Status Report

East Kootenay Angling Management Plan

East Kootenay Angling Management Plan Committee
B.C. Water, Land, and Air Protection

December 2003

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Acknowledgements

Between June and November 2003 members of the **East Kootenay Angling Management Plan Ad Hoc Committee** donated many hours of their time and some travelled large distances to attend evening meetings in Cranbrook. For their efforts and input the regional fisheries program offers sincere thanks.

Fish biologists and others of the regional and headquarters fisheries program provided useful background information, comments, and information summaries at various points along the way, as well.

Introduction

Over the last two decades, sport fish population recoveries as well as increasing numbers of people within a day's drive have attracted increasing guided and unguided angling on several south-eastern B.C. streams. In some cases the quality of the angling experience is degrading or is likely to degrade in the near future, and mortality or injury from catch-and-release angling may begin to adversely impact sport fish stocks. Regional biologists, anglers, and angling guides identified these streams as the Upper Kootenay River (excluding its tributaries) upstream of its confluence with the White River, and the White River, Elk River, Wigwam River, Bull River, St. Mary River and Skookumchuck Creek and their tributaries.

In spring, 2000 the province, with resident angler and guide representatives, began reviewing the Angling Guide Management System and Classified Waters, aiming to evaluate government's role in managing the freshwater guiding industry and angler effort on B.C.'s special waters, and develop ways to improve the existing system.[1] In this context, the Ministry of Water, Land, and Air Protection imposed an 18 month moratorium in March, 2003, on both the issuance of new guide licenses and on increases of existing guided days for these streams, in order to allow regional biologists and stakeholders time to develop a plan for 1. managing angling use and 2. provide for conservation of fish populations.

This report summarizes the progress to date of an angling management planning committee of local resident anglers, angling guides, a First Nations representative, and the senior regional fish biologist, and represents the consensus conclusions of discussions. The report summarizes the process and methods the committee followed, issues it discovered and discussed, existing information reviewed or gathered or anticipated, potential tools locally acceptable to address the issues, potential implementation costs balanced by potential revenues, target angler days for each moratorium water, and finally, a proposed target allocation of these angler days among resident, non-resident, and guided anglers.

However, reviews and acceptance, at senior levels of government, of a draft "Management of Angling Use on Classified Waters" strategy as well as tenure harmonization are ongoing and further progress towards a final angling management plan for the moratorium waters requires their completion.

[1] http://wlapwww.gov.bc.ca/fw/home/guide/agmscw_review.html

Process and Methods

Although not the first angling management or angler use plan for B.C. streams, this planning process is the first effort to develop an angling management plan for special fishing waters in B.C. following recent recommendations, principles, and suggestions of 1. the Freshwater Fishing Strategy Steering Committee[2], 2. the Recreation Stewardship Panel[3] and 3. *Managing Angling Use on Classified Waters Draft Strategy*[4]. Instead of repeating here summaries of each, readers can instead obtain and read these documents from government internet sites (footnoted), to understand the policy direction.

By and large following the planning process outlined in the draft strategy, government invited a group of stakeholders to join an Angling Management Plan ad hoc committee, resulting in the following structure (Appendix 1 for details):

1 Regional Fish Biologist
4 Local Resident Anglers
4 Local Angling Guides
1 Local First Nations Representative

Some members were 'volunteered' by others but hopefully warmed to the task.

The committee held 9 meetings (not all committee members attended all meetings) in Cranbrook between June and November 2003 in order to identify issues, gather information, and identify locally acceptable tools to manage angling use (including commercial use) and provide for fish conservation, and produce an angling management plan on the following proposed schedule of milestones:

- Draft Kootenay River use plan for internal review – October 1, 2003
- Public release of Angling Management Plan and meeting – October 30, 2003
- Public input deadline – April 1, 2004
- Revision and Regional acceptance – August 1, 2004
- Government approval/rejection – September 1, 2004
- Regulation Changes complete for – March 2005

Alert readers will note that the process is not on schedule, as a draft plan is not complete; however, a completed plan that we can implement requires finalized provincial policy on both the draft strategy and tenure.

[2] wlapwww.gov.bc.ca/fw/home/freshwater-strategy.html
[3] wlapwww.gov.bc.ca/esd/recpanel/recpanel.htm
[4] wlapwww.gov.bc.ca/fw/fish/pdf/angling_use_on_cw.pdf

Ad Hoc Committee Goals

The committee expanded the basic goals of the process (managing angler use and fish conservation – noted in the introduction) to the following:

1. To sustain the quality and quantity of wild fish stocks.

2. To sustain the quality of the fishing experience for all classes of anglers. (The quality fishing experience includes (i) high probability of catching wild fish (ii) scenic and accessible setting and (iii) a range of angler densities from low to high, but sensitive to the desire for minimum crowding and direct angler conflicts).

3. To have the use of the fishing resources contribute to the local and provincial economy through user fees and tourism expenditures.

4. To generate revenue from these seven special waters through licenses and fees for increased management of these waters (i.e., enforcement, education).

Issues

Four separate methods allowed the committee and other interested stakeholders to identify their issues and concerns for the seven moratorium streams and tributaries:

1. On 2 June 2003, at a meeting with anglers and angling guides in Fernie, 12 speakers identified issues to the Minister of Water, Land and Air Protection Joyce Murray, MLA Bill Bennett and regional biologists.
2. In July, a survey solicited input on each moratorium stream and the respondent's view of its associated problems. This survey reached respondents through an ad placed in the Kootenay Advertiser on 11 July 2003, and through ad hoc committee members.
3. Ad hoc committee meetings provided an opportunity for members to identify issues and concerns.
4. The Ktunaxa-Kinbasket Tribal Council provided a summary of its views in a letter appointing Bill Green as their representative.

Although these methods resulted in a large list of different issues (Appendix 2 summarizes them), they distill into general categories, and if not raised for all the moratorium streams, certainly apply to all at present or will apply in the future:

- Conservation concerns
- Angler crowding and associated problems
- Regulation non-compliance and enforcement
- Business environment for guides, and access to guiding
- Sharing the water

In addition to angler use and conservation issues, people raised other concerns, and some members of the committee prefer an angling management plan to document (not discuss or plan for) these as well. For example, these other issues would include land use (logging and development) management, and access management (number and location of boat launches).

Existing information

Some background information exists that addresses conservation issues, angling use, and guided use of the moratorium rivers. This section of the status report summarizes the important background information.

