

**Fish and Wildlife Section Head Decision: SAAT Regulation Proposal 2018-01**

**Proposal Title: Classified Waters License fee increase**

**Proponent: Upper Skeena Angling Guide's Association - Gene Allen**

**Proposed Regulation Change:**

Increase the classified licence fee for all non BC-residents from \$20/day to \$100/day.

**Summary of issue(s) proposal is to address:**

This extra revenue could be applied to help enhance funds for wild steelhead projects. This is still a reasonable price to pay compared to other river systems that are not as special as the Skeena River system. These rivers were classified because they're special and the rates haven't been changed forever! Atlantic Salmon daily license fees in Canada start at \$500 per day and \$2000 per day in Europe. We always hear "we don't have the funds to undertake that, or no funds for more enforcement" - to me raising c/w fees accomplishes just that. We are giving away the greatest steelhead fishing in the world, and letting the fish get totally beat up in the process!

**Regulatory/ Policy Impediments: *(list & provide details)***

Licensing fees are set province wide and there is no mechanism to make them region specific.

**Existing Regulation & Justification Summary: *(may include biological comments)***

Class 1 daily fee for a non res Canadian=\$40.00  
Class 1 daily fee for a non res alien=\$40.00  
Class 2 daily fee for a non res Canadian=\$20.00  
Class 2 daily fee for a non res alien=\$20.00

**Management Considerations: *(summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues)***

N/A

**Available Options: *(where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more***

*effectively)*

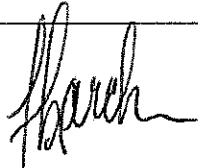
**Summary of SAAT Issues and Concerns:**

The Chairman communicated that a fee-related proposal is provincial in scope and requires a Treasury Board submission. Discussion occurred with respect to the proposed Classified Waters (CW) fee increase and whether or not a fee increase would result in a decline in angler effort on CW's. Some members thought an increase was justified, but not to the level indicated by the applicant while others voiced concern that a fee increase may result in a decrease in effort. An alternative proposal was accepted, specifically, an increase in the CW fee for streams with anadromous fisheries. The committee chose to vote on this modified proposal with the understanding that fee changes were outside the scope of the regional committee: 6 in favour and 2 opposed while 3 abstained.

**Fish and Wildlife Section Head Decision:**

This proposal is outside of the scope of the SAAT and as such will not be forwarded to the Director of Fisheries for consideration. Committee members received the contact information for the Provincial Angling Advisory Team (PAAT), who are responsible for entertaining such proposals.

**Signed by:**



Fish and Wildlife Section Head

Date

2018-05-23

**Fish and Wildlife Section Head Decision:** SAAT Regulation Proposal 2018-02

**Proposal Title:** Bull Trout tributaries

**Proponent:** Kris Maier

**Proposed Regulation Change:**

Gosnell Creek and Tributaries

- No Fishing August 1 to September 30

Thautil River and Tributaries

- No Fishing August 1 to September 30

Glacier (Redslide) Creek (an unnamed tributary to Nanika River)

- No Fishing August 1 to September 30

Magar Creek

- No Fishing August 1 to October 31

**Summary of issue(s) proposal is to address:**

- Reduce angling-related mortality on reference populations of Bull Trout
- Apply precautionary principle to at-risk populations of fish in a data-deficient management scenario
- Improve validity of redd survey study design

**Regulatory/ Policy Impediments: *(list & provide details)***

- None

**Existing Regulation & Justification Summary: *(may include biological comments)***

**Existing regulations:**

Gosnell and Thautil, as tributaries of the Morice River:

- Angling prohibited for non-guided non-resident aliens on Saturdays and Sundays, Sept 1 - Oct 31
- No fishing for finfish other than salmon, Jan 1 to Aug 31
- Bait ban
- Fly Fishing only, Sept 1- Sept 30
- No angling from boats, Aug 15-Dec 31
- Class II water Sept 1-Oct 31; Steelhead Stamp mandatory Sept 1-Oct 31

Glacier (Redslide) Creek (an unnamed tributary to Nanika River)

- Regional regulations

Magar Creek, as a tributary of the Gitnadoiks:

- Class I water all year; Steelhead Stamp mandatory Apr 1-May 31

**Justification:**

Fluvial char stocks are a management priority for the Skeena region. Measures to ensure monitoring methods are sound should be taken to ensure management prescriptions taken in the future are based on sound information. In addition, these changes provide additional precautionary protection which should help maintain BT populations in their current state and/or trajectory. Increasing popularity of BT fisheries could increase angling effort on reference reaches which may impact monitoring efforts.

**Management Considerations: (summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues)**

Stock status – uncertain, appears to be a downward trend in Gosnell. Likely stable in Magar.

Life history – Fluvial Bull trout, exposed to several fisheries over several months outside of proposed closure dates

Exploitation – Unknown. Currently under non-retention regulation so expected to be low

Other – BT are highly vulnerable to angling in spawning habitat. Precautionary closures exist for other spawning fish in the Skeena region (Summer ST – no fishing/spring closure. LT – non-retention)

**Available Options: (where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more effectively)**

No alternatives exist which could meet the objectives of the proposal.

11/11 stakeholders voted to support this proposal. Recommend forwarding to the Director for implementation.

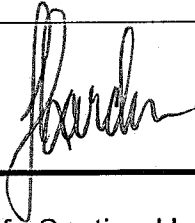
**Summary of SFAC Issues and Concerns:**

Clarification required on lower boundary at Magar Creek / Gitnadoiks River confluence. Some anglers fish lower Magar Creek near the confluence with the Gitnadoiks River. Boundary signage can be placed to accommodate current angler use (coho fishery) on lower Magar Creek.

**Regional Section Head Decision:**

This submission is approved as proposed and a Variation Order should be submitted to the Provincial Fisheries Director as soon as possible.

Signed by:



Troy Larden  
Fish and Wildlife Section Head

Date  
2018-05-10

**Fish and Wildlife Section Head Decision:** SAAT Regulation Proposal 2018-03

**Proposal Title:** Kitimat River

**Proponent:** Kris Maier

**Proposed Regulation Change:**

- No Fishing Dec 1-Mar 31 \*(including tributaries)
- No Fishing in tributaries and upstream of Highway 37 bridge, Apr 1-May 31
- Bait ban, Apr 1-Aug 31 and Nov 1-Nov 30 \*(including tributaries)
- Hatchery Steelhead and rainbow trout daily quota = 10, Apr 1-Nov 30, no minimum size

**Summary of issue(s) proposal is to address:**

- Provide increased protection for Kitimat CCT, which are designated as regionally at-risk.

**Regulatory/ Policy Impediments: *(list & provide details)***

- Minor DFO amendments required.

**Existing Regulation & Justification Summary: *(may include biological comments)***

**Existing regulations:**

Kitimat River (including tributaries)

- No Fishing on the West half of river between fishing boundary signs near Kitimat Hatchery outfall
- Hatchery steelhead daily quota = 1; hatchery steelhead monthly quota = 10;
- Note: province-wide hatchery steelhead annual quota = 10
- When you have caught and retained your daily steelhead quota from the Kitimat, you must stop fishing the Kitimat for the remainder of that day
- Bait ban, May 15-Aug 31
- No powered boats

**Justification:**

- Kitimat CCT are highly vulnerable to capture and mortality during the overwintering period while they are aggregated in easily accessible and well known locations (Vogt 2017).
- Kitimat CCT have a high spawning mortality (58%, Vogt 2017) which is a concern to the Ministry and may be linked to repeat capture rates during the winter fishery.
- Kitimat and Douglas Channel CCT display a lower than expected level of genetic diversity (Costello unpublished data) and the Ministry is concerned that this is a result of low CCT survival rates.
- The Ministry wishes to maintain angling opportunity for Kitimat CCT during the period prior to Dec 1 and after Mar 31.
- Prior to Dec 1, Kitimat CCT are migrating to overwintering habitats. After Mar 31, CCT begin migrating out of overwintering habitats and to staging and spawning areas throughout the watershed. CCT will be less vulnerable to anglers after Mar 31 while still providing a fishery opportunity coinciding with the entry of spring-run steelhead into the Kitimat after Apr 1, for which a significant fishery exists.
- Angling guide reports show that 0.23% (63 total days over 25 total years) of the

total Kitimat angling guide activity occurs during these three months. As such, we expect that this regulation change should have a negligible effect on angling guide opportunity in the Kitimat River watershed.

