
- The Working Group recommended that there would be no guiding on weekends (Saturday and Sunday) during the classified period. It was also recommended that there would be no non-resident angling on weekends, which provides for a resident-only fishery on Saturday and Sunday during the classified period. This would provide an opportunity for non-guided, resident anglers to access the fishery during the days of the week that are highly desirable by local anglers. This was a major concession by the guide community as they recognized the importance of this fishery to the resident angling community.
- Restrict the maximum number of anglers that a guide or assistant guide may assist during a day to three anglers. This limits the maximum guided party size.
- The Working Group recognized that the current guide allocation on Zymoetz II (five guides and 117 rod-days) would need to be increased to accommodate the extension of the Classified Waters period. The recommendation is that each of the five guides be increased by 30 rod-days (total of 150 additional rod-days). The new total in Schedule A of BC Regulation 125/90 would be five guides and 267 rod-days.
- The Working Group recommended that guided effort be more evenly distributed throughout the fishing season to address the crowding issue. The recommendation was to have 40% of the guided effort occur during the two shoulder seasons (i.e., 20% in August and 20% in November-May) and to have the remaining 60% of the guided effort occur during September and October. This translates to a guide allocation by month of August: 53 rod-days; September/October: 160 rod-days (80 days in each month), and November-May: 54 rod-days.
- Non-resident anglers would access the weekday fishery by lottery and this would be implemented immediately. The non-resident lottery cap is 267 rod-days (equal to the new guide allocation). Non-resident angler allocation would be 534 angler-days via the guides and lottery access.
- The distribution of non-resident angling effort would be distributed throughout the season like the guide effort, so it is: 40% during the two shoulder seasons (i.e.,

20% effort in August and 20% from November to May) and 60% of remaining effort during the peak (September and October). This translates to a non-guided, non-resident allocation by month of: August - 53 rod-days; September/October - 160 rod-days (80 days in each month), and November to May – 54 rod-days.

- The Working Group considered that the “best” total effort estimate of 1,398 angler-days (based on the 1999 creel survey) would give non-residents access to 564 days or 40% of the days fished.

5.14 West Working Group: Kitsumkalum River

5.14.1 Background information

(Grieve and Webb 1997b)

The Kitsumkalum River (Figure 9) is 95 kilometres long and enters the north bank of the Skeena River approximately 90 kilometres above the estuary and two kilometres downstream from the community of Terrace. It drains Kitsumkalum Lake, a relatively cold lake that is a central feature of the watershed. The river drains approximately 2,270 square kilometres and has 21 major tributaries.

Species other than steelhead found in the Kitsumkalum include: chinook, sockeye, pink, coho, and chum salmon; cutthroat trout; Dolly Varden; and mountain whitefish.

The Kitsumkalum is a relatively cold-water river and the presence of glacial flour makes the waters quite turbid throughout much of the year. Its fishability is limited by the turbidity and active sediment sources. The Kitsumkalum is renowned for the diverse run-timing (May through July) of chinook salmon and the very large body size that they attain. There is a coho salmon fishery during September and October, and steelhead fishery (September through May). The river supports both summer and winter/spring steelhead returns.

General road access to the Kitsumkalum, also known locally just as the Kalum, is excellent all year round. There is jet boat access to both the upper reaches downstream of Kitsumkalum Lake and the lower reaches above the Highway 16 bridge.

5.14.2 Problems and issues

- Illegal poaching in the Cedar and Beaver Rivers was identified as an issue and concern for the Kitsumkalum watershed. This is largely an enforcement issue and it is beyond the scope of the angling management planning process.
- Increased angling effort and crowding by all classes of anglers:
 - Four key months have been identified — September, October, April, and May
 - Crowding has been identified in some localized reaches of the river. One such area is at the lake outlet during high-water periods, particularly during the months of September and October

- High angling guide pressure during the months of September, and the first 15 days in October, April, and May. The guide quota situation on the Kitsumkalum is unique. It has two distinct management times: From October 16 to March 15 there is no guiding allowed and this was instituted in 1990 to recognize the importance of this fishery to local resident anglers. From March 16 to October 15 BC Regulation 125/90 allows 13 guides to guide a total of 959 angler-days.
- The Working Group cited that there has been a shift in guided effort from the chinook salmon fishery (May through July) to the more desirable and marketable steelhead fishery (September to October 15; March 16 to the end of May). The reasons for this shift are as follows:
 - The quality of the chinook salmon fishery was higher on the Skeena River main stem than on the Kitsumkalum River.
 - The confluence area of the Kitsumkalum and Skeena rivers does not hold as many chinook salmon as it did historically. The river morphology has changed from the days when the “hog line” was one of the most productive chinook salmon angling areas. Today boat anglers rarely congregate there.
 - Non-resident angler demand has shifted to steelhead from salmon due to a building awareness and market for a wild steelhead fly-fishing opportunity.
 - Recent transfers of Kitsumkalum guide licences to new angling guides has been coincident with the observed shift in focus from chinook salmon to steelhead.
- Increased effort and crowding by non-guided, non-residents as the Kitsumkalum becomes better known.
- The use of jet boats to access more remote stretches of river has increased and sometimes concentrates the angler pressure. This has been observed on the whole river (both the upper and lower reaches).
 - The lower river is defined as the section from the Lower Canyon downstream to the confluence with the Skeena River.
 - High jet boat use occurs during the peak steelhead months (September – October and April – May). During the winter months, low water flows and snow restrict jet boat use.
- Concerns were raised that heavy steelhead angling effort, particularly during the winter months when summer steelhead are overwintering, may negatively impact the steelhead population. This issue is outside the scope of the angling management planning process.
- Illegal guiding was identified for the Kitsumkalum River. Examples cited were bed & breakfast operations offering a shuttle service for guests that included transport to and from multiple angling sites. This constitutes illegal guiding as defined under the *Wildlife Act* and regulations.
- Access to the Kitsumkalum River is generally good. The Kitsumkalum is located very close to the community of Terrace and it is open to angling all year, which results in considerable local resident use. Three reaches have been identified:
 - Reach from Glacier Creek confluence to Alice Creek confluence
 - Reach from Lower Canyon to Deep Creek confluence