Conservation

Whirling disease has caused a catastrophic decline in a recreational trout fishery in Montana (Madison River) and perhaps elsewhere, and is therefore of potential concern in southeastern B.C. Goldes (2000) reviewed the threat of whirling disease in B.C. Most of her recommendations to minimize risk are unrelated to angler management, and in particular, since ducks and other fish eating waterfowl can transport the parasite from one waterbody to another, it would seem that regulating angler behaviour (washing boats, waders) would be of dubious (at best) benefit in reducing the risk of introduction of the parasite (if it isn't already present). The current Ministry focus on education, and Biodiversity Branch initiatives to survey some watersheds for the parasite, are likely sufficient measures, and the angling management plan would simply duplicate effort by taking on this issue.

Some conservation issues in the moratorium rivers are not likely to be impacted positively or negatively by angling use. An example of this is the hybridization of native westslope cutthroat with stocked or naturalized non-native rainbow trout. Fish misidentification by anglers would likely sabotage any program to preferentially harvest rainbow trout and lead to enforcement issues.

Monitoring changes in parameters such as the abundance, age structure or range of fish populations, provides useful signals for triggering fisheries management conservation actions (regardless of whether the changes are a result of angling pressure, or some other pressure). Designing appropriate fishing regulations that conserve wild fish while providing angling opportunities requires information. A few angler use and creel surveys exist for some of the moratorium waters (Elk, St Mary, and Wigwam Rivers - in Heidt 2002, Martin 1983, Martin and Bell 1984, and Westover 1993, 1994, 1999a and 1999b); however, increases or decreases in angler catch-per-effort can be more related to changes in angler or fish behaviour than to increasing or decreasing numbers of fish. Where other information independent of angling is unavailable, catch-per-effort trends in time are possible to continue, or start, on some or all of the moratorium rivers, with caution required in interpretation. Fortunately a reasonably large and annually increasing number of projects collecting measurements of actual population sizes and age structure (e.g. spawning escapement enumeration fences), or indices of population size (redd counts, snorkel surveys, juvenile densities) exist for some of the moratorium rivers (Wigwam River, Skookumchuck Creek in several Baxter [and co-authors], Chirico and Westover, and Cope [and co-authors] reports from 1998 - 2003). Radio tracking of bull trout and cutthroat trout (Prince and Morris 2003) provides current information on spawning, overwintering, and staging locations for several moratorium rivers as well. The regional

fisheries program can use and interpret these, unpublished data on file, and information collected in the future to monitor fish populations for wild fish conservation goals and designing appropriate fishing regulations to achieve these goals.

Angling Use Information

Several surveys (conservation section above cites the reports) exist that allow for future comparisons of angler success and satisfaction. The significant survey, however, that we can use for developing an angling use plan is that for the Elk River in 2002 (Heidt, 2002), because it's the fishery with the highest levels of use and reported issues, and therefore useful as a benchmark.

Important highlights of the 2002 fishery are:

- Survey interviewed and counted anglers from July 1 – October 31, from Elko to Sparwood (65 km)
- Estimate of total effort = 10,720 angler days
- Percentage of angler days guided = 19 % (almost all boat based)
- Percentage of angler days non-guided = 81% (60% boat-based; 40% shore based)
- Percentage of angler days non-resident = 79 % (35% guided, 65% non-guided)
- Percentage of angler days resident = 21 % (3% guided, 97% non-guided)
- Fish caught = 98,000 (> 95% cutthroat trout and > 99% released)

Clearly, perceptions of legal guiding causing most of the Elk crowding issues are unfounded, at 19% of angler days.

In addition, the Habitat Conservation Trust Fund's River Guardian Program funded angler use surveys of the 2003 fisheries on both the Elk and St Mary River, for which data, analysis and interpretation will be available by March 2004. Although the 2003 fishery was likely less aggressive than 2002 because of forest fires and reduced numbers of visitors to B.C. from elsewhere, 2003 angler use data may be useful as moderate benchmarks for the St Mary, Elk, or both rivers.

Guided Use Information

This section provides information to describe patterns of guided angler use in time and among the moratorium rivers.

Since 1994, the number of guides and assistant guides has increased up to 12 × and the number of guided angler days has increased up to 96 × (Table 1), depending on the stream. On some of the streams increase in guided use has either been less dramatic, or absent.

The Elk and St. Mary Rivers receive the largest shares of guided days, of the moratorium rivers (Figure 1).

Figures 2 and 3 show graphically the increases since 1994 that Table 1 lists, in numbers of guides and assistant guides and in guided days, for the 4 moratorium streams with the most guided use.

Finally, figure 4 shows the cumulative distribution of guided days among guide businesses, which provides some notion of the distribution of the current market among relatively small to large guide operations. The figure caption explains how to read the graph.

Table 1. Guiding summary 1994 - 2002 (2002 numbers incomplete).

Guide and assistant guide numbers							
Year	Bull River	Elk River	Kootenay River - East	Skookumchuck Creek	St Mary River	White River	Wigwam River
1994	0	5	3	0	2	0	0
1995	1	9	2	3	5	0	6
1996	3	12	5	2	5	0	7
1997	4	24	3	4	7	0	13
1998	4	25	2	5	11	0	11
1999	6	30	4	9	11	0	11
2000	4	39	3	7	10	0	16
2001	17	56	3	8	24	1	26
2002	13	52	3	8	22	1	21
Guided angler days							
Year	Bull River	Elk River	Kootenay River - East	Skookumchuck Creek	St Mary River	White River	Wigwam River
1994	0	81	NA	0	9	0	0
1995	2	149	NA	22	32	0	64
1996	8	237	NA	26	136	0	28
1997	15	620	NA	17	230	0	82
1998	15	999	NA	51	504	0	90
1999	40	1067	NA	48	574	0	66
2000	44	1340	NA	36	560	0	148
2001	207	1812	NA	55	801	12	282
2002	172	1575	NA	75	869	16	212