**Management Considerations:** *(summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues)*

- Stock status – Unknown
- Life history – Anadromous, fluvial and resident populations all present
- Exploitation – Unknown. Currently under liberal bag limit of 1/day over 30cm Jul1 – Oct 31. Exploitation may be unsustainably high. Effort is significant, however effort is currently directed at salmon species. If there is a downward trend in salmon escapements, the potential for extremely high exploitation rates exists.
- Other – CCT are highly vulnerable to angling in overwintering habitat. Other precautionary closures exist for overwintering summer ST fish in the Skeena region (No fishing Jan 1 to Jun 15).

**Available Options:** *(where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more effectively)*

Implement the regulation as proposed.

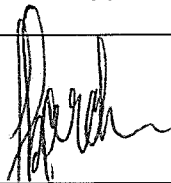
**Summary of SFAC Issues and Concerns:**

Support for hatchery rainbow harvest  
Support for extension of bait ban  
Concerns about not being able to fish for ST in March. Angling guide reporting data suggests ST are minimally available and not targeted in March.  
Concerns about upper boundary of closure area. May minimally restrict angling opportunity for ST, but also provides additional protection for wild ST and CCT.

**Regional Section Head Decision:**

This submission is endorsed as proposed and will be forwarded to the Provincial Fisheries Director for approval and Variation Order.

Signed by:



Troy Larden  
Fish and Wildlife Section Head

Date 2018/07/03

**Fish and Wildlife Section Head Decision:** SAAT Regulation Proposal 2018-04

**Proposal Title:** Kispiox River Fly Fishing Only

**Proponent:** Upper SAGA

<p><b>Proposed Regulation Change:</b></p> <ul style="list-style-type: none"><li>• Fly-fishing only, Aug 15 to Dec 31</li></ul>
<p><b>Summary of issue(s) proposal is to address:</b></p> <ul style="list-style-type: none"><li>• Perception that ST capture rates in the Kispiox are too high</li></ul>
<p><b>Regulatory/ Policy Impediments: <i>(list &amp; provide details)</i></b></p> <ul style="list-style-type: none"><li>• None</li></ul>
<p><b>Existing Regulation &amp; Justification Summary: <i>(may include biological comments)</i></b></p> <p><b>Existing regulations:</b></p> <ul style="list-style-type: none"><li>• Angling prohibited for non-guided non-resident aliens on Saturdays and Sundays, Sept 1 - Oct 31</li><li>• Bait ban (EXCEPT Hevenor Creek)</li><li>• No angling from boats, no powered boats</li><li>• Class II water Sept 1-Oct 31; Steelhead Stamp mandatory Sept 1-Oct 31</li></ul> <p><b>Justification:</b></p> <ul style="list-style-type: none"><li>• Create a pilot project that makes the Kispiox River a fly fishing only river from August 15 to December 31, as a conservation effort. The Kispiox was the first river in the Skeena system to become catch and release. This was later adopted throughout the whole Skeena River system.</li><li>• The Kispiox River does not support the same number of Steelhead as the Bulkley and Morice Rivers. The runs/pools are smaller and some methods of gear fishing are highly effective. The fish no longer have any areas of sanctuary as all of the river can be reached and fished. As the seasonal temperatures cool down and water temperatures drop, fish tend to hold in larger numbers in deeper pools. The effectiveness of certain methods used by anglers fishing these areas contributes to a higher number of fish caught and increased fish mortality. Our observations are that when steelhead are caught multiple times, they become less responsive to anglers. We believe that the danger to their survival, spawning, and mortality will increase in fish caught multiple times. A pilot project of fly fishing only on the Kispiox River should be considered for other rivers in the future if it is deemed to be a good tool for conservation,</li><li>• By moving to a more selective method of fishing, more fish will then be available to other anglers and it may help to reduce the number of times a fish is hooked.</li><li>• The expected outcome is that the fish will have more refuge in areas of the river by limiting certain methods of angling. This would allow for a more even distribution of angling success amongst anglers. It would contribute to fish conservation and increase the quality of experience for all user groups</li></ul>

**Management Considerations:** (*summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues*)

Stock status – Unknown

Life history – Anadromous

Exploitation – Unknown. Currently under non-retention regulations expected to be low

Other – FF only would decrease capture rates (see graph), but may increase overall use if fly anglers view this regulation as desirable. Concern that FF only on the Kispiox would displace higher densities of gear anglers to other nearby waters (Zymoetz, Kitsumkalum, Kitwanga, Suskwa, Bulkley, Morice)

**Available Options:** (*where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more effectively*)

The proponent indicates that reducing Steelhead captures rates and establishing refuge areas is a desirable outcome. There are several ways to accomplish this in addition to the fly-fishing only proposal:

Restricting anglers in time and space (booking/lottery system) may achieve a more desirable result (fewer anglers = fewer captures) without restricting gear type. This option is projected to be possible in 2-3 years time.

Decrease length of angling season (close on Nov 30 or Oct 31)

Spatial closure (e.g.: no angling upstream of Bear Claw Lodge or other obvious upriver access point)

Implement Fly Fishing Only Aug 15 to Dec 31 as a pilot project until a lottery/booking system is available (3 year project). A pilot project would require funding and staffing to conduct creel surveys in order to determine the effectiveness (CPUE) and angler response to the new regulation. This would also require a VO request to DFO for the period during which salmon fishery opportunities are occurring.

Fly Fishing only for the months of Nov-Dec would decrease the catch rate of ST which are settled in overwintering habitats. This would not require a pilot/creel or DFO VO request.

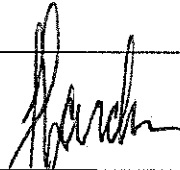
**Summary of SAAT Issues and Concerns:**

There was a range of opinions about this proposal. Vote was 3 for / 5 against / 3 abstain.

**Regional Section Head Decision:**

With a range of options available to meet management objectives it is important to select the most appropriate options that best achieves the objectives stated in the proposal. Skeena Region will forward a recommendation to the Director of Fisheries to implement a Fly Fishing Only Aug 15 to December 31 as a pilot project until other tools are available for future implementation. It is recognized that this will require additional resources to monitor effectiveness of meeting the primary objectives of reduced CUE and a reduction of angler density. It is also recognized that there will likely be additional effects on other rivers as anglers seek opportunity for their preferred methods. This buffered adjacent opportunity is one reason that allows for the piloting of this project. Additionally, if this Variation Order is approved, BC will seek a mirror order from Canada to ensure the effectiveness of the regulation is met.



<b>Signed by:</b> 	
Troy Larden Fish and Wildlife Section Head	Date 2018-06-29



**Fish and Wildlife Section Head Decision: SAAT Regulation Proposal**

**Proposal Title: Skeena Booking System**

**Proponent: Upper Skeena Angling Guides Association**

**Proposed Regulation Change:**

Implement a flexible and modified version of the Kootenay booking system. A threshold number of non-resident and alien days would be determined and made available through an online angling licensing system. Selections would be made on a first-come, first-serve system.

Implement the flexible booking system by the 2019 steelhead season, based on the numbers from current license sales the ministry already has.

