



c/o Canada Olympic Park  
88 Canada Olympic Road SW  
Calgary AB T3B 5R5  
Phone: (403) 232-6686

Director  
SARA Directorate  
Department of Fisheries and Oceans  
200 Kent St.  
Ottawa, ON  
K1A 0E6  
SARA/LEP.XNCR@dfo-mpo.gc.ca



P.O. Box 52031  
Edmonton, Alberta T6G 2T5  
Phone: (780) 328-3780

**RE: CPAWS Comments on the Draft Recovery Strategy for the Rainbow Trout (*Oncorhynchus mykiss*) in Canada (Athabasca River populations)**

Dear SARA Directorate,

This submission is on behalf of the Canadian Parks and Wilderness Society (CPAWS) Northern and Southern Alberta Chapters. We are pleased to participate in the public consultation for the draft Recovery Strategy for the Rainbow Trout (*Oncorhynchus mykiss*) in Canada (Athabasca River populations). Overall, we are pleased action is being taken to support the recovery of Athabasca Rainbow Trout (ARTR). We support the five broad threats to ARTR as invasive species, habitat loss and degradation, mortality, contaminants and toxic substances, and climate change. We support the emphasis on improving and maintaining core populations and conservation populations.

However, we have some areas of key concern that should be addressed in the final recovery strategy:

- An update and re-assessment of the severity of industrial threats to ARTR habitat and populations due to the recent decision by the Government of Alberta to rescind the Coal Policy that previously protected large portions of the ARTA range from open pit coal mining;
- A precautionary approach to critical habitat identification while research is being completed on areas of occupancy for ARTR;
- Emphasis on maintaining or improving habitat quantity, as well as quality, in recovery objectives; and,
- The extensive impacts of cumulative effects that should require more specific objectives and actions.

In particular, we emphasize that ARTR, and many other sensitive species, will be negatively impacted by the rescission of Alberta's decades old Coal Policy - a decision announced on May 29, 2020, just days before the draft recovery strategy was released for public consultation on June 1, 2020. The previous policy provided broad protections for environmentally sensitive areas along the Eastern Slopes. It prohibited coal development in areas called "Category 1" lands and restricted open pit mining development in areas called "Category 2" lands. Category 2 lands cover important areas of the ARTR range, especially near existing protected areas: Willmore Wilderness Park and Jasper National Park.



Without the coal policy, applications for open-pit coal mines can be approved in these environmentally significant areas. The likelihood of coal development is high in this region, as several proposed mines on Category 2 lands are already reported to move forward given the policy rescission<sup>1</sup>.

The Government of Alberta stated that the coal policy is obsolete due to modern land use planning processes, but a Regional Plan for the Upper Athabasca Region is not yet even in draft stages. And so, there is no existing land use planning that can strategically and sustainably manage for coal development in ARTR range. This would mirror the COSEWIC status report, which describes resource extraction and agricultural practices as severe threats to ARTR survival. It also builds upon concerns already noted in the draft Recovery Strategy that “open pit coal mining is expanding in the range of Athabasca Rainbow Trout”.

Moreover, we note that Alberta’s Athabasca Rainbow Trout Recovery Plan 2014-2019 expired last year, and there has yet to be a review and follow-up provincial recovery plan.

We detail our specific concerns and suggestions for different sections of the recovery strategy below. Thank you for providing us the opportunity to engage on the management and recovery of our species at risk in Canada, and we look forward to a final Recovery Strategy that will achieve recovery of Athabasca Rainbow Trout in Alberta and we would welcome the opportunity to meet with you to discuss our recommendations.