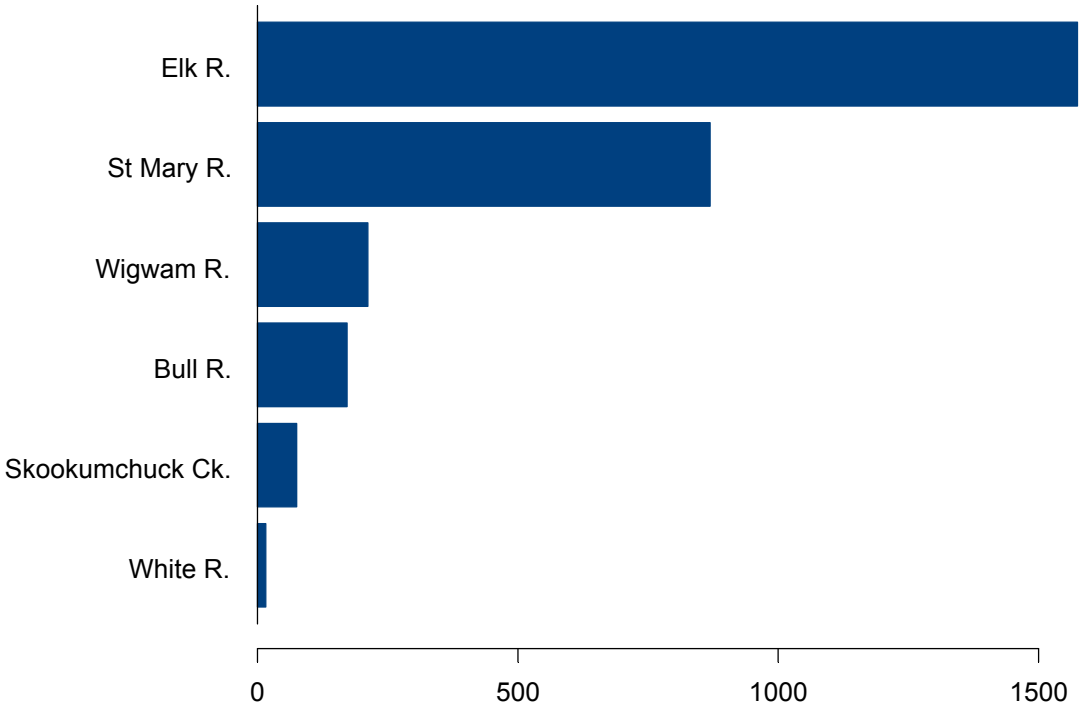

Figure 1. Current (2002-03) reported numbers of guided angler days on 6 East Kootenay Rivers. Although 2002-03 data is incomplete, virtually the same proportions exist for 2001-02.

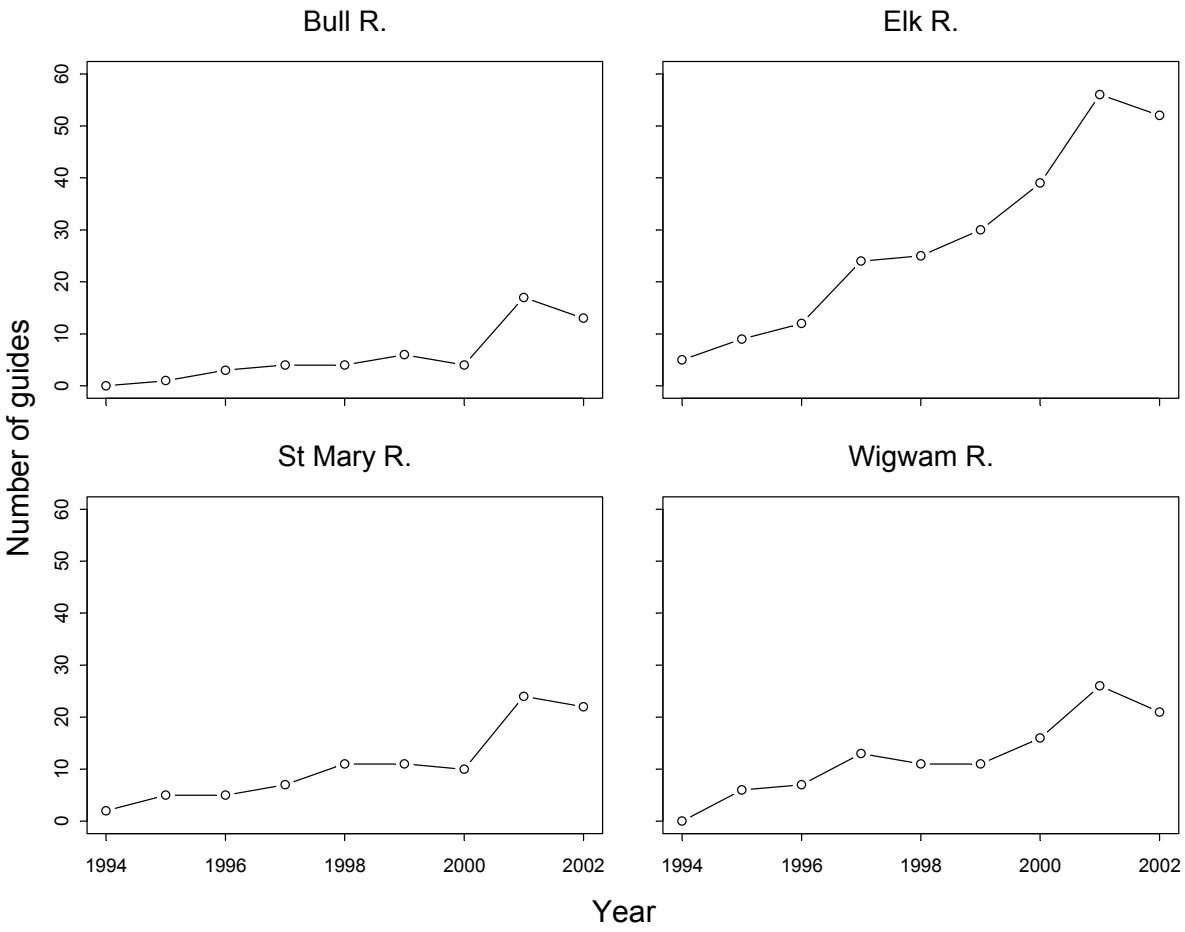

Figure 2. Increases in guide and assistant guide numbers for the 4 moratorium rivers that have had at least 10 guides/assistant guides operating recently.