In order to further determine usage and carrying capacities, more information on numbers of non-guided anglers, including resident, non-resident, and non-resident aliens is needed.

The existing BC Parks Reservation Service has been suggested as a template to collect information which can be applied to an existing flexible booking system.

**Summary of issue(s) proposal is to address:**

- Perception of overcrowding in the seasonal steelhead fishery by the Skeena guide community.
- Reduce crowding on classified waters
- Restrict non-resident aliens

**Regulatory/ Policy Impediments: *(list & provide details)***

N/A

**Existing Regulation & Justification Summary: *(may include biological comments)***

\*Anglers are not restricted to the maximum number of days of fishing anywhere in the Upper Skeena.

\*Canadian Residents only on Saturday and Sunday during classified waters on the Morice, Bulkley, and Kispiox Rivers.

\*Babine River is Canadian residents only on Saturdays and Sundays from the juvenile fish counting weir located at the outlet of Nilkitkwa Lake to the Nilkitkwa River confluence, Sept 1-Oct 31.

\*No angling restriction on the Sustut.

**Management Considerations:** *(summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues)*

N/A

**Available Options:** *(where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more effectively)*

- At this point in time changes to the current licensing management regime are possible, as shown by the Kootenay Angling booking system. However, the fishing and hunting licensing systems are set to become one entity in the near future. This would mean that making changes to the current classified waters licensing framework would be inefficient at this time.

**Summary of SFAC Issues and Concerns:**

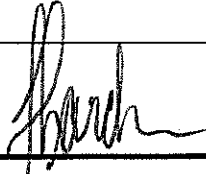
- Member of Skeena Angling Guides Association (SAGA) would like to have the same licensing system pertain to classified rivers in the lower Skeena River, similar to the recommendations for the tributaries of the upper Skeena River.
- Voting - 9 yes, 0 no, 2 abstain.

**Regional Section Head Decision:**

Skeena Region understands the challenges facing angling stakeholders on classified waters across the region and will be taking steps to face these challenges in the future. Currently, the province is working towards the integration of the fishing and hunting licensing platforms. At this point in time, there would be no efficiency in implementing license changes due to the potential changes in licensing provincially. Skeena Region will look to use the integration of the fishing and hunting licensing systems as a benchmark to address the management of anglers on an undetermined number of classified waters in Skeena Region.

Considering the points above, this proposal will not be considered for forwarding to the Director of Fish and Wildlife for implementation at this time.

**Signed by:**



Troy Larden  
Fish and Wildlife Section Head

Date  
2018-05-22



**Fish and Wildlife Section Head Decision: SFAC Regulation Proposal 2018-06**

**Proposal Title:** BC residents only on the Suskwa, Kitsequecla, Kitwanga, and Telkwa Rivers Sept 1 - Oct 31.

**Proponent:** Upper Skeena Angling Guides Association

**Proposed Regulation Change:**

- BC residents only on the Suskwa, Kitsequecla, Kitwanga, and Telkwa Rivers Sept 1 - Oct 31.

**Summary of issue(s) proposal is to address:**

- To offer increased angling opportunity for BC resident anglers and decrease pressure on the number of Steelhead in these smaller tributaries.
- With the increase in angler pressure throughout the Upper Skeena Region, these rivers may become vulnerable to heavier use. These rivers were previously fished by mostly BC resident anglers but have become subject to more angling pressure from non-residents as anglers seek new fishing opportunities. Steelhead may become susceptible if the carrying capacity of anglers (or threshold) for a smaller tributary is exceeded.
- By creating a BC resident-only fishery on the entirety of these rivers, this regulation would limit the amount of angling pressure on smaller systems. It would restrict non-resident angling and they are already no guiding rivers.
- This regulation would provide another area of angling opportunities for resident anglers, as well as the conservation of the Steelhead run from excessive pressure and fishing.

**Regulatory/ Policy Impediments: *(list & provide details)***

During the 2009 Skeena angler management planning process, the legality of restricting Canadian residents from natural resources was challenged by DFO. In this case, DFO identified that the resident-only times and zones overlapped salmon fisheries on a number of rivers recommended for changes. DFO indicated that it was their mandate to provide equal access for all Canadians to recreational salmon fisheries, rather than for BC residents only.

Recognizing the overlap between salmon and steelhead fisheries, and acknowledging DFO's mandate, the ministry endorsed the concept of resident-only times and zones, and supports Canada's proposal that such regulations allow access for both BC residents and non-resident Canadians and restrict non-resident alien anglers.

**Existing Regulation & Justification Summary: (may include biological comments)**

- \*Canadian residents only on the Suskwa on Saturdays and Sundays, all year
- \*Angling prohibited for non-guided non-residents aliens on Saturdays and Sundays, all year on the Kitseguecla and Kitwanga River
- \*Canadian residents only on the Telkwa River, Sept 1 - Oct 31.
- \*No guiding permitted on Kitwanga, Kitseguecla and Suskwa rivers; all year.

**Management Considerations: (summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues)**

One of the tools available to fisheries manager to determine angler effort on a particular classified water is through the analysis of classified waters license sales information. In particular case, classified waters license sales information, pre and post 2012, was analyzed. The analysis was utilized to detect patterns in classified waters license sales for non-resident Canadian and non-resident aliens on the Kitwanga, Kitseguecla and Suskwa rivers. Unfortunately, this analysis is not a tool to determine BC resident angler use, since BC residents are not restricted to purchasing river/date specific classified waters licenses like non-resident Canadians and non-resident aliens. The Telkwa River was not considered for the analysis either, since non-resident aliens are currently restricted from angling Sept 1 – Oct 31 annually.

Angling effort on Kitwanga and Kitseguecla Rivers continues to remain somewhat constant. Specifically, on the Kitwanga River for the years available, prior to the 2012 regulation change (n=3) an average of 12.6 angler days/year were spent on the Kitwanga River by non-resident Canadians (2.6) and non-guided non-resident aliens (10) during the classified waters period. Post 2012 (n=6), for the Kitwanga River an average of 13.8 anglers days/year were spent by non-resident Canadians (7) and non-guided non-resident aliens (6.8). The same information was consolidated for the Kitseguecla River, prior to the 2012 regulation change (n=3) an average of 9 angler days/year were spent on the Kitseguecla River by non-resident Canadians (1.3) and non-guided non-resident aliens (7.7) during the classified waters period. Post 2012 (n=6), for the Kitseguecla River an average of 11.8 anglers days/year were spent by non-



resident Canadians (1.1) and non-guided non-resident aliens (10.7).

Angling effort on the Suskwa River has a dropped slightly since 2012, but is starting to increase to historic levels of use. Specifically, on the Suskwa River prior to the 2012 regulation change (n=3) an average of 108 angler days/year were spent on the Suskwa River by non-resident Canadians (6) and non-guided non-resident aliens (102) during the classified waters period. Post 2012 (n=6), on the Suskwa River an average of 72.6 anglers days/year were spent by non-resident Canadians (8.6) and non-guided non-resident aliens (64).

**Available Options:** *(where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more effectively)*

- At this point in time, there are no available options to restrict non-resident Canadians from the proposed waterbodies, due to the overlap in angler opportunity for provincially and federally managed fish species.
- There is the potential to reclassify the Kitwanga, Kitseguella and Suskwa rivers to Canadian Residents only. Limiting non-resident aliens from angling the fore mentioned rivers either year round, during the classified period or a selected number of days during the weekdays including weekends.

**Summary of SFAC Issues and Concerns:**

- Groups vote on the proposal; 9 yes, 1 no, 1 abstain.
- Group requested at the proposal include Insect Creek. The proposal proponent agreed to add Insect Creek to the proposal.
- The SAAT member representing Skeena Angling Guides Association (SAGA) would like to see non-resident Canadians and non-resident aliens restricted on all bodies of water that guides are not permitted to operate on.
- Issue with DFO and the constitutional right to allow Canadians access to salmon fisheries was brought up by Provincial staff and understood by the group. Hence, the provinces inability to restrict Canadian residents from mixed species fisheries at this time.

