



Interior Fraser Steelhead

BC/Canada Action Plan

The following tables of actions were developed in collaboration between the Province of BC and the Federal Department of Fisheries and Oceans.

Improving Management & Governance.

Year 1 (2019/20)	Lead
Establish DFO-BC Executive Level Dispute Resolution Process. <ul style="list-style-type: none"> Minister. Further develop collaborative management approaches through regular Minister-level meetings as agreed upon February 2019 and an updated MOU. Executive. Schedule regular meetings for the Director/ADM committee to develop options/solutions and improved relationships. 	<ul style="list-style-type: none"> DFO/BC
Indigenous Collaborations on the Management of Interior Fraser Steelhead (IFS) <ul style="list-style-type: none"> Establish an effective partnership between the Province and Indigenous partners along the full watercourse in order to determine “system scale” solutions. 	<ul style="list-style-type: none"> BC
Public & Stakeholder Engagement Process. <ul style="list-style-type: none"> Undertake a public engagement process using Engage BC as well as discussion forums to collect the range of ideas and opinions. 	<ul style="list-style-type: none"> BC

Improve Production (Habitat)

Year 1 (2019/20)	Lead
Watershed Management <ul style="list-style-type: none"> New watershed fish-habitat assessment tool completed 2018. Apply to the Thompson and Chilcotin watersheds to identify priority issues, areas and multi-year actions. Ensure the results of the watershed monitoring are incorporated into resource management decisions, guidance and operational policy. For restoration issues, complete a watershed restoration plan with clear projects priorities and a multi-year implementation plan. Significant investments in the Habitat Program to better support habitat protection, including more staff to evaluate project and development proposals and to support a more integrated management approach. 	<ul style="list-style-type: none"> BC BC/DFO BC DFO
Habitat Recovery – Fish Passage (old road crossings). <ul style="list-style-type: none"> Fish Passage Detailed Assessment. Complete a detailed assessment and inventory of passage problems across the IFS staging and spawning areas. Direct new-funding to these priorities. At least 2 remediation projects completed (approx. \$300,000 each). 	<ul style="list-style-type: none"> BC BC
Habitat Recovery - Bonaparte River <ul style="list-style-type: none"> Fishway stabilization and repairs. Elephant Hill Fire Recovery – Complete a Fish Passage Plan and Restoration Plan for sediment blockages and other on-the-ground Actions by Dec 2019. 	<ul style="list-style-type: none"> DFO BC



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<ul style="list-style-type: none"> • Bonaparte River 2019 fish-passage to spawning grounds. • DFO has hired a senior biologist for Kamloops as part of the DFO Resource Restoration Unit. 	<ul style="list-style-type: none"> • BC - Trap and truck completed • DFO
<p>Habitat Recovery – Channelized/Lost streams</p> <ul style="list-style-type: none"> • Inventory and riparian assessment of developed streams in drought-prone areas of IFS holding and spawning habitat in order to identify remediation opportunities and prioritize work (including third party). • Pilot 1-2 riparian remediation projects (municipal or agricultural). 	<ul style="list-style-type: none"> • BC • BC
<p>Habitat Protection - Regulatory</p> <ul style="list-style-type: none"> • Riparian Areas Regulation (RAR) updates completion (2019) – increased accountability. • RAR Effectiveness Review – Review implementation, requirements and guidance; identify options to strengthen RAR for streams with species of concern. • Forest and Range Practices Act – improvements to fish and water guidance for legislative process in 2020. • Identification and implementation of management actions for agricultural areas. • Fisheries Act – completion of the Act updates in 2019 which strengthen the protective measures for habitat. • Water Sustainability Act - Sensitive Streams. Complete the assessments and implement decisions on designations (target 2019) on all holding and spawning areas with a first priority on tributaries to the Thompson system. The Province will monitor conditions and be prepared to declare significant water shortages as required and regulate to protect critical environmental flow needs. 	<ul style="list-style-type: none"> • BC • BC • BC • BC • DFO • BC
<p>Habitat Management/Protection – Drought and Water Flow Management</p> <ul style="list-style-type: none"> • Water allocation review – update the policy and procedures to ensure water flow and condition needs for IFS are met as a priority. • Develop a water flow/temperature mitigation strategy. Identify drought prone areas and areas that may incur water shortages and develop a mitigation plan to address current and future climate change impacts. • Assessment of potential alternative Irrigation opportunities/practices in the Thompson (AGRI, FLNRORD). • Earlier activation of the BC Drought Response Plan. A Provincial Technical Drought Working Group, with representation from the Province, Environment Canada and Department of Fisheries and Oceans Canada, was initiated early (May 25-28) and the Drought Information Portal was activated. Consideration of the water needs in IFS holding and spawning areas is a priority. To support implementation, each region establishes a stream-watch list early in the year for streams that are fish-bearing and have a history of mortality-generating low flows. Under the current low flow conditions, staff have initiated additional streamflow and temperature monitoring on these streams, including IFS streams. 	<ul style="list-style-type: none"> • BC • BC • BC • BC/DFO • BC