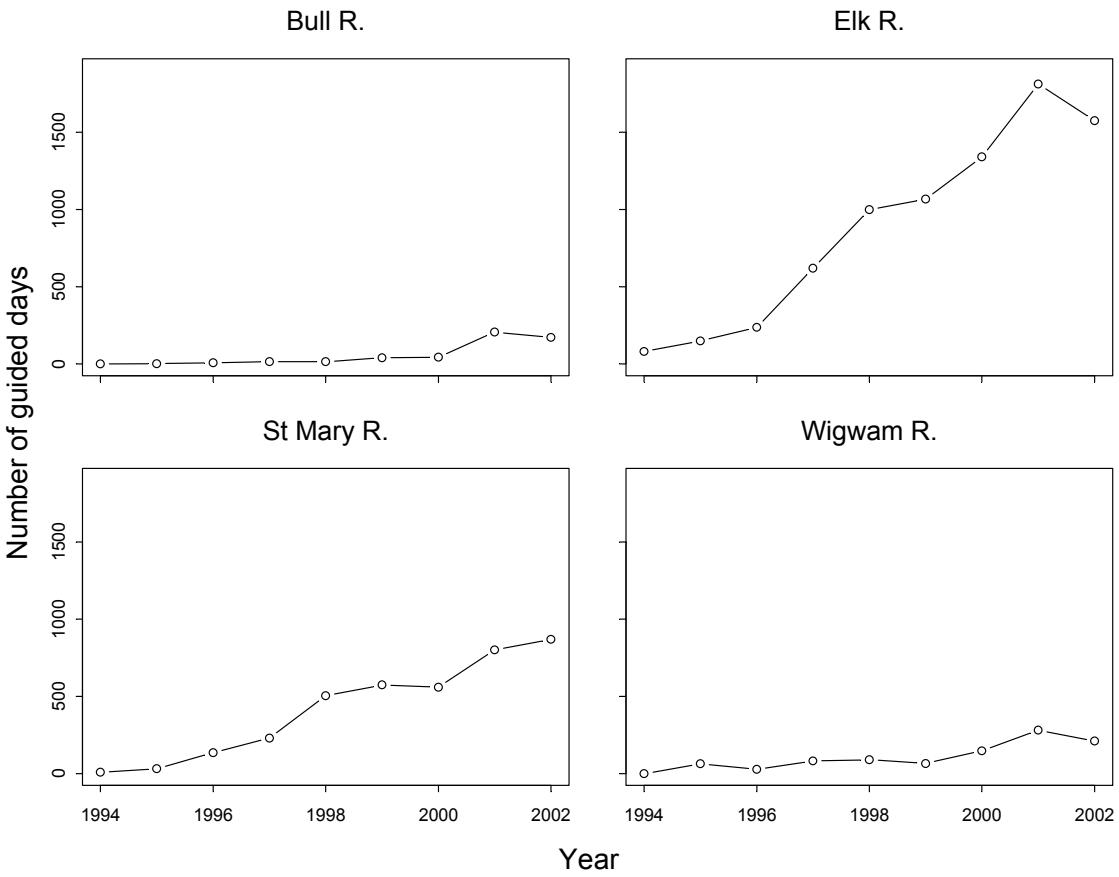

Figure 3. Increases in reported guided days for 4 moratorium rivers (those with at least 200 recently reported days).

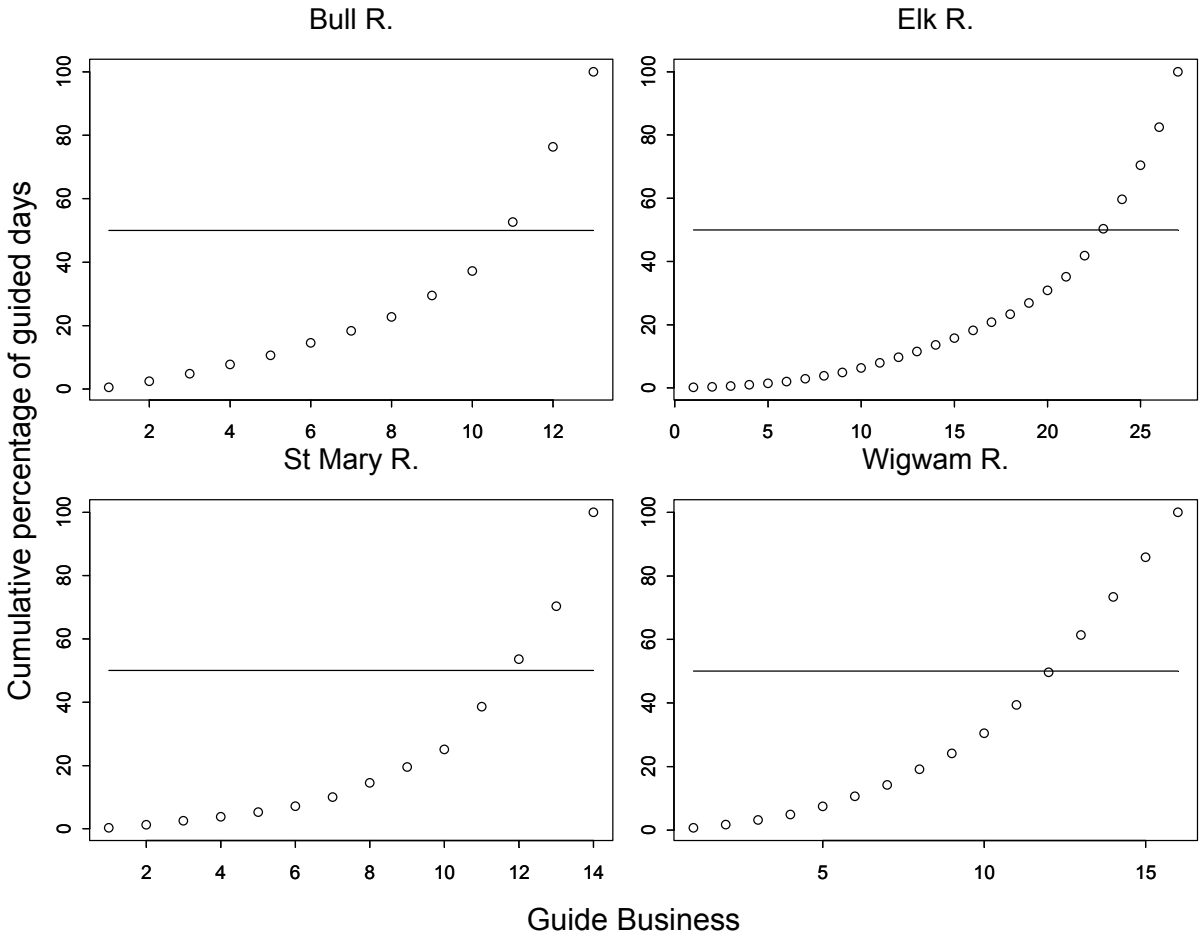

Figure 5. For 2001-02, cumulative percentage of total guided days vs. guide business (businesses sorted from least to most days, left to right). For ease of reading, each figure has a line at 50% of the guided days; businesses above and below this line each comprise 50% of the total guided days. For example 3 of the 13 guide operations using the Bull River sell 50% of the guided days to clients.