**Regional Section Head Decision:**

The major hurdle in managing non-resident Canadians on classified waters in the Skeena Region is the legality of restricting Canadian residents from constitutionally protected rights to natural resources. In this case, during the previous angler management planning process in the Skeena region, DFO identified that resident-only times and zones would overlap with salmon fisheries on a number of rivers recommended for changes. DFO indicated that it was their

mandate to provide equal access for all Canadians to recreational salmon fisheries, rather than for BC residents only.

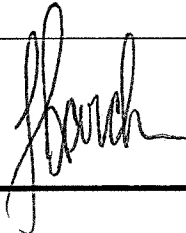
Recognizing the overlap between salmon and steelhead fisheries, and acknowledging DFO's mandate, the ministry endorsed the concept of resident-only times and zones, and supports Canada's proposal that such regulations allow access for both BC residents and non-resident Canadians and restrict non-resident alien anglers.

Classified license sale information available to fisheries managers does not show substantial increase in non-resident Canadian and non-guided non-resident alien angler effort on the Kitwanga, Kitsequecla, and Suskwa rivers since the revamping of the classified waters regulations in 2012. The Telkwa River was not considered for the analysis, since non-resident aliens are currently restricted from Sept 1 – Oct 31 and province does not have the ability to regulate non-BC residents at this time. That being said, the Province may revisit the possibility of more stringent regulations on the Kitwanga, Kitsequecla, Suskwa, and Telkwa rivers in future years.

Regarding the request to include Insect Creek as a residency restricted body of water. The province, under the current regulatory regime does not have the tools available to manage angler use on bodies of water that are not classified. At this point in time, Skeena region is not entertaining the idea of increasing the number of classified waters in region. Insect Creek proposal will remain in the files for future consideration.

Considering the points above, this proposal will not be considered for forwarding to the Director of Fish and Wildlife for implementation at this time.

Signed by:



Troy Larden  
Fish and Wildlife Section Head

Date  
2018-05-22

**Fish and Wildlife Section Head Decision: SAAT Regulation Proposal 2018-07**

**Proposal Title: Zymoetz River B Fly Fishing Only**

**Proponent: Jim Culp, BC Federation of Fly Fishers Region 6**

**Proposed Regulation Change:**

Zymoetz River B (Class II; defined in regulation as Zymoetz River downstream of the Limonite Creek confluence), October 1 to Dec 31:

- fly fishing only;
- floating fly line only;
- no hooks greater than 10 mm from point to shank.

**Summary of issue(s) proposal is to address:**

The proponent contends that environmental degradation and increasing angler numbers are negatively impacting Zymoetz River steelhead. The proposed regulations are intended to reduce hooking and catch rate of Zymoetz River summer-run steelhead, to lower population impacts of recreational angling.

**Regulatory/ Policy Impediments: *(list & provide details)***

The current legal regulatory framework for recreational angling in fresh waters of British Columbia does not allow for

- 1) restriction of fly fishing line type, or
- 2) limitation of hook point-to-shank dimension to 10 mm.

Provincial fisheries staff have considered the needed modifications to the regulatory framework and delegated authority to make available these types of regulations, but major legal changes would need to be implemented by both the Federal and Provincial governments, unlikely to be completed in the near future.

**Existing Regulation & Justification Summary:**

Relevant regulations which currently apply to the Zymoetz River B steelhead fishery:

- No retention of wild steelhead
- Bait ban
- Single barbless hook
- Class II water July 24 - May 31
- Steelhead stamp mandatory July 24 - May 31
- Angling prohibited for non-guided non-resident aliens on Fridays, Saturdays and Sundays Jul 24 – May 31
- No fishing upstream of the powerline crossing located downstream of Zymoetz Canyon, Jan 1 - Jun 15

Regulations for Zymoetz River B were most recently modified effective April 1, 2012, as a result of the Skeena Quality Waters Strategy (QWS) process. The Angling Management Plan describing the changes was signed by the Fish and Wildlife Manager on November

19, 2013 and included:

- extension of the Class II water period from its previous extent (Sep 1 - Oct 31) to present duration of July 24 - May 31;
- extension of the Steelhead Stamp requirement period from its previous extent (Sep 1 - Oct 31) to present duration of July 24 - May 31;
- guide restriction to maximum three anglers per guided group, and one group per guide per calendar day;
- guided angler day allocation modified to accommodate Classified Waters period extension: maintained allocation of 117 days from Sep 1-Oct 31 but allocated additional 100 days from Jul 24-Aug 31 and 50 days from Nov 1-May 31;
- guiding allowed on Friday and in a zone on Saturday from the Mattson Creek confluence downstream to the Skeena River confluence.

The QWS West Working Group did not provide a recommendation about a fly fishing only regulation for Zymoetz River B.

### **Management Considerations:**

In comparison to winter-run steelhead, summer-run steelhead can experience greater impacts of fishing. This is based on the timing of return to fresh water, which increases exposure to both commercial and sport fisheries. For this reason, interior summer-run populations of the Skeena and Nass watersheds are protected from angling impacts by closure of recreational angling during the winter and spring. Seasonal closures are typically not implemented on tributaries near the coast where only winter-run stocks are present, so that winter and spring angling opportunities for steelhead can be maintained.

The larger Skeena River tributaries in the Terrace area, such as the Kitsumkalum, Lakelse and Zymoetz rivers, are generally acknowledged to support both summer- and winter-run steelhead components. This creates a challenge due to competing objectives for the two run-timing components in these streams. All of these rivers are geographically proximal to the largest angler communities in the region which increases the relative exposure of these stocks to angling impacts. The majority of the Zymoetz watershed is closed to angling during winter and spring (Jan 1 to Jun 15) to reduce impacts to summer-run steelhead, but the lowermost 20 km of the river (downstream of the powerline crossing) is open to allow angling for the Zymoetz winter-run component. Unfortunately, the two components are not completely spatially/temporally segregated in this way. Thus the present regulations expose some fish of the summer-run component in the Zymoetz to recreational angling impacts during winter and spring, in order to maintain opportunity for anglers to pursue winter-run steelhead. It is a perverse unintended by-product of this regulatory regime that perhaps the rarest form of summer-run steelhead in the Skeena and Nass watershed (summer-runs coexisting with winter-runs) may be exposed to the greatest overall fishing impacts in comparison to other summer-run steelhead in the Nass and Skeena watersheds.

Steelhead population status information specific to the Zymoetz River summer-run component is not available. Annual steelhead angling activity for the river appears relatively stable over the previous two decades (Figure 1). The questionnaire data do not allow the isolation of Zymoetz B activity from that of Zymoetz A, but the majority of effort occurs in Zymoetz B due to accessibility.

Non-fishing impacts to steelhead in both the ocean and freshwater environments are likely increasing, with climate warming the most obvious and perhaps least-manageable.