- Area near the three-kilometre mark on West Kitsumkalum Forest Service Road
- There are areas with poor or limited access that exacerbate the crowding issues in areas with easy access. Some examples of access challenges are:
 - First Nations reserve lands — Access to the river from the West Kitsumkalum Forest Service Road crosses through Kitsumkalum First Nation Band reserve lands.
 - There is less public access as fishing lodges have been constructed at or near prime angling locations. Private land purchases have alienated historical river access sites for walk-in, shore-based anglers.
 - The reduced river access to shore based anglers generally affects resident anglers and non-guided, non-resident anglers more than the angling guides who almost all use jet boats to access the river.
- Increased enforcement of the angling regulations was cited as an ongoing concern, but this issue is beyond the scope of this angling management planning process.

5.14.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Kitsumkalum River (and its tributary streams) is a Class II Classified Water year round. A Steelhead Stamp is required between December 1 and May 31.
 - b. The river is subject to a prohibition on the use of bait between January 1 and March 15.
 - c. The licensed guiding activity is currently restricted to 11 angling guides who are allocated 959 rod-days. Schedule A of BC Regulation 125/90 establishes a maximum of 13 guides and 959 rod-days between March 16 and October 15. There is no guiding between October 16 and March 15.
2. Water designation and licence surcharge:
 - a. Change to Class I Classified Water for entire river and make the Steelhead Stamp mandatory all year
3. Guide-Use Restrictions
 - a. Restrict each guide to the use of one boat in the upper river and one boat in the lower river; No guiding on Sundays. The delineation of the upper and lower river is the canyon.
 - b. Restrict each guide to the use of one boat in the upper river and one boat in the lower river; No guiding on weekends.
4. Angling-Use Restrictions
 - a. Mandatory guiding for non-residents on entire river
 - b. Limited licence availability for non-guided, non-residents after a threshold is reached. Option considered was four non-guided, non-resident anglers per day).

5. The river could be zoned to consider the restriction of non-resident anglers either during some time period or during some spatial zone.

Lakelse and Kitsumkalum Rivers

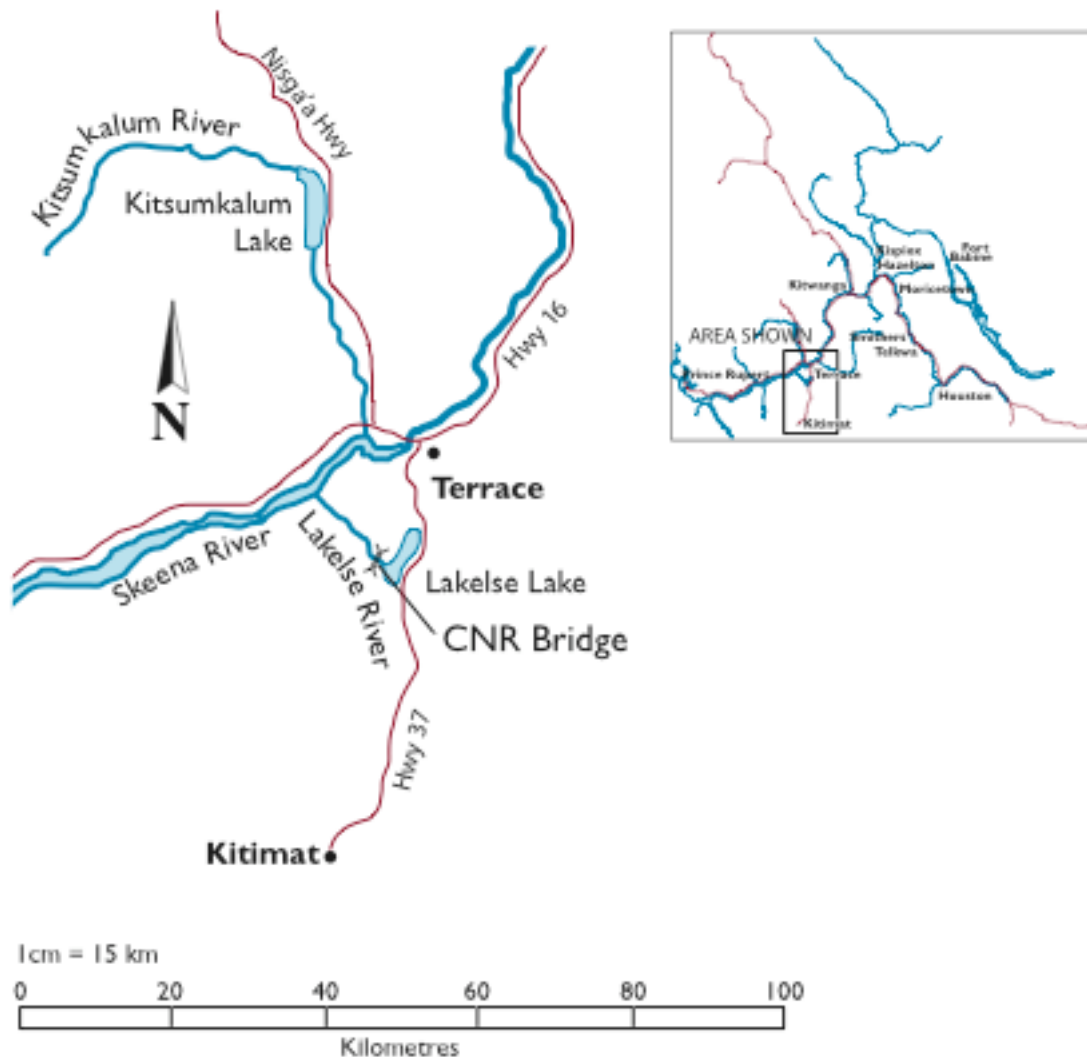


Figure 9 Lakelse and Kitsumkalum Rivers

5.14.4 Management Element analysis

Management Element #1 (status quo)

- The status quo was deemed to not address the problems and issues identified for the Kitsumkalum River — in particular, the crowding observed during September – October and April – May.
- The status quo does not address the busy guide periods and the shift in guided effort from chinook salmon to steelhead.
- The Working Group acknowledged that these key issues needed to be addressed but it was not satisfactorily addressed under the status quo.