Options for Tools

The draft strategy proposes an angling management plan template that includes a template for tools and implementation (Figure 6).

Exhibit 3 Proposed Template For AMP *Managing Angling Use Issues & Recommended Tools*			
Angling Use Issue #1:	• *Description of angling use issue – when and where angling use is a concern*		
Objective To Address Issue:	• *Statement of what is to be achieved in order to address the issue*		
Recommended Tools To Meet Objective			
Tool	**Responsibility to Implement Tool**	**Estimated Cost to Implement Tool**	**Method to Measure Effectiveness of Tool**
Tool #1 Selected from the Tool Box	*Who will implement the tool, Ministry staff, angling community, angling sector, etc.*	*Estimated costs both public and private sector costs*	*Method and when it should be applied to measure effectiveness*
Tool # 2			

Figure 6. Proposed template for recommended tools

This section lists the locally acceptable and recommended tools according to category of issue they attempt to address, consensus, important requirements to implement, timing or ability to phase in, and monitoring methods, but does not yet fit them all into the proposed template, in particular implementation responsibility or estimated implementation costs (Table 2).

An important tool that the committee identified was the designation of 7 special watersheds (Figure 7), and a special license to fish the streams in those watersheds for all classes of anglers except for resident anglers under 16 years of age. There was unanimous support at the table for this, provided that a portion of the fees collected from such potential license sales were available to fund River Guardian[s] and conservation monitoring projects, through a model such as the Habitat Conservation Trust Fund or its River Guardian subprogram.

Table 2. Tool Options and associated information.

Tool	Category of issue addressed	Consensus	Important requirements to implement	Schedule	Monitoring methods
Angling regulation changes as required (gear, season, quota, size, area closure regulation requirements)	Conservation	Yes	Existing annual WLAP responsibility; no special requirements	Annual review, already occurring; monitoring to occur as funds are available	Spawning escapement estimation, index counts (snorkel surveys, redd counts, etc.), angler use surveys
No fishing from boat zones (e.g. East Fernie Bridge to Coal Creek option; St Mary from big bend upstream to 100 m downstream of McPhee Bridge)	Sharing the water	Yes Bill Green - abstains	Mechanisms already exist, but possibly new regulation to be more effective?	Annual review, already occurring; monitoring to occur as funds are available; Other access points to be considered as well	River Guardian, Angler Use Surveys
Establish 7 East Kootenay Special Waters (entire watershed excluding lakes) (Figure 7):	All	Yes	Order-in-council regulation additions or changes	Prefer asap	
Annual Special or Classified waters license for residents (1 license for all watersheds)	All	Yes	Order-in-council regulation additions or changes; cost estimate	Phase in asap	River Guardian, Angler Use Surveys
Per day Special or Classified waters license for non-residents (separate license for each watershed)	All	Yes Bill Green – abstains	Order-in-council regulation additions or changes; cost estimate	Phase in asap	River Guardian, Angler Use Surveys

Tool	Category of issue addressed	Consensus	Important requirements to implement	Schedule	Monitoring methods
Limit Non-resident licenses available numbers by digital lottery or other means	All	Yes	Order-in-council regulation additions or changes; cost estimate; electronic licensing	Phase in when e-licensing available	River Guardian, Angler Use Surveys
River Guardian presence	Enforcement, Conservation	Yes	Special waters fees available to fund, Chief Conservation Officer must agree and appoint	Phase in as funds available, staring with Elk and St Mary Rivers	River Guardian, Angler Use Surveys
Establish unguided waters or zones (e.g. White River, Upper Kootenay River, St Mary River above St Mary Lake)	Sharing the water, future crowding	Yes Bill Green – abstains	Order-in-council regulation additions or changes; Respect existing guided angling incidental to guided hunts by guide-outfitters?	Phase in asap	River Guardian, Angler Use Surveys
Require guides to affix their license number to boats	Enforcement	Yes	Order-in-council regulation additions or changes	Phase in asap	River Guardian, Angler Use Surveys
Increase guide fees	Business environment for guides	Yes	Order-in-council regulation additions or changes	Phase in asap	
Require assistant guides to write exam	Business environment for guides, Conservation	Yes	Order-in-council regulation additions or changes	Phase in asap	WLAP examination
Limit number of assistant guides a guide can employ (committee consensus=6)	Crowding, Business Environment	Yes Bill Green - abstains	Order-in-council regulation additions or changes	Prefer asap	River guardian; WLAP licensing

Tool	Category of issue addressed	Consensus	Important requirements to implement	Schedule	Monitoring methods
Allocate special waters rod days to guides	Business environment for guides, Crowding	Yes Bill Green – abstains	Provincial policy finalized, Order-in-council regulation additions or changes	Guides prefer before end of moratorium	Partnership: guide industry and government