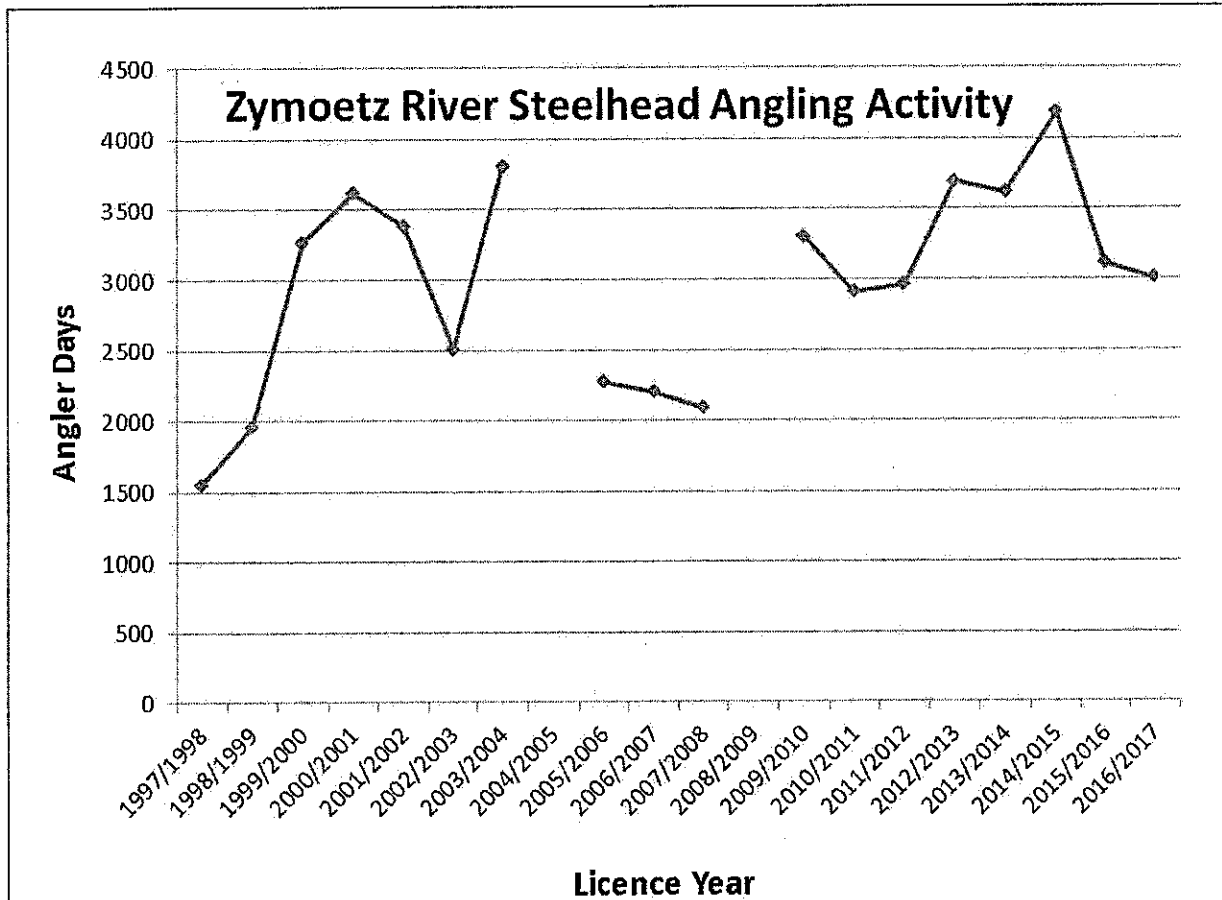
Reduction in angling impacts is a precautionary approach to mitigating other impacts which cannot be easily quantified but are likely to become significant if not already so.

Available evidence suggests that fly fishing generally produces somewhat lower catch rates than other non-bait terminal tackle types allowed in stream fisheries for steelhead, despite the effectiveness of fly fishing having increased through time with improvements to equipment and techniques. In addition, fly fishing also moderately reduces injury and mortality rates of angled steelhead relative to other non-bait terminal tackle types, as do smaller hooks. However, an additional management consideration is the mobility of anglers and the unpredictability of how effort will shift among waters or otherwise respond to the creation of a fly fishing only opportunity for steelhead in a river section located very near to the largest population centres in Skeena Region. An increase in effort could offset any gains in steelhead survival due to the changes in methods allowed.

Other methods to reduce impacts to Zymoetz summer-run steelhead are also available. Reduction of the period for which exposure to angling occurs, by closing the lower portion of the river (downstream of the canyon) to angling for steelhead from April 1 to June 15, would reduce angling impacts and additionally benefit both run-timing components by protecting them during the spawning period. Such a closure would still maintain an angling opportunity for Zymoetz winter-run steelhead during the winter and for species other than steelhead during the spring. The total impact (and benefit) of such a closure cannot be estimated because BC-resident steelhead angling effort cannot be categorized by date with the available data. However, beginning with the 2013-2014 licence year when the classified period for Zymoetz B was extended to include the spring, through 2017-2018 which is the most recent complete year of data, a total of  $n=5634$  classified angler days on Zymoetz B have been sold to non-British Columbians (data from electronic licencing database). Of these,  $n=120$  (2.1%) occurred during the period April 1 to May 31. With respect to guiding,  $n=960$  of the  $n=5634$  classified days sold were recorded as guided. Of the guided days,  $n=35$  (3.6%) occurred during the April 1 to May 31 period. Thus, a "no fishing for steelhead" regulation in the spring period would be expected to have minimal effect on guiding and the total annual economic activity engendered by non-British Columbian angling on Zymoetz B.

Regulations which allow angling, but do not allow angling for a particular species, create an enforcement challenge as they require the discrimination of intent to capture. Nevertheless, such regulations may partially achieve a significant proportion of their intended effect through communication of the objective to the angling public, the majority of whom try to comply with regulations to the extent possible.

In the event that the regulatory regime for the streams in the Terrace area which support both summer-run and winter-run steelhead is to be modified to reduce or eliminate exposure of summer-run steelhead to angling during the spawning period, although the spawning timing may vary an alignment of dates for steelhead fishing closures among these systems would reduce confusion among anglers and avoid unintended shifting of effort (and impacts) from one stream to another. The end date of June 15 aligns with protection afforded interior summer-run steelhead in the Nass and Skeena watersheds. April 1 as a start date allows for a winter fishery targeting winter-run steelhead in the January 1 to March 31 window but provides protection during the immediate lead-up to spawning, and spawning period, for both run-timing components.



**Figure 1.** Annual steelhead angling activity on the Zymoetz River, all residency classes and river sections pooled, as estimated by the provincial Steelhead Angling questionnaire.

**Available Options:**

Implementation of the proposal as submitted is not an available option, due to the present inability to legally restrict fly line type and hook size to the specified dimension.

The following options are available:

- Option 1: Forward only the fly-fishing only portion of the proposal.
- Option 2: Forward only the hook size limitation portion of the proposal by modifying it to 15 mm which is currently supported in the regulatory framework.
- Option 3: Forward both the fly fishing only portion and modified hook size limitation portion to 15 mm which is currently supported in the regulatory framework.
- Option 4: Forward an alternative regulation change intended to afford additional protection to Zymoetz summer-run steelhead: no fishing for steelhead in the Zymoetz River downstream of the powerline crossing April 1 to June 15.
- Option 5: Decline to forward any portion of the proposal or other regulation intended to reduce angling impacts to Zymoetz River summer steelhead.

**Summary of SAAT Issues and Concerns:**

SAAT members display persistent confusion about the limitations created by the current legal framework for recreational angling regulation in fresh waters of BC. Proposals for regulating aspects of angling (for example, fly line type) which are not supported in legislation are received annually by the committee.

A subset of SAAT members opposes the creation of any additional fly-fishing-only regulations, because of the perception that non-fly fishers will be selectively excluded from angling such waters, and that divisions and conflict between classes of anglers based on angling method will be exaggerated.

Support from the SAAT members for the proposal as written was expressed as 3 in favour, 5 not in favour, and 2 abstaining.

**Regional Section Head Decision:**

**Will forward on proposal with option 4 as a recommendation to the Director of Fisheries and Habitat.** Selection of option 4 serves to manage for the protection of both ecotypes of steelhead present in the Zymoetz River system while still preserving some limited opportunity for all anglers. The Province's ability to endorse the regulation change proposal as originally proposed is limited by the current legal regulatory framework for recreational angling in fresh waters of British Columbia. Trying to achieve fairness to the angling public while still managing to protect the fisheries values will have to see compromise by numerous stakeholders and conservation. This proposed change addresses both.