Management Element #2 (Class I water and Steelhead Stamp year round)

- Changing the class of the river to a Class I water and requiring a Steelhead Stamp all year was thought to increase the “status” of the river. There was a perception that this would afford the Kitsumkalum increased levels of habitat protection. If this element were implemented the cost to angle the river would increase substantially for non-residents and angling guides. Rod-day fees would also increase but this is a premier river and members of the Working Group feel that it could be worth the extra money.
- This element may address some of the illegal guiding issues and it may have enforcement benefits. It was thought that the profile of the river could be elevated.
- This tool was seen to have merit in addressing some of the crowding issues but it was rejected as a stand-alone option

Management Element #3a (restrict number of boats, no guiding on Sundays)

- This management element could help to more evenly distribute the guided angler effort throughout the upper and lower reaches of the river, but it would mean that an individual guide would not be able to concentrate his boats in one section of the river (for example, the upper or lower section) if he operates multiple jet boats.
- The second component of this element is to eliminate guiding on Sunday from March 16 to October 15. This would be of significant benefit to resident anglers and non-guided, non-resident anglers during the months when crowding has been identified (April – May and September – October 15). There is no guiding for the remainder of the year. The guides would be negatively affected by such a change.
- The tool was rejected as a stand-alone option.

Management Element #3b (restrict number of boats, no guiding on weekends)

- This element is similar to element 3a but contemplates no guiding on both Saturday and Sunday. Again this would benefit all non-guided anglers (resident and non-resident alike).
- This would severely impact the licensed angling guides.
- The tool was rejected as a stand-alone option

Management Element #4a (mandatory guiding for non-residents)

- Mandatory guiding for non-residents is not a regulation that has been used in BC. It appears to be one potential approach to address the illegal guiding issue (especially if non-residents are believed to be guiding illegally). Illegal guiding was identified as a problem on the Kitsumkalum River.
- The potential impact on local tourism (and local business) of a guided-only management option could be negative. However survey data indicate that the proportion of non-resident anglers fishing the Kitsumkalum River relative to the number of resident anglers is low.

- The Working Group considered the addition of a trigger to this option. This option would allow open access to the fishery by non-guided, non-resident anglers until such time as a trigger or target number of non-guided, non-resident angler-days is reached then non-guided, non-resident anglers would need a guide to access the Kitsumkalum River fishery.
- This option would benefit resident anglers and it would also benefit guides, but it may adversely affect local businesses. While this option was considered, no exact trigger or target non-guided, non-resident level was determined.
- These tools were rejected as stand-alone options.

Management Element #4b (lottery access to fishery for non-guided, non-residents)

- The Working Group considered placing non-guided, non-residents anglers on a lottery system to access the fishery. This option would allow open access to the fishery by non-guided, non-resident anglers until such time as a trigger or target number of non-guided, non-resident angler-days is reached. This level must be achieved in two of three years before action is taken. After the trigger has been reached then the non-guided, non-resident anglers would apply for lottery access to the Kitsumkalum River fishery. The option considered was to limit non-guided, non-resident to four anglers per day on the Kitsumkalum River.
- This option would benefit resident anglers and it would also benefit guides, but it may adversely affect local businesses. There would be high management costs to this option. While this option was considered, no exact trigger or target non-guided, non-resident level was determined.
- The tool was rejected as a stand-alone option.

Management Element #5 (non-residents restricted from temporal or spatial zones)

- This option is very intrusive and has high management costs for the ministry.
- The Working Group did not see the application of this tool as appropriate to address the crowding issues on the Kitsumkalum River.
- The tool was rejected as a stand-alone option.

5.14.5 Recommended Management Alternative

- To address the issue of guides contributing to crowding on the Kitsumkalum River, the Working Group proposed to limit each licensed guide to the use of one boat on the upper river and one boat on the lower river on any single day. This could be achieved by making it a condition of the angling guide's licence.
- Along with the first element, it was proposed that angling guides be restricted to a maximum of four guided anglers per boat. This could be achieved by making it a condition of the angling guide's licence.
- To acknowledge the importance of this fishery to resident anglers, no guiding on Sundays on the entire river is proposed. This could be achieved by making it a condition of the angling guide's licence.
- No guiding on the section of river from the Glacier Creek confluence upstream to the outlet of Kitsumkalum Lake on Saturday. The remainder of the river (downstream of the Glacier Creek confluence) would be open to guiding. The first

four elements will adversely impact the guide sector and benefit the resident angling sector.

- A change to the BC Regulation 125/90 is proposed that would reduce the maximum number of guides allowed on the Kitsumkalum River from 13 to 11 guides. There are currently 11 licensed angling guides operating on the Kitsumkalum. This will constrain the access of more guides to the Kitsumkalum fishery. The 959 angler-days are fully allocated to these 11 angling guides.
- All non-residents must be guided during the period when guiding is allowed – March 15-October 15. This will mean that there is a resident-only fishery between October 16 and March 14 as both guides and non-residents are restricted from access to the fishery at that time.
- It was noted that this option severely restricts non-guided, non-resident opportunities and that it has very high management and regulatory costs associated with implementation.