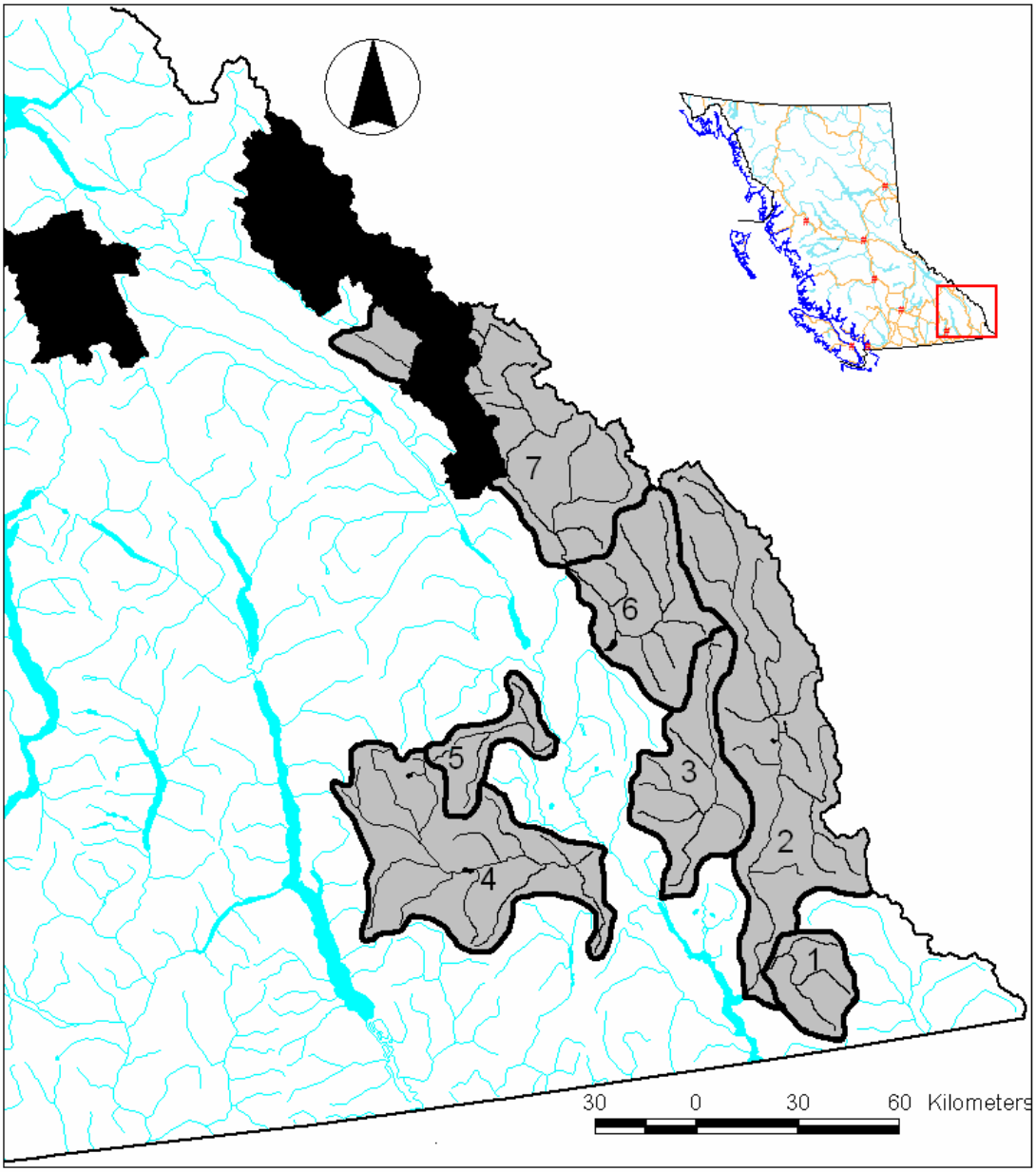

Figure 7. Map showing proposed special watersheds: 1. Wigwam 2. Elk 3. Bull 4. St Mary 5. Skookumchuck 6. White 7. Upper Kootenay. The Findlay is also a possible special water (watershed tributary to the Kootenay, north of Skookumchuck). Black areas are national parks in which angling management is a federal jurisdiction.

Implementation Costs

Recovery of costs of implementation of an East Kootenay angling management plan should be at least 100% through user fees, resulting in a net annual implementation cost to the province of zero, although there are some up front costs (some already incurred, some to be incurred to take the process forward).

This section provides *a scenario* (Table 3), that applies existing Class 2 waters angling license fees and Class 1 waters guided rod day fees as revenue sources to balance implementation costs.

Table 3. Implementation costs scenario

Costs - Development	
WLAP AMP development, salaries (AMP development, drafting regulations) – internal ministry staff prioritization	0
Angling management plan meetings, travel, facilitation	20000
Costs - Annual implementation	
River guardian/enforcement costs (e.g. 1 conservation officer, 2 seasonal river guardians – salary/benefits, equipment and expenses)	140000
Annual wild fish population monitoring project costs, signage, education	40000
Government administrative costs	?
Revenues – Annual special waters	
Non-resident special waters license fees (6000 angler days @ $20)	120000
Resident annual special waters license fees (800 @ $15)	12000
Guide rod day fees (5000 @ $10)	50000

Other scenarios result in annual revenues and/or costs that are more (e.g. up to $250,000 in revenues) or less than those in Table 3.

There was recognition of the fact that revenues generated in the East Kootenays might be available for River Guardian or fish monitoring projects elsewhere in the province, in the same way that funds generated by anglers and angling guides elsewhere in the province has financed East Kootenay River Guardian and fish monitoring projects.

Target angler densities

The committee chose to consider targets in the overall numbers of anglers, and not attempt, at this time, the micromanagement of anglers by time and place.

It was clear that a simple and direct method to reduce crowding and associated problems was to directly reduce the numbers of anglers (starting with non-residents). But how to first define target densities?

Method

1. Use the 2002 Elk River angler use survey estimates from Elko to Sparwood (Heidt 2002) to estimate a benchmark "crowded" density of anglers, and reduce it to 75% of it's value in order to reduce crowding:

Observed Density = estimated angler days ÷ surveyed days ÷ length survey section
= 10720 days ÷ 120 survey days ÷ 65 km
= 1.37 anglers per km

Benchmark Density = Observed density × 75 %
= 1.37 anglers per km × 75 %
= 1.03 anglers per km

It's important to note here that the estimate of total angler days is subject to uncertainty; however, for comparison, a draft plan for the Horsefly River targets 0.5 anglers/km, and for the upper Dean River targets 1 angler/km.

2. Calibrate the benchmark density for the other moratorium rivers. In other words, estimate the equivalent "crowded" density as a proportion or percentage of the Elk River situation. This is important in order to reflect the fact that a km of any particular river will not necessarily support the same number of anglers as on the benchmark Elk River reaches and "seem" as crowded, and to reflect that different rivers have different modes of access and styles of angling. It is a subjective proportion that committee members discussed, and these numbers were corroborated by regional fisheries biologists in Cranbrook.