By forwarding dates consistent with other existing and proposed change proposals, the Province is also maintaining consistency which will avoid confusion by anglers as well as unintended impacts to other watersheds by shifting angler effort.

**Signed by:**



Troy Larden  
Fish and Wildlife Section Head

Date  
2018-01-08





**Fish and Wildlife Section Head Decision: SAAT Regulation Proposal 2018-08**

**Proposal Title: Kitsukalum No Fishing for Steelhead**

**Proponent: British Columbia Federation of Fly Fishers – Jim Culp**

<p><b>Proposed Regulation Change:</b></p> <p>It is unlawful to angle for or to catch steelhead in the Kitsumkalum River in the vicinity of its confluence with the Skeena River, April 1 to May 31.</p>
<p><b>Summary of issue(s) proposal is to address:</b></p> <p>Provide protection for over-wintering and spawning steelhead in the Kitsumkalum River.</p>
<p><b>Regulatory/ Policy Impediments: <i>(list &amp; provide details)</i></b></p> <p>N/A</p>
<p><b>Existing Regulation &amp; Justification Summary: <i>(may include biological comments)</i></b></p> <p>Bait ban – January 1 to June 15</p> <p>No fishing in any stream in the watersheds of the Skeena River upstream of Cedarvale or Nass River upstream of Kitsault Bridge, January 1 to June 15</p>
<p><b>Management Considerations: <i>(summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions &amp; relevant examples / references from the literature, social issues)</i></b></p> <p>Angling is not permitted for Interior Summer Steelhead in Skeena and Nass tributary streams upstream of Cedarvale and the Kitsault Bridge, respectfully, between January 1<sup>st</sup>.and June 15<sup>th</sup> . The vast majority of Skeena Interior Summer steelhead ecotype steelhead populations are afforded a spawning closure. The justification for this closure is to provide refuge for overwintering summer-run steelhead prior to spawning in the spring. The life history type of this species typically enters the Skeena River in July through September and makes long migrations to overwintering locations. The majority of steelhead populations upstream of Cedarvale demonstrate this life history. Summer-run steelhead move into overwintering habitats when water temperatures drop below the threshold that facilitates the combined metabolic activity required to continue upstream migrations and other life processes. During this time, they are usually</p>

stationary and congregate in areas that make them more vulnerable to repeated captures, handling and disturbance. The closure date of January 1, was selected to reflect the time when the majority of summer-run steelhead have begun the overwintering period. Migration out of overwintering habitats to spawning locations occurs in the spring when water temperatures begin to increase. The majority of overwintering steelhead in the mainstem Skeena will have moved out of the Skeena mainstem into their spawning tributaries by May 31 which is the rationale for reopening the mainstem Skeena on May 31. By June 15, it is predicted that the majority of steelhead have completed spawning and are in the process of kelting and returning to the ocean.

Several Skeena River tributaries downstream of Cedarvale that support known summer-run populations have spatial or temporal angling closures. These closures are intended to provide the same protection afforded to summer-run steelhead populations upstream of Cedarvale. The notable exceptions are the summer-run steelhead populations on the Lakelse River and Kitsumkalum River.

No fishing for steelhead during the months of May and June within the Skeena Region would afford all Skeena Region steelhead populations the same protection.

Changing weather conditions (relatively warmer, more precipitation) have allowed for angling effort in November and December, and concerns for steelhead population health and abundance in light of recent declines in ocean productivity and summer stream discharge, while stream temperatures have increased, further taxing cold-water species such as summer steelhead.

([https://en.wikipedia.org/wiki/The\\_Blob\\_\(Pacific\\_Ocean\)](https://en.wikipedia.org/wiki/The_Blob_(Pacific_Ocean)));

<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2018GL077325>;

[https://www.nwfsc.noaa.gov/assets/4/9042\\_02102017\\_105951\\_Crozier.2016-BIOP-Lit-Rev-Salmon-Climate-Effects-2015.pdf](https://www.nwfsc.noaa.gov/assets/4/9042_02102017_105951_Crozier.2016-BIOP-Lit-Rev-Salmon-Climate-Effects-2015.pdf); <http://www.dfo-mpo.gc.ca/Library/331396.pdf>)

Concerns for chinook and sockeye salmon abundance in the Skeena watershed, as well as for steelhead throughout much of their range (note the pending species-at-risk listings for Thompson and Chilcotin river steelhead) are of particular concern for fisheries managers ([http://registrelep-sararegistry.gc.ca/document/default\\_e.cfm?documentID=3290](http://registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=3290)).

Department of Fisheries and Oceans' regulated spring run chinook fisheries allow for angling during the period of the proposed closure, where steelhead will be caught incidentally.

Provincially managed angling guides hold rod day quotas for steelhead. A conservation-first focus and a precautionary approach, rather than providing opportunity, is the priority for Provincial fisheries managers and is the accepted United Nations Food and Agriculture Organization (FAO) default in data-poor

circumstances.

(<http://www.fao.org/docrep/003/w1238e/w1238e00.htm>)

**Summary of SAAT Issues and Concerns:**

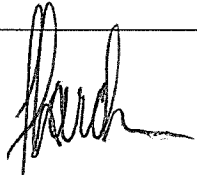
The proponent proposed an alternate: spatially limited to the vicinity of Deep Creek confluence. One SAAT committee member recommended that more abundance data be collected prior to implementing more restrictive regulations. Another long-term participant in the fishery relayed that angling pressure on the Kitsumkalum River has continued to increase. Vote – 1 yes / 7 no/ 2 abstain.

**Fish and Wildlife Section Head Decision:**

Concern for steelhead conservation in the context of changing climate/ocean conditions and the failure to meet steelhead abundance targets in 4 of the past 5 years prompts me to adopt a precautionary approach to steelhead management, which is complementary to the existing regulations for summer run steelhead in the Skeena and Nass watersheds via the January 1 through June 15 closure for the Interior Summer steelhead ecotype within the Skeena River watershed.

A modification of this proposal is recommended to be reviewed by the Director of Fisheries, specifically, no fishing for steelhead within the Skeena Watershed in May and June while they are spawning.

**Signed by:**



Fish and Wildlife Section Head

Date : 2018-06-29



**Fish and Wildlife Section Head Decision: SAAT Regulation Proposal 2018-09**

**Proposal Title: Lakelse River Steelhead**

**Proponent: Jim Culp, BC Federation of Fly Fishers Region 6**

**Proposed Regulation Change:**

Lakelse River, Mar 1 – May 31, no fishing for Steelhead upstream of CNR bridge

This is a modification of the original submitted proposal, as agreed to by the proponent at the annual Skeena Angling Advisory Team meeting in March 2018. The original proposal suggested limiting angling during this period to trout tackle (undefined) and implementing a steelhead angling closure for the entire river in the same period.

**Summary of issue(s) proposal is to address:**

Protection of summer-run steelhead from angling in the upper Lakelse River during the spawning period.

**Regulatory/ Policy Impediments: *(list & provide details)***

There are no regulatory or policy impediments to this modified proposal.