5.15 West Working Group: Lakelse River

5.15.1 Background information

(from Grieve and Webb 1997a)

Lakelse River (Figure 9) is an 18-kilometre stream that runs in a northwestern direction, entering the Skeena River about 84 kilometres above its mouth and 13 kilometres downstream from the community of Terrace. It drains Lakelse Lake, a shallow, warm-water lake that is a central feature in the watershed. The river drains approximately 552 square kilometres and has three main tributaries — Williams Creek, Coldwater Creek and White Creek.

The low gradient and warm waters make this system very productive, although it is limited by its relatively small size (length and watershed area). Besides steelhead, fish species include: chinook, sockeye, pink, chum and coho salmon; cutthroat trout; Dolly Varden; bull trout and mountain whitefish. The river supports a productive cutthroat trout fishery and angler effort is directed on this species during the spring months in the reaches immediately downstream from the lake. Steelhead return to the Lakelse almost every month of the year as it supports fall, winter and spring runs. There is a notable coho salmon fishery that occurs each fall. Significant restoration efforts have been initiated to rebuild the sockeye salmon run.

The Lakelse has good access and offers high-quality angling throughout the year. Lakelse Lake acts to stabilize water levels and flow so this river is often fishable when other waters are high and dirty.

5.15.2 Problems and issues

- There is overlap during the fall months with the coho salmon fishery and the first arrival of fall steelhead and this will be a consideration in the development of an Angling Management Plan for the Lakelse River.

- Illegal guiding, by both BC residents and non-residents, was raised as a significant issue for the Lakelse River.
- There was a concern with the increase in non-resident effort on the Lakelse River. Concerns were raised about bed & breakfast operators and tackle shops that are allegedly distributing maps of the Lakelse to anglers. While this service is not illegal, it is not regulated or managed and it contributes to the crowding issue.
- The crowding is much more prominent when the other streams are high and turbid and this lake-headed system is buffered from these high water events. Anglers then congregate in the upper reaches of the Lakelse.
- Concern was raised for potential impacts on spawning steelhead at the lake outlet as trout anglers and steelhead anglers may be walking on redds and disturbing fish during the spawning period (May). Concerns were also raised as there are more anglers targeting spawning steelhead during the spring. It was acknowledged that both of these issues are beyond the scope of the Angling Management Planning process.
- Both BC residents and non-residents have open, unrestricted access to the fishery. The river is small and its capacity is not large relative to other longer rivers.
- At the time of initial classification in 1990, it was recognized that the Lakelse should not have guiding in recognition of its small size and importance to the resident angler community.

5.15.3 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. The Lakelse is a Class II Classified Water all year long.
 - b. It is one of six non-guided rivers in the region.
 - c. A Steelhead Stamp is required between December 1 and May 31.
 - d. There is a fly-fishing only section downstream from the lake outlet to the CNR Bridge (nine kilometres upstream from its confluence with the Skeena River) from March 1 to May 31.
 - e. A bait ban is in place year round.
 - f. There is a power boat restriction (no motorized boats) in place due to its small size and resulting safety hazard.
 - g. There is a cutthroat trout catch and release (non-retention) fishery from March 1 to April 30. The boundary for this fishery is from the lake outlet downstream to the CNR Bridge.
 - h. No coho fishing allowed above the CNR bridge crossing.
2. Water Designation
 - a. Change to a Class I Classified Water all year long.
 - b. Make a Steelhead Stamp mandatory all year long
3. Licence-Class Restriction – lottery access for non-guided, non-resident anglers

5.15.4 Management Element analysis

Management Element #1 (status quo)

- Generally the Working Group was satisfied with the non-guided direction for the Lakelse River. It was acknowledged that the small size of the river and close proximity to Terrace make it a resident-focused fishery.
- It has crowding issues at times but the greatest concern was the illegal guiding and non-guided, non-resident angler effort when guides are excluded from the fishery.

Management Element #2a (Class I all year long)

- It was perceived that changing to Class I would decrease effort on the river, because non-residents would not come due to increased costs of a Classified Water licence.
- Revenues to government could potentially increase.
- It was believed that the status of the river would increase and perhaps provide a higher level of habitat protection.
- A change in classification might affect the coho salmon fishery in the fall, as licence fees would increase.
- If non-resident angler participation declined, then local businesses may be affected.
- This tool was seen to have merit in addressing some of the crowding issues, but it was rejected as a stand-alone option.

Management Element #2b (Steelhead Stamp mandatory all year long)

- This option was considered as the current requirement (December 1 to May 31) does not cover the time when steelhead are actually present in the river. This negatively biases Ministry of Environment Steelhead Harvest Questionnaire results. This should have little impact on resident anglers. The Working Group agreed that a Steelhead Stamp should be mandatory for the period when steelhead are in the river.
- Both management elements 2a and 2b could have a slight negative impact on the salmon fishery.
- This tool was seen to have merit in addressing some of the crowding issues, but it was rejected as a stand-alone option.

Management Element #3 (lottery access for non-guided, non-resident anglers)

- Three time period options were considered: (i) September 1 – May 31; (ii) October 1 – May 31; and (iii) November 1 – May 31. The Working Group determined the most appropriate period was September 1 – May 31 as this accurately reflected when steelhead are in the river. Some target or trigger was acknowledged as being necessary and several options were discussed.
- There would be some overlap with the coho salmon fishery in the months of September and October.
- Several versions were considered by the Working Group. They ranged from putting non-residents on lottery once the trigger of 200 non-resident angler-days is reached in two of three years. We are currently not at this level of non-resident

angler use based on Classified Water licence sales. A second option was a trigger of 100 non-resident alien (from outside of Canada) angler days during the fall fishery and have the April – May fishery be resident only. Another option discussed included eliminating non-resident aliens from the fishery and limit non-resident Canadians to four anglers per day up to a seasonal maximum of 200 angler days.