Table 3. Calibration of angler density to Elk River benchmark

Stream	**Calibration to Elk River from Elko to Sparwood (%)**
Bull R.	40
Elk R. to Sparwood	100
Elk R. upstream of Sparwood	25
Kootenay R.	10
Skookumchuck Ck.	30
St Mary R.	70
White R.	10
Wigwam R. below km 42	30
Wigwam R. above km 42	30

3. For each moratorium main stem stream, estimate fishable km, length of the fishing season, and apply the benchmark density and calibration to identify target angler days:

Target angler days = Fishing Season days × Fishable km × Benchmark Density × Calibration

Results

Table 4 summarizes the values for these parameters and resulting target angler days. Targets could change if any of the factors change, based on new input, measurements, or discussions. For example, fishable lengths are estimates based on map measurements and local knowledge, but may be high or low.

The target angler days are conservative for two reasons. First, although the committee intends targeted days to apply to whole watersheds (lakes excepted), this method identifies targets using main stem river fishable lengths without estimating additional tributary capacity. And second, actual fishable seasons are longer than those the calculation uses.

Table 4. Calculation of target angler days for each moratorium water. The final column is the product of the preceding four columns, rounded to the nearest 50.

Stream	Season (Days)	Fishable length (km)	Elk R. Benchmark Density (anglers/km)	Angler/Water Calibration	Target Angler Days
Bull R.	107	45	1.03	40%	2000
Elk R. to Sparwood	107	80	1.03	100%	8800
Elk R. upstream of Sparwood	107	100	1.03	25%	2750
Elk River total					11550
Kootenay R.	90	60	1.03	10%	550
Skookumchuck Ck.	93	20	1.03	30%	600
St Mary R.	107	65	1.03	70%	5000
White R.	90	90	1.03	10%	850
Wigwam R. below km 42	93	12	1.03	30%	350
Wigwam R. above km 42	48	16	1.03	30%	250
Wigwam River total					600

Allocation

The committee kept in mind several principles in working on a fair allocation, to different groups, of angler days that the previous section estimated.

- Resident priority: resident anglers should not be limited (days will be allocated to them from first non-residents, and then from guides, if conservation or crowding concerns remain, and angler day targets are reached or exceeded in the future). In our situation, their "allocation" will currently provide unlimited opportunity.
- Non-resident anglers should be limited in the number of days available to them
- Guides informed the committee that they require allocated and tenured days in order to run their businesses (for various reasons, foremost being that a day is what they sell), but are willing to be excluded from access to the un-guided allocations to residents and non-residents
- Pending the outcomes of provincial level reviews of angling guide management policy and tenure harmonization, the committee attempted no allocation of days among guides; however, Kootenay Angling Guide Association members have a number of recommendation and proposals for such allocation and will inform the provincial process
- It would be better to err low and increase allocations later than to attempt to reduce them later
- No guided days on the White and Upper Kootenay River watersheds, or the St Mary upstream of St Mary Lake.
- If we increase target angler days for a watershed, each class will acquire a share according to original percentage allocation
- Allocation can consider historic, current, and desired patterns of angling use.

Percentage allocation

There was consensus on general percentage allocation (Table 5).

Table 5. Consensus allocation of target angler days among class of angler

Group	%
Residents	45
Non-Residents	30
Guided	25

Allocation by Watershed

Table 6 provides the application of allocations to the targeted angler days, by watershed, using Table 5 in general, but modifying for the St Mary, White and Upper Kootenay Rivers, as well as rounding. It's significant to note and compare the Elk River allocation to actual use in 2002: there is considerable room for residents to expand their use in this

model. Resident use was 2200 days (Table 5 allocation = 5220 days), guided use was 2020 days (Table 5 allocation = 2900 days), and non-resident unguided use was 6560 days (Table 5 allocation = 3480 days).
It's reasonable to assume that public input might modify these further (for example adjusting more remote streams such as the upper Kootenay or White towards more resident use.)

Table 6. Allocations of target angler days among groups. None of the St. Mary guided days would occur upstream of St. Mary Lake.

Watershed	Total angler day target	Residents	Non-residents	Guided
Bull R.	2000	900	600	500
Elk R.	11600	5220	3480	2900
Kootenay R.	550	275	275	0
Skookumchuck Ck.	600	270	180	150
St Mary R.	5000	2250	1500	1250
White R.	850	425	425	0
Wigwam R.	600	270	180	150
Totals	21200	9610	6640	4950

At the last meeting, consensus settled on totals of 21400, 9700, 6700, and 5000 for total, resident, non-resident, and guided days respectively (adding 200 angler days to the Elk Watershed).

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Appendix 1. Ad Hoc Angling Management Plan Committee

This appendix table lists the Ad Hoc Angling Management Plan Committee membership, clearly representing a range of interests (though not all). Some members had alternates who attended meetings periodically, and not all members or alternates were able to attend all 8 meetings. For example, Bill Green was unable to attend and report back to the Ktunaxa-Kinbasket Tribal Council on the first 6 meetings.

Member	Affiliation[s]
Government	
Jeff Burrows	Ministry of WLAP - Fish and Wildlife Science and Allocation
Resident Anglers	
Barry Nagle	St. Mary Flyfishers, Golden District Rod & Gun; East Kootenay Wildlife Association
Gerry Ogilvie	St. Mary Flyfishers
Doug Peck	East Kootenay Wildlife Association; B.C. Wildlife Federation; Sparwood and District Fish & Wildlife Association
John Poirier	Wapiti River Flyfishers
First Nations	
Bill Green	Ktunaxa-Kinbasket Tribal Council
Angling Guides	
John Douglas	Angling guide – unaffiliated
Barry Rogers	Kootenay Angling Guide Association
Kim Sedrovic	BC Guide Outfitters Association; Kootenay Angling Guide Association; Fernie Rod and Gun Club
Bill Wilcox	Kootenay Angling Guide Association

Appendix 2. Issues

This appendix lists and summarizes issues raised for the moratorium rivers. Each one relates to one of 4 categories: conservation, crowding and associated problems, non-compliance with regulations and enforcement, or an appropriate business environment for guides.