**Existing Regulation & Justification Summary: *(may include biological comments)***

Relevant regulations which currently apply to the Lakelse River fishery for steelhead:

- No retention of wild steelhead
- Bait ban
- Single barbless hook
- No powered boats
- Fly fishing only between Lakelse Lake and CNR bridge, Mar 1 – May 31
- Class I water all year
- No guiding
- Steelhead stamp mandatory Sep 1 – May 31
- Angling prohibited all year for non-guided non-resident aliens from the outlet of Lakelse Lake to the powerline crossing 3.5 km upstream of the river mouth

Regulations for Lakelse River were most recently modified effective April 2012, as a result of the Skeena Quality Waters Strategy (QWS) process. These included:

- change from Class II water all year to Class I water all year;
- extension of the Steelhead Stamp requirement period from its previous extent of Dec 1 – May 31 to present extent of Sep 1 - May 31;

The QWS West Working Group recognized the importance of the steelhead and cutthroat trout fisheries during the spring, primarily to resident anglers.

**Management Considerations: (summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues)**

In comparison to winter-run steelhead, summer-run steelhead can experience greater impacts of fishing. This is based on the timing of return to fresh water, which increases exposure to both commercial and sport fisheries. For this reason, interior summer-run populations of the Skeena and Nass watersheds are protected from angling impacts by closure of recreational angling during the winter and spring. Seasonal closures are typically not implemented on tributaries near the coast where only winter-run stocks are present, so that winter and spring angling opportunities for steelhead can be maintained.

The larger Skeena River tributaries in the Terrace area, such as the Kitsumkalum, Lakelse and Zymoetz rivers, are generally acknowledged to support both summer- and winter-run steelhead components. This creates a challenge due to competing objectives for the two run-timing components in these streams. All of these rivers are geographically proximal to the largest angler communities in the region which increases the relative exposure of these stocks to angling impacts. The present regulations expose some fish of the summer-run component in the Lakelse to recreational angling impacts during winter and spring, in order to maintain opportunity for anglers to pursue winter-run steelhead. Although there may be a tendency for summer-run steelhead to stage and spawn in the upper portion of the Lakelse watershed where they may be less impacted by angling due to the fly-fishing only regulation, summer-run steelhead are also present in the lower river during the late winter and spring. It is a perverse unintended by-product of this regulatory regime that perhaps the rarest form of summer-run steelhead in the Skeena and Nass watershed (summer-runs coexisting with winter-runs) may be exposed to the greatest overall fishing impacts in comparison to other summer-run steelhead in the Nass and Skeena watersheds. The proposed regulation would lower the overall impacts to summer-run steelhead but would not reduce the impacts to this run component in the lower river.

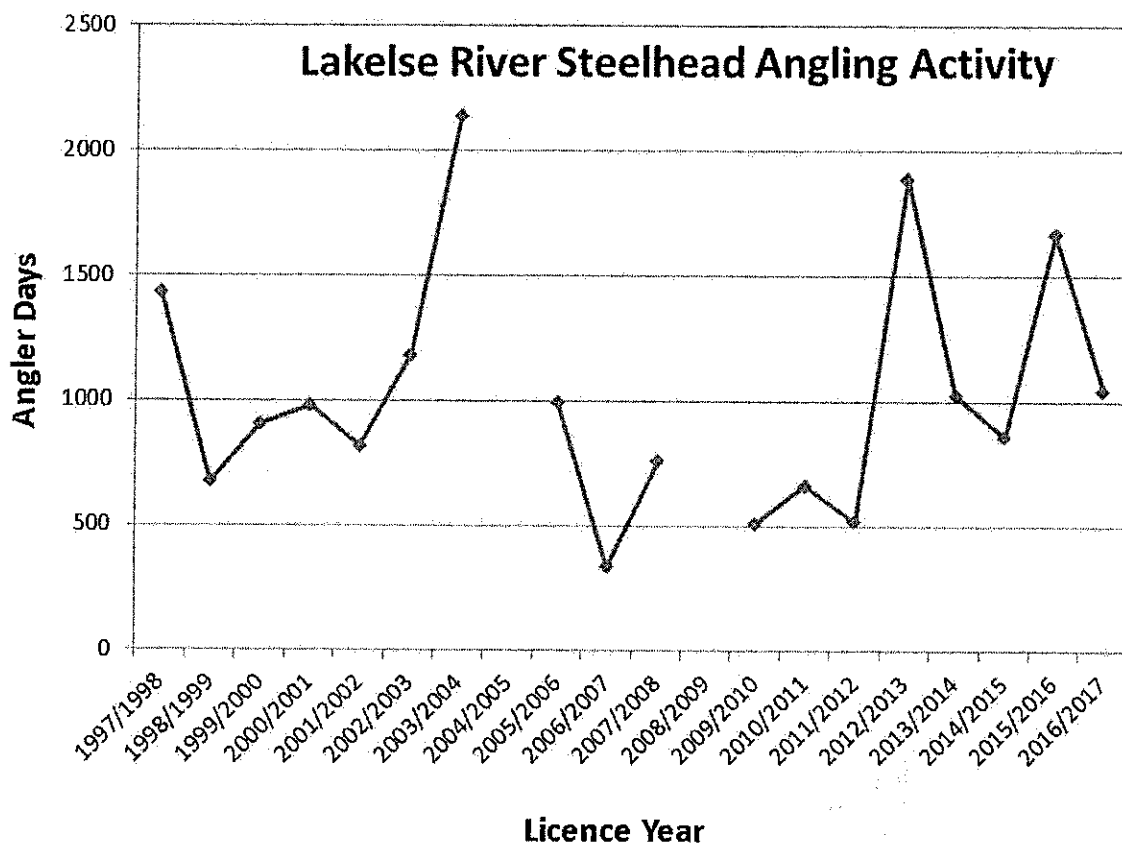
Steelhead population conservation status information specific to the Lakelse River summer-run component is not available. Annual steelhead angling activity for the Lakelse River appears relatively stable over the previous two decades (Figure 1). The provincial questionnaire, from which these estimates are made, does not allow distinction of the dates of angling or section of the river. Date and water-specific classified waters licences are required only for non-British Columbians. For the licence years 2009-2010 to 2016-2017 inclusive, n=1333 classified angler days have been sold to non-British Columbians on the Lakelse River. About 15% percent of those days have occurred during the period March 1 to May 31; a similar percentage have been sold in the period April 1 to June 15 which is discussed below as an alternative timing for a no fishing for steelhead regulation.

Non-fishing impacts to steelhead in both the ocean and freshwater environments are likely increasing, with climate warming the most obvious and perhaps least-manageable. Reduction in angling impacts is a precautionary approach to mitigating other impacts which cannot be easily quantified but are likely to become significant if not already so.

The proposal as modified at the SAAT annual meeting is intended to allow the continuance of the high-quality fishery for cutthroat trout which occurs on the upper Lakelse River during the spring period, while reducing impact to summer-run steelhead in

particular which occupy the same section of river in this period. Regulations which allow angling, but do not allow angling for a particular species, create an enforcement challenge as they require the discrimination of intent to capture. Nevertheless, such regulations may partially achieve a significant proportion of their intended effect through communication of the objective to the angling public, the majority of whom try to comply with regulations to the extent possible.

In the event that the regulatory regime for the streams in the Terrace area which support both summer-run and winter-run steelhead is to be modified to reduce or eliminate exposure of summer-run steelhead to angling during the spawning period, although the spawning timing may vary an alignment of dates for steelhead fishing closures among these systems would reduce confusion among anglers and avoid unintended shifting of effort (and impacts) from one stream to another. The end date of June 15 aligns with protection afforded interior summer-run steelhead in the Nass and Skeena watersheds. April 1 as a start date allows for a winter fishery targeting winter-run steelhead in the January 1 to March 31 window but provides protection during the immediate lead-up to spawning, and spawning period, for both run-timing components.



**Figure 1.** Annual steelhead angling activity on the Lakelse River, all residency classes and river sections pooled, as estimated by the provincial Steelhead Angling questionnaire.