- These options had high management costs and high impacts to non-resident anglers.
- This tool was seen to have merit in addressing some of the crowding issues but it was rejected as a stand-alone option.

5.15.5 Recommended Management Alternative

- Class I all year (change from Class II all year). This acknowledges the wilderness attributes of the river, especially in some of the more remote sections.
- Steelhead Stamp Mandatory between September 1 and May 31 (extension from present December 1 – May 31, to reflect actual time steelhead are in the river). This would reduce the negative bias that was observed in the Steelhead Harvest Questionnaire for Lakelse as only those anglers that purchased a Steelhead Stamp are included in the survey. Those anglers fishing for steelhead prior to December 1 would not necessarily be included in the survey.
- The Working Group recommended establishing a resident-only fishery for steelhead from March 1 to May 31 for Lakelse River. This would cover both the spring steelhead and cutthroat trout fisheries. This element recognizes that importance of these fisheries to resident anglers.
- Non-resident anglers can access the fishery from June 1 – February 28. This recognizes the summer and fall salmon fisheries that overlap with the steelhead fishery. This is a compromise to accommodate the interests of local businesses although it is expected that non-guided, non-resident effort would be lower under this management option.
- Non-resident angling effort will be constrained if total non-guided, non-resident effort exceeds 100 angler-days, two years out of three. When this target or trigger is achieved a limited-day licence lottery would be implemented based on a target of 100 angler-days. The non-guided, non-resident effort will be monitored for the time being.
- There could be some negative impacts to the local economy.

5.16 West Working Group: Skeena River IV (downstream from Kitwanga Bridge)

5.16.1 Background information

(from Paish and Associates 1985)

The Skeena River, situated in west central British Columbia, is one of the largest drainages on the Pacific coast of North America. Originating from the high mountain valleys of the Skeena Range in northwestern BC, the Skeena flows approximately 620

kilometres southwest and drains an area of 39,000 square kilometres before reaching the Pacific Ocean near Prince Rupert (Figure 1). Major tributaries include the Babine, Bulkley-Morice, Kispiox, Sustut and Zymoetz Rivers. Many tributaries of the Skeena River are glacial in origin, resulting in high, turbid conditions throughout much of the spring and summer. Autumn hydrographs are characterized by at least one high water resulting from rain on snow.

This section of the Skeena River (Figure 10) is approximately 85 kilometres in length and extends from 1.5 kilometres above the confluence of the Zymoetz River to directly downstream of the Kitwanga Bridge, approximately 68 kilometres northeast of Terrace.

Throughout the study area, river condition and fishability can change substantially from day to day as a result of the diverse discharge regimes of the numerous tributaries. The sport fishery begins with spring-run steelhead and early chinook salmon, usually in March. The fishery is interrupted by spring run-off in May and June. By late June the river is usually fishable again, and chinook salmon and summer run steelhead are the targeted species until August. Coho enter the river in early August and are fished along with steelhead until October.

Species present in the Skeena River include, but are not limited to, bull trout, burbot, chinook salmon, chum salmon, coho salmon, pink salmon, sockeye salmon, cutthroat trout, Dolly Varden, eulachon, green sturgeon, longfin smelt, mountain whitefish, rainbow trout, steelhead, white sturgeon and a number of non-game fish species.

The area for planning (downstream from Kitwanga Bridge) was delineated by the Regional Quality Waters Management Committee (Regional Committee) and it is bounded by the Highway 37 bridge crossing of the Skeena River at Kitwanga, downstream to 1.5 km upstream from the confluence of the Skeena and Zymoetz rivers. While the lower section is quite long (approximately 83 kilometres), only about 73 kilometres is fishable as 10 kilometres of river is bedrock controlled (i.e., canyon water). Hence there is significantly less fishable water than first appears.

The fishing season is quite long but the area affords only marginal fishing conditions at times. Extensive canyon reaches and upper watershed glacial tributaries render fishing conditions poor for much of the summer. The fishery is unique as most of the fish are migrating through this part of the Skeena to up-river natal streams and so it is largely an interception fishery for both steelhead and salmon. The exception to this would be near the confluences of larger productive tributaries such as the Kitwanga River, where Kitwanga steelhead are known to overwinter prior to migrating into the Skeena to spawn in the spring. Skeena IV is unique in that it is classified from July 1 to October 31, which substantially overlaps with the salmon fisheries of the Skeena River. It is for this reason that a Steelhead Stamp is only required when angling for steelhead.

Skeena IV (below Kitwanga Bridge)



Figure 10 Skeena IV (below Kitwanga Bridge)

5.16.2 Problems and issues

- The Working Group discussed the upstream Kitwanga Bridge boundary of this planning area versus some point upstream from the bridge and eventually accepted the bridge boundary.
- Concerns about illegal guiding were raised but it was acknowledged that this issue is difficult to address. Suggestions included the potential need to re-define and clarify the term “guiding” under the Wildlife Act. This is beyond the scope of this Angling Management Planning process.
- Crowding occurs at several key locations in this section of river. The first is near the confluence of the Kitwanga River and downstream for several kilometres. The second is the stretch of river just upstream from the boundary located at 1.5

kilometres upstream from the Zymoetz River confluence to the Kitselas Canyon. The third is at the Skeena West bridge crossing of the Skeena River.