Year 1 (2019/20)	Lead
<ul style="list-style-type: none"> New regulatory tools. Immediate voluntary water conservation is being encouraged while the Province develops regulations for water usage to give priority of water rights to critical environmental flow thresholds. 	
Habitat Management / Protection – Wildfire <ul style="list-style-type: none"> New 2017 Chief Forester and ADM Stewardship guidance for wildfire salvage, ensuring critical habitat needs were equitable priority with economic interests. Review implementation and results, identify and implement improvements. Use the Watershed assessment to drive the identification and prioritization of habitat recovery/management projects. I.e. ensure hydrological stability before investing in in-stream remediation. 	<ul style="list-style-type: none"> BC BC
Data and Knowledge Management <ul style="list-style-type: none"> Partner with Pacific Salmon Foundation to put Steelhead on the Salmon Explorer. Review Chum hatchery production considering implications for Interior Fraser Steelhead recovery Review advancements in aquaculture/hatchery techniques and update the provincial policy. Develop an enhanced IFS Monitoring Strategy for implementation late 2019. Continue to refine the scientific understanding of IFS through BC-Federal science collaborations as well as incorporation of Traditional Knowledge. 	<ul style="list-style-type: none"> PSF/BC DFO BC BC BC / DFO

Reduce Mortality / Increase Survival

Year 1 (2019/20)	Lead
Recreational IFS Fishery <ul style="list-style-type: none"> Provincial Regulations in place for no IFS fishery. Update penalties including increasing fines to make them a deterrent. 	<ul style="list-style-type: none"> BC - Closure In place BC
Recreational Fishery Bycatch: Holding and Spawning Areas <ul style="list-style-type: none"> Recreational fishing closures for all fishing across holding and spawning areas. 	<ul style="list-style-type: none"> Closures In place
Recreational Fishery Bycatch: IFS Migration Route (Fraser Mainstem) <ul style="list-style-type: none"> Illegal to retain IFS in Fraser Mainstem. Recreational Fishery for other species – <ul style="list-style-type: none"> Fraser River – BC. While regulatory limits are in place, additional regulatory closures are being considered for 2019 to further reduce accidental capture. These may be additional timing restrictions or species restrictions. Fraser River – DFO. Consideration of recreational salmon fishing closures in times and areas where IFS may be intercepted (Fraser River Mainstem, Thompson and Chilcotin Rivers). The SARA reviewed sturgeon Catch and Release fishery does not materially overlap with IFS. BC is seeking additional regulatory tools and consistency in management between the tidal and non-tidal portions of the sturgeon range. 	<ul style="list-style-type: none"> BC - In place BC DFO BC / DFO
Non-Selective Fisheries – Bycatch. <ul style="list-style-type: none"> Due to the extremely low numbers of fish remaining, and to retain a population that is still viable to recover, BC would like to see more than 95% of the run 	<ul style="list-style-type: none"> BC Recommendation



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protected from potential by-catch mortality. BC would also like to see a multi-year commitment in order to support development of multi-year recovery actions.	
Selective Fisheries <ul style="list-style-type: none"> • Invest in partnerships with First Nations in traditional selective methods. • Work with industry to further advance selective fishing methods 	<ul style="list-style-type: none"> • BC & DFO • DFO & BC
Monitoring and Enforcement <ul style="list-style-type: none"> • Increased enforcement. • Guardians and Monitors – In collaboration with the First Nations Fisheries Council, improve coordination and effectiveness between provincial, federal and indigenous guardians/monitors in BC waters. 	<ul style="list-style-type: none"> • BC / DFO • BC
Predators <ul style="list-style-type: none"> • Technical conferences and engagement hosted by DFO on the science and impacts of pinniped predation on all salmonids. This will inform future management discussions. 	<ul style="list-style-type: none"> • DFO • DFO
Stock Data/Information <ul style="list-style-type: none"> • Develop a proposal for integrating data systems between BC and DFO to enable collective access to the best decision-support information. 	<ul style="list-style-type: none"> • DFO/BC