1. Fernie meeting, 2 June 2003

Speakers List:
Bill Bennett, MLA
Joyce Murray, Minister
Bob Forbes (Kootenay Region Section Head, Fish and Wildlife Science and Allocation)
Jeff Burrows (Kootenay Region, Senior Fish Biologist)
Doug, Barry, Louis, Kim, John, Gerry, Kelly, Darren, George, Tom, Gord, Rebecca, Bill

Issues raised:

- Crowding
- Enforcement and compliance
- Quality of fishery
- Quality of Guide Industry
- Return on use of crown assets and royalties
- Access to river
- Membership in KAGA (Kootenay Angling Guide Association)
- Alberta guides
- Illegal US guides
- Licence costs (should be higher for alien and non residents)
- Courtesy on river
- Non residences unguided is 60%!
- Lots of illegal Guiding
- Seniority and investment by guides
- Residency of guides
- Moratorium prevents new guides from working
- Whirling disease
- Fish injuries
- how to keep casual anglers interest in fishing (not drive away with high fees)

2. Survey

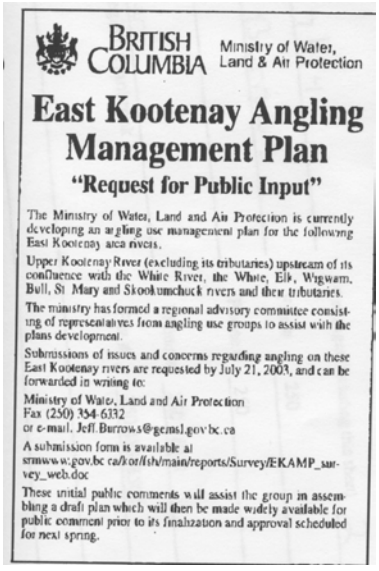
The survey asked interested persons to identify and rank in importance, for each moratorium river, issues and concerns related to their angling experience (and problematic behaviour) and fish conservation. At the request of some ad hoc committee members, the survey sought additional information on other concerns such as habitat and access).

In addition to committee members distributing the survey, an ad in the Kootenay Advertiser, on 11 July 2003 publicized the process and solicited input (Figure A2.1).

We received 25 individual responses commenting on one or more rivers. Verbatim responses are available on request from Jeff.Burrows@gems1.gov.bc.ca; here is a summary of the results:

Responses received:

Total number:	25
Elk	22
St Mary	3
White	0
Wigwam	11
Bull	3
Skookumchuck	3
Upper Kootenay	0



BRITISH COLUMBIA Ministry of Water, Land & Air Protection

East Kootenay Angling Management Plan

"Request for Public Input"

The Ministry of Water, Land and Air Protection is currently developing an angling use management plan for the following East Kootenay area rivers.

Upper Kootenay River (excluding its tributaries) upstream of its confluence with the White River, the White, Elk, Wigwam, Bull, St. Mary and Skookumchuck rivers and their tributaries.

The ministry has formed a regional advisory committee consisting of representatives from angling use groups to assist with the plans development.

Submissions of issues and concerns regarding angling on these East Kootenay rivers are requested by July 21, 2003, and can be forwarded in writing to:

Ministry of Water, Land and Air Protection
Fax (250) 354-6332
or e-mail. Jeff.Burrows@gems1.gov.bc.ca

A submission form is available at
srmwww.gov.bc.ca/kor/fish/main/reports/Survey/EKAMP_survey_web.doc

These initial public comments will assist the group in assembling a draft plan which will then be made widely available for public comment prior to its finalization and approval scheduled for next spring.

Figure A2.1. Ad placed in the Kootenay Advertiser

List of concerns raised:

- Crowding (general, guides, non-resident)
- Enforcement insufficient
- Guides (too many, unrestricted residence, number of trips, number of assistant guides, unlicensed guides, unrestricted rivers)
- Angling courtesy and etiquette problems
- Number of boats
- Lack of return to BC from guiding
- Regulations (suggestions include gear restrictions e.g. bait ban, boat limits, C&R by species or tributary)
- Questioned survey results
- Any plan should be reviewed for effectiveness at periodic intervals

Conservation concerns:

- Catch and release related mortality of fish, harassment of fish
- Whirling Disease

Other concerns:

- Raw sewage
- Boat launches (more and maintenance)
- Litter
- Logging (riparian protection and visual quality)

3. At 8 ad hoc committee meetings similar and additional concerns were raised

- Dramatic increases in the numbers of people in surrounding jurisdictions (Alberta, U.S.) within roughly 300 km
- Perception of crowding expressed by all classes of anglers
- Illegal behavior.
    - illegal guiding by US, AB and local guides
    - poaching – keeping of fish
    - illegal gear
- Direct conflicts between anglers.
    - vandalism of vehicles
    - confrontations
    - traffic jams – need for protocols for meeting other anglers
- Commercialization of fishing at odds with local/resident angler culture
- Potential threat of whirling disease
- Too many guides to realize a viable and sustainable industry that will contribute to local economy in a significant way (i.e., 75 guides and 100 assistants licensed in Region 4 – with 35 guides and 40 assistants on Elk River).
- Limited government management resources particularly enforcement
- Lack of regional government resources to handle complex administrative angler use management schemes implies a simple and efficient scheme
- Irresponsible anglers leaving garbage, etc.
- Impact of other land uses on water quality and setting (i.e., of particular note is logging activity presently underway along the Skookumchuck).
- Limited access points concentrate use on the Elk and St. Mary's Rivers although guides have taken the initiative on the St. Mary's to negotiate and purchase access from private land.
- Perception of historic lack of government management of angler use issues.
- Loss of pure strain west slope cut throat trout with hybridization with rainbow.
- Sustaining and managing bull trout populations.
- Need for a revised and updated provincial angling guide policy to manage a growing and more complex industry (and to provide a framework and direction for the guiding aspects of the East Kootenay special waters plan).

- Need for a revised and updated classified waters policy or a new special waters management policy to provide direction for sustainable use and quality fishing experiences (and to provide a framework and direction for the East Kootenay special waters plan).
- Unethical, discourteous and selfish behaviour of some guides, residents and non-resident anglers adversely impacting an enjoyable fishing experience of others

4. First Nations Concerns

In a letter appointing Bill Green to participate in the planning process in order to report back to, and seek direction from the Ktunaxa-Kinbasket Tribal Council (KKTC) on progress and key issues, the Council outlined the following

- Deep concerns about the use of catch-and-release angling as a conservation tool, instead of more stringent conservation and angling measures. Playing with a living thing for recreational pleasure is not compatible with respect for all living things.

- "The KKTC is pursuing economic access to fisheries resources, including angling guiding opportunities at the treaty negotiation table. As such, we will not be commenting on proposed provisions relating to the numbers and allocation of angler guide licenses except as those provisions may affect conservation objectives"