- Concern has been raised that increased angling effort on Kitwanga steelhead stocks in fisheries located at the Kitwanga River mouth may be negatively impacting this population. Escapement monitoring of the steelhead returning to Kitwanga River conducted by Gitanyow Fisheries and the Ministry of Environment have not indicated severe declines.
- As the Skeena IV angling guide quota (10 guides and 1000 rod-days) has not been fully allocated (only 414 rod-days currently allocated), there is a desire from the guide sector to increase guiding.
- A complicating factor is that to access two angling locations (Kitwanga and Hells Bells), anglers must cross First Nations reserve lands. This private land access issue may lead to future restrictions on these reserve lands. Resolution of this issue is beyond the scope of this angling management planning process.
- The available effort data for Skeena IV is generally poor as no creel surveys have been completed and the Steelhead Harvest Questionnaires are difficult to interpret because they do not specify which section (Skeena I, II, III or IV) an angler is fishing in. The Steelhead Harvest Analysis only provides information for the Skeena main stem.
- The planning area is also complicated by fact that the “old” Skeena IV Classified Water has been divided into two new Classified Waters and much of the available information is not parsed in a similar fashion. New guide allocations will need to be developed that are specific to the lower and upper sections.

5.16.33 Management Elements considered

(Note: non-resident anglers include anglers from other provinces in Canada plus anglers from countries other than Canada.)

1. Status quo
 - a. Schedule A of BC Regulation 125/90 establishes a maximum allocation of 1,000 angler-days and a maximum of 10 angling guides for all of Skeena IV Classified Water.
 - b. The current allocation is 414 angler-days distributed among nine guides spread out over 375 kilometres of river (from just upstream of the Zymoetz confluence to headwaters).
 - c. The period of classification is from July 1 to October 31 and a Steelhead Stamp is only required when angling for steelhead.
 - d. The Skeena River main stem (above Cedarvale) is closed to angling from January 1 to May 31 to protect overwintering and spawning steelhead.
2. Water Designation
 - a. Change to Class I Classified Water
 - b. Steelhead Stamp mandatory August 1 – December 31
3. Licence-Class Restriction
 - a. Restriction on non-residents (lottery)
 - b. Non-guided, non-residents limited to eight-day licence
4. Area Zoning

- a. No guiding area at Kitwanga River mouth confluence
 - b. Non-guided, non-resident exclusion zones
- 5. Angler-Use Restrictions
 - a. No fishing from boats
 - b. Non-residents must be guided

5.16.4 Management Element analysis

Management Element #1 (status quo)

- Crowding was identified as an issue in a few key hot spots or locations.
- The guide sector sees Skeena IV as one of the few Classified Waters where guiding opportunities could be increased.
- There was general agreement that angling pressure was increasing on this section of Skeena IV, but the crowding issues were not as severe as in other Skeena watershed Classified Waters.
- The Working Group indicated a desire to develop a plan that would maintain a quality angling experience while allowing for some growth in the fishery.

Management Element #2a (changing to Class I)

- There was discussion that Skeena IV had wilderness attributes in some reaches that warrant a change to Class I status.
- Similarly, some felt a need to lengthen the period of classification from July 1 to October 31 to year round. As the lowest reaches of this section of Skeena IV (downstream of Cedarvale) are open all year long, it was proposed that the Classified Water period reflect this.
- This management element would benefit residents and to a lesser degree angling guides, because for guides who have rod-days, it makes for a more desirable, higher status product for clients. This would be countered by an increase in rod-day fees to guides.
- There are some impacts to those anglers targeting salmon (e.g., sockeye and chinook during the summer) on the Skeena main stem.
- This element may also negatively affect non-resident anglers as the increase in fees may be a disincentive for them to participate in this fishery.
- This tool was seen to have merit in addressing some of the crowding issues, but it was rejected as a stand-alone option.

Management Element #2b (Steelhead Stamp mandatory)

- Initially the Working Group considered changing the Steelhead Stamp so it is mandatory from August 1 to December 31. This later evolved to become year round to reflect the extended period of classification discussed in Management Element #2a.
- This management element could assist in the collection of better effort and angler demographics information as the accuracy of the Steelhead Harvest Questionnaire would be improved. While beyond the scope of this plan the questionnaire data required for monitoring this Angling Management Plan would need to be able to separate anglers fishing in Skeena I, Skeena II, Skeena III, and Skeena IV lower and Skeena IV upper levels to be useful for monitoring

purposes. Electronic licensing may assist this at least for non-resident anglers who require daily Classified Waters licences.

- There are some impacts to those anglers targeting salmon (sockeye and chinook during the summer), as they would require an additional licence or tag. This element may also negatively affect non-residents anglers as the requirement of another species licence may be a disincentive to participate in this fishery.
- This tool was seen to have merit in addressing some of the crowding issues but it was rejected as a stand-alone option.

Management Element #3a (non-resident lottery to access the fishery)

- This tool was deemed as inappropriate for Skeena IV as the non-guided, non-resident angling effort was not viewed as the major issue that needs to be addressed by this Angling Management Plan.
- This Management Element was rejected by the Working Group.

Management Element #3b (non-guided, non-residents limited to eight-day licence)

- This element was considered by the Working Group as a candidate for Skeena IV however, for much the same rationale as element 3a, it was deemed inappropriate. Non-resident angling effort was not viewed as the major issue that needs to be addressed by this Angling Management Plan and this type of restriction may have impacts on local business.
- This Management Element was rejected by the Working Group.

Management Element #4a (no guiding area at Kitwanga River mouth)

- The Working Group realized that restricting guides would not alleviate the crowding issues at the river mouth confluences. Both resident anglers and non-guided, non-resident anglers contribute to the crowding issue.
- This Management Element was rejected by the Working Group.

Management Element #4b (non-resident exclusion zone)

- The Working Group realized that restricting non-guided, non-resident anglers would not alleviate the crowding issues at the river mouth confluences.
- This Management Element was rejected by the Working Group.

Management Element #5a (no fishing from boats)

- Angling from boats is generally an issue on small- to medium-sized rivers, but it was not felt to be an issue on Skeena IV due to its large size and lack of identified conflict.
- This Management Element was rejected by the Working Group.

Management Element #5b (mandatory guiding for non-residents)

- Mandatory guiding for non-residents was felt to be too strong a measure, taking away too many opportunities for non-guided, non-residents.
- This Management Element was rejected by the Working Group.