**Available Options:** *(where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more effectively)*

1. Forward the proposal of no fishing for Steelhead upstream of CNR bridge, Mar 1 to May 31.
2. Modify the modified proposal by either or both of timing and spatial parameters as being potentially (i) the entire Lakelse River, for (ii) the period Apr 1 to Jun 15
3. Decline to forward any changes to Lakelse River angling regulations at this time

**Summary of SFAC Issues and Concerns:**

Much of the committee commentary related to the original proposal, which was modified during the course of the discussion, so that material is not summarized here.

Some committee members opposed a no fishing for steelhead regulation for the lower river due to the presence of winter-run steelhead.

Support from the SAAT members present for the modified proposal was expressed as 7 in favour, and 3 abstaining.

**Regional Section Head Decision: Will forward on proposal with option 2 as a recommendation to the Director of Fisheries and Habitat.** Selection of option 2 serves to manage for the protection of both ecotypes of steelhead present in the entire Lakelse River system while still preserving opportunity for anglers to access the valued trout population historically fished. It is recognized that there are enforcement challenges with this proposal moving forward and efforts will be made to seek endorsement with the Conservation Officer Service on an approach that meets this conservation effort. Trying to achieve fairness to the angling public while still managing to protect the fisheries values will have to see compromise by numerous stakeholders and conservation. This proposed change addresses both. By forwarding dates consistent with other existing and proposed change proposals, the Province is also maintaining consistency which will avoid confusion by anglers as well as unintended impacts to other watersheds by shifting angler effort.

**Signed by:**



Troy Larden  
Fish and Wildlife Section Head

Date  
2018-08-01



**Fish and Wildlife Section Head Decision:SAAT Regulation Proposal 2018-15**

**Proposal Title: Skeena watershed streams bait ban**

**Proponent: <Randy Dozzi >**

**Proposed Regulation Change:**

A total bait ban, year round.

**Summary of issue(s) proposal is to address:**

To maximize survival of released fish while sportfishing. To minimize fatal and repeated hooking of fish staging for spawning and/or fish holding over winter.

**Regulatory/ Policy Impediments: *(list & provide details)***

None

**Existing Regulation & Justification Summary: *(may include biological comments)***

Currently, there are no bait restrictions on the mainstem Skeena River.

**Management Considerations: *(summarize relevant: stock status, life history information, exploitation levels/limits, information or observations from other geographic locations or jurisdictions & relevant examples / references from the literature, social issues)***

In 2013, conservative angling regulations were implemented prohibiting the retention of char in streams and reducing the retention opportunities for trout in streams. A complementary regulation is the restriction of bait use for Skeena Region stream fisheries. Generally, combinations of resident rainbow trout, cutthroat trout, bull trout and Dolly Varden are present during recreational steelhead fisheries. Therefore, these species are caught incidentally by steelhead anglers. All these species are regulated as non-retention except for resident trout that have a short retention opportunity. Literature indicates that cutthroat trout post release mortality rates are as high as 48% when caught using natural baits. In comparison, post release cutthroat trout mortality rates associated with artificial gear is reported to be lower than 5% (Harding and Coyle 2011). Similar to cutthroat trout, post release mortality rates associated with natural baits is higher (28%) for rainbow trout when compared to post release mortality rates on artificial lures (7%) (Harding and Coyle 2011). A literature review of post release mortality rates for winter –run steelhead concluded that the post release mortality rate for bait caught winter –run steelhead was less than

10% although hooks baited with natural baits penetrated critical areas 50% of the time versus 10% for artificials (Mongillo 1984). Similarly, a mortality study conducted on the Keogh River resulted in a bait caught post release mortality rate of 9.1% for winter-run steelhead compared to 3.8% for artificial lures (Hooton 2001). During this experiment angler effort was heavily biased towards anglers using artificial lures, however, anglers using bait caught 2.38 times more fish (Hooton 2001). All the literature reviewed indicated that mortality rates were higher for species caught using natural baits compared to artificial lures. A local study on the Keogh River indicated that the success of steelhead anglers using natural bait was 2.38 times that of anglers using natural lures. A key point discussed, during a similar decision making process, by another regulatory agency was *"In any fishery where a significant number of fish will be released, by regulation or voluntarily, it is important that the fish have as high a probability of surviving once released"*.

Changing weather conditions (relatively warmer, more precipitation) have allowed for angling effort in November and December, and concerns for steelhead population health and abundance in light of recent declines in ocean productivity and summer stream discharge, while stream temperatures have increased, further taxing cold-water species such as summer steelhead.

([https://en.wikipedia.org/wiki/The\\_Blob\\_\(Pacific\\_Ocean\)](https://en.wikipedia.org/wiki/The_Blob_(Pacific_Ocean)));

<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2018GL077325>;

[https://www.nwfsc.noaa.gov/assets/4/9042\\_02102017\\_105951\\_Crozier.2016-BIOP-Lit-Rev-Salmon-Climate-Effects-2015.pdf](https://www.nwfsc.noaa.gov/assets/4/9042_02102017_105951_Crozier.2016-BIOP-Lit-Rev-Salmon-Climate-Effects-2015.pdf); <http://www.dfo-mpo.gc.ca/Library/331396.pdf>)

Concerns for chinook and sockeye salmon abundance in the Skeena Watershed, as well as for steelhead throughout much of their range (note the pending species-at-risk listings for Thompson and Chilcotin river steelhead) are of particular concern for fisheries managers ([http://registrelep-sararegistry.gc.ca/document/default\\_e.cfm?documentID=3290](http://registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=3290)).

Changing weather conditions (relatively warmer, more precipitation) have allowed for angling effort in November and December, and concerns for steelhead population health and abundance in light of recent declines in ocean productivity and summer stream discharge, while stream temperatures have increased, further taxing cold-water species such as summer steelhead.

([https://en.wikipedia.org/wiki/The\\_Blob\\_\(Pacific\\_Ocean\)](https://en.wikipedia.org/wiki/The_Blob_(Pacific_Ocean)));

<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2018GL077325>;

[https://www.nwfsc.noaa.gov/assets/4/9042\\_02102017\\_105951\\_Crozier.2016-BIOP-Lit-Rev-Salmon-Climate-Effects-2015.pdf](https://www.nwfsc.noaa.gov/assets/4/9042_02102017_105951_Crozier.2016-BIOP-Lit-Rev-Salmon-Climate-Effects-2015.pdf); <http://www.dfo-mpo.gc.ca/Library/331396.pdf>)

References:

Harding, Roger D and Coyle Coyle, Carol L. 2011. Southeast Alaska Steelhead, Trout and Dolly Varden Management. Special Publication No. 11-17. Alaska Fish & Game. Anchorage. Alaska.

Hooton, R.S. 2001. Facts and Issues Associated with Restricting Terminal Gear Types in the Management of Sustainable Fisheries in British Columbia. Ministry of Environment, Lands and Parks. Nanaimo. B.C.

**Available Options:** *(where appropriate, incorporate biological information above that supports an alternative approach to achieve the same outcome more effectively)*

N/A

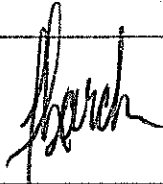
**Summary of SAAT Issues and Concerns:**

The SAAT committee discussion regarding this proposal involved the merits of the studies with respect to the impacts of bait and their relevance to the Skeena watershed as well as personal observations. There was no clear consensus regarding this proposal as written. The voting results were **Skeena watershed bait ban 3 yes / 4 no / 4 abstain**. The committee also chose to vote on a modified version of this proposal **Hell's Gate to Skeena 2 Boundary (Powerlines at Remo) April 1- Sept 1 – 7 yes / 1 no / 3 abstain**

**Regional Section Head Decision:**

Recommend forwarding the regulation proposal – No angling with bait for all finfish other than salmon in Skeena Region streams, year round - to the Director of Fish and Wildlife for approval.

Signed by:



Troy Larden  
Fish and Wildlife Section Head

Date  
2018-06-29