5.16.5 Recommended Management Alternative

- Class I all year (change from Class II between July 31 and October 31). This would better reflect the wilderness nature of this section of Skeena IV.
- The Working Group elected to maintain the current Steelhead Stamp requirement, which is only required when fishing for steelhead. This reduces the licensing impact on salmon anglers.
- The existing (pre-Angling Management Plan) Skeena IV guides will not be constrained in the use of their Skeena IV angler-day allocation. They can guide in either reach (upper or lower) of the new Skeena IV Classified Waters.
- To address the concerns of the guide sector, four new guide opportunities of 20 rod-days each would be made available (total 80 new rod-days). This was to address the issue that new guides (usually non-Classified Waters guides) have few opportunities to access premier fisheries.
- Additionally, the existing Skeena IV guides from the Terrace area (four guides were identified that presently hold a cumulative total of 85 rod-days) would be issued 30 additional rod-days. This would increase their cumulative allocations by a total 120 rod-days. Schedule A of BC Regulation 125/90 would have to be amended to reflect these changes.
- If total non-guided, non-resident angler effort exceeds 1,000 angler-days, two years out of three, a limited-day licence lottery would be implemented with a target of 1,000 angler-days. While the available data are sparse, the Working Group did not feel that present non-guided, non-resident angler effort was near this target. Ministry of Environment data collection systems and methods may need to be altered to appropriately estimate this effort target and electronic licensing will assist in this objective.

6.0 Next Steps

This draft Angling Management Plan and the recommended management alternatives will be presented to the public and stakeholders in the fall of 2008. In early 2009, the Working Groups will re-convene to modify the plans in relation to feedback received during the fall consultation process. The final draft management plan containing the recommended management options will be forwarded to the Director of Fish and Wildlife at the Ministry of Environment in February 2009. The director will carefully review the recommendations to ensure they balance all the different community interests. The ministry will respond to the plan and any regulation changes that are approved will likely be reflected in the 2010/2011 Angling Synopsis.

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8.0 Appendices

Appendix A. Members of the Working Groups

East Working Group	
Tom Espersen	Resident angler
Tony Harris	Resident angler
Gord Wolfe	Resident angler
Michael Hurwitz	Resident angler
Tom Jones	Resident angler-alternate
Bob Hull	Guide
Brian Schneider	Guide
Richard Pow	Guide
Keith Douglas	Guide-alternate
Jeff Lough	MOE
Dorli Duffy	Facilitator, Alan Dolan & Associates
Central Working Group	
David Larson	Resident angler
Doug Eftoda	Resident angler
Don Intermela	Resident angler
Jason Wiley	Resident angler
Ian Trombley	Resident angler-alternate
Bob Clay	Guide
Gene Allen	Guide
Tom Lee	Guide
Dean Peard	MOE
Alan Dolan	Senior Facilitator, Alan Dolan & Associates
West Working Group	
Jason Ouellet	Resident angler
Chris Culp	Resident angler
Jim Culp	Resident angler
Rob Brown	Resident angler
Michael Johnston	Resident angler-alternate
Dan Daigle	Guide
Dustin Kovacovich	Guide
Andrew Rushton	Guide

Randy Dozzi	Guide-alternate
Dana Atagi	MOE
Sandra Bicego	Facilitator, Alan Dolan & Associates
Paddy Hirshfield	MOE, Quality Waters Biologist (alternate for East and Central Working Groups)

Appendix B. Agendas for Working Group meetings

Agenda (East, West and Central Working Groups) April 19 – 20, Terrace, BC

Objectives:

- To orient Working Group members on the roles, responsibilities and code of conduct for all
- To ensure Working Group members understand the scope of work to be completed by June 2008
- To ensure Working Group members understand the process to be used to complete this task, including decision-making and the use of multi-criteria analysis
- To ensure Working Group members understand the background information and context for the task
- To gain agreement on communications between the Working Group and the broader public
- To clarify next steps including additional information needs, homework and agendas for subsequent meetings

Saturday April 19	
Time	Activity
9:30	Arrive, continental breakfast
10:00	Introductions
10:15	Welcome - Tom Bell , Regional Manager, Skeena Region MOE
10:25	Process information and decisions – Alan Dolan , Senior Facilitator <ul style="list-style-type: none"> • Housekeeping • Agenda review • Conduct, responsibility and roles • Present and seek agreement <ul style="list-style-type: none"> ○ Decision-making process ○ Public and media at meetings ○ Media spokesperson
11:00	QWS and AMP Framework - Dana Atagi , Section Head, Fish and Wildlife, Skeena Region MOE <ul style="list-style-type: none"> • Historical perspective • QWS guiding principles • AMP — what it is, what it isn't • Introduction to toolbox
11:45	AMPs in Cariboo Region (Horsefly and Dean Rivers) - Mike Ramsey , Section Head, Fish and Wildlife, Cariboo Region MOE

Saturday April 19	
Time	Activity
12:30	LUNCH
1:30	Public and Stakeholder Consultation – Alan Dolan
2:15	Small groups <ul style="list-style-type: none"> • Introductions, expectations • Discussion: public and stakeholder consultation • Clarity on conduct, responsibility, roles, scope, decision making • Logistics and attendance at next two meetings
3:15	BREAK
3:30	Plenary: How we are going to develop the AMPs? <ul style="list-style-type: none"> • Draft AMP objectives • Draft evaluation criteria • Building contingency table • Making trade-offs: Introduction to Multi-Criteria Analysis • Why are we doing it like this?
5:00	Adjourn

Sunday April 20	
Time	Activity
9:00	Welcome, check in, review agenda
9:20	Review of angling use data - Paddy Hirshfield, Quality Waters Biologist, Skeena Region, MOE <ul style="list-style-type: none"> • How is data developed? • What does it mean? • How can it be used?
10:00	Break
10:20	Small groups <ul style="list-style-type: none"> • Discussion of angling use data • Discussion of how we are going to develop the AMPs • Determine information needs • Understanding of homework
12:00	Lunch
1:00	Plenary <ul style="list-style-type: none"> • Reporting from small groups on: <ul style="list-style-type: none"> ○ How to develop AMPs ○ Information needs • Continued discussion of AMP development, Multi-Criteria Analysis OR back into small groups and start to look more closely at priority waters
2:30	Developing agenda for next meetings
2:55	Evaluation
3:00	Adjourn

Other participants from Ministry of Environment and Alan Dolan & Associates:

Jeff Lough, Fisheries Biologist, Skeena Region, MOE

Dean Peard, Resource Information Biologist, Skeena Region, MOE

Dorli Duffy, Facilitator, Alan Dolan & Associates
 Sandra Bicego, Facilitator, Alan Dolan & Associates

Agenda (Working Groups in different locations)

May 10 – 11, 2008

Central Working Group, Hazelton (River Boat Restaurant)
West Working Group, Terrace (Coast Inn of the West – Copper Room)
East Working Group, Smithers (Sandman Inn – Meeting Room)

Objectives:

- To remind Working Group members of their roles, responsibilities and code of conduct
- To assemble all the background information, finalize the situational analysis, and clearly understand the problems and issues of each river
- To develop management alternatives for each of the priority waters
- If time permits, to begin the process of evaluating the management alternatives
- To clarify next steps including additional information needs, homework and agenda for June meetings

Saturday May 10	
Time	Activity
9:00 am	Introductions, expectations
9:10	Process items <ul style="list-style-type: none"> • Housekeeping • Agenda review • Briefly revisit and reiterate conduct, responsibility and roles
9:20	Review of Working Group and plenary notes from Terrace April 19-20 meeting
9:40	Review objectives for this meeting
9:45	Situational analysis and background <ul style="list-style-type: none"> • Prioritize waters • Mapping • Data review • Carrying capacities
10:30	BREAK (snacks)
10:50	Situational analysis and background
12:00 pm	LUNCH (provided)
1:00	Management alternatives <ul style="list-style-type: none"> • Identify and clarify issues and problems • Introduce tool box • Develop alternatives for each water
3:00	BREAK (snacks)

Saturday May 10	
Time	Activity
3:20	Management alternatives
4:00	Public presentations
5:00	Adjourn

Sunday May 11	
Time	Activity
9:00 am	Welcome, check in, review agenda
9:20	Management alternatives
10:00	BREAK (snacks)
10:20	Management alternatives
12:00 pm	LUNCH (provided)
1:00	Management alternatives / evaluate alternatives
3:00	BREAK (snacks)
3:20	Management alternatives / evaluate alternatives
4:20	Next steps <ul style="list-style-type: none"> • Homework • Agenda/objectives of next meeting • Logistics of next meeting
4:55	Evaluation
5:00	Adjourn

Check list of what to bring

1. This agenda
2. Terrace meeting notes (WGs and whole group)
3. Consultation Report (including new appendix)
4. Tool kit from QWS 2005 document
5. Skeena Watershed Angling Data Summary
6. Freshwater Fishing Regulations Synopsis
7. Other data analysis

Homework to do before Saturday am

1. Read Consultation Report, particularly:
 - a. From beginning to Discussion
 - b. Notes (stakeholder and public meetings, from Response Forms, phone and emails)

2. Review Angler-use data
3. Familiarize yourselves with Tool Box (in QWS 2005 document)
4. Think about carrying capacity of your waters
5. Read river-specific creels (if applicable)
6. Brief alternates

Agenda (East, West and Central Working Groups) June 7 – 8, Smithers, BC

Objective:

- To develop recommended management alternatives for the priority rivers

Saturday June 7	
Time	Activity
9:30	Arrive, continental breakfast
10:00	Introductions: All
10:20	Process: Alan Dolan <ul style="list-style-type: none"> • Housekeeping • Agenda review • Conduct, responsibility and roles • Decision making
10:30	Working Groups Session 1
12:00	LUNCH (provided)
1:00	Working Groups Session 2
3:00	BREAK
3:20	Working Groups Session 3
4:15	Plenary <ul style="list-style-type: none"> • Reports from groups
5:00	Adjourn

Sunday June 8	
Time	Activity
9:00	Working Groups Session 4 <ul style="list-style-type: none"> • Welcome, agenda review
10:00	BREAK
10:20	Working Groups Session 5
12:00	LUNCH (provided)
1:00	Working Groups Session 6 (optional West and Central together to finish Skeena IV)
3:00	Welcome: Tom Ethier, Director of Fish and Wildlife, MOE BREAK
3:20	Plenary <ul style="list-style-type: none"> • Report from groups • Making it all work together • Moving forward
4:50	Evaluation
5:00	Adjourn (actually 6:00 pm for West and East Working Groups)

Appendix C. Regional Committee members

The Skeena Regional Quality Waters Management Committee, a local group of representatives of resident anglers and representatives of the guiding community, has been meeting for the past two years with the Ministry of Environment to oversee the Skeena Quality Waters Strategy, the community engagement process and the development of AMPs.

Members of the Regional Committee include:

Sharon Robertson (Chair) – Resident Angler Representative, New Hazelton, BC
Tom Protheroe – Resident Angler Representative, Terrace, BC
Mike Wallden – Resident Angler Representative, Prince Rupert, BC
George Deagle – Resident Angler Representative, Hazelton, BC
Gill McKean – Angling Guide Representative, Terrace, BC
Noel Gyger – Angling Guide Representative, Terrace, BC
Dave Evans – Angling Guide Representative, Smithers, BC
Dana Atagi – Ministry of Environment Representative, Smithers, BC