Sincerely,

Gillian Chow-Fraser  
Boreal Program Manager, CPAWS Northern Alberta

Katie Morrison  
Conservation Director, CPAWS Southern Alberta

---

<sup>1</sup> CBC Calgary. “Alberta rescinds decades-old policy that banned open-pit coal mines in Rockies and Foothills”. May 22, 2020. <https://www.cbc.ca/news/canada/calgary/alberta-coal-policy-rescinded-mine-development-environmental-concern-1.5578902>



## **Detailed Concerns for the draft Recovery Strategy for the Rainbow Trout (*Oncorhynchus mykiss*) in Canada (Athabasca River populations):**

### **Introduction:**

#### **Section 5: Threats**

Given the rescission of “A Coal Development Policy for Alberta” (1976) (herein “Coal Policy”), significant portions of the ARTR range are no longer protected from negative impacts of open pit coal mines. Combined with the impacts of existing coal mines and current expansion proposals, this section should reflect the heightened threat of habitat loss and degradation from coal development (under “Habitat Fragmentation: Land Use Practice” in Table 2). Threat level should be increased from “low” to “high”, as the Sawatzky (2018) assessment of threats was performed before the Coal Policy changes.

A description of the threats under Land Use Practices in Section 5.2 should reflect the reduction in provincial regulatory tools to manage open pit coal developments. Though this section already notes that open pit coal mining is expanding in the range of ARTR, it should explicitly state that provincial regulatory processes that should regulate coal mining in this region no longer exist, and that regional land use planning does not currently exist to plan for these land use changes either. Moreover, it should note that coal mines introduce indirect impacts to ARTR--more than just habitat loss--such as sedimentation, fragmentation, changes in water flows, lethal and sub-lethal contaminant loading, and erosion. This is especially concerning if ARTR are more sensitive to Selenium loading as stated in Section 5.2.4 of the draft Recovery Strategy.

In Section 5.2.5 (Climate change and other factors), it should be additionally noted that increasing coal mining and coal development will introduce greenhouse gas emissions into the atmosphere, and thus, additionally contribute to the rate of climate change and its impacts.

### **Recovery:**

#### **Section 6: Population and distribution objectives**

We support the short-term objective adopted from the Alberta recovery plan in principle. With respect to the recovery goal, we support the goal of improving habitat quality and connectivity; however, we feel increasing habitat *quantity* is additionally important for such a threatened species. At minimum, a short-term objective should at least include maintaining the amount of total intact habitat for ARTR.

#### **Section 7: Broad strategies and general approaches to meet objectives**

In Section 7.1 (Actions already completed), it should be noted that the Upper Athabasca Regional Planning process which captures the ARTR range, under the Land Use Framework, has not yet begun and thus should not be referenced as a piece of provincial regulation that is actively protecting the water courses in this region from industrial and recreational impacts.

The following concerns focus on the recovery planning table (Table 3) in Section 7.2.

Under Broad strategy #3 (Habitat assessment and monitoring), we would also like to stress the importance of including reclamation as a key step when closing industrial access roads. If the road is no



longer used by industry, we suggest that reclamation occur immediately and be closely monitored to ensure both establishment of vegetation and public compliance with road closures.

Moreover, an additional approach should be added under Broad strategy #3 that assesses cumulative impacts within ARTR range. Given the acknowledgement that threat of “interactive and cumulative effects” are known, high, extreme, extensive, and with high certain causality in 11 of the 18 HUC 8s within the ARTR range (Appendix D), there should be approaches that clearly speak to assessing and addressing the stressors of cumulative effects. CPAWS recommends the approach commit to a cumulative effects assessment be conducted and relevant limits and thresholds on habitat disturbances (linear and non-linear) be set for both upland/watershed and riparian areas.

With respect Broad strategy #4 (management and regulatory actions), the first management approach should be amended to read: “Develop regulatory measures to ensure sedimentation, fragmentation, *and industrial developments* are managed effectively”, as we have previously stated that historical regulatory tools for managing coal mining in the region no longer exist, and the land use planning process has not yet begun for this region.

Under Broad strategy #4, we suggest adding an approach that focuses on addressing cumulative effects. Land use planning and, therefore, regional access management plans, should be a priority to develop within the region, with a focus on multi-species conservation. As mentioned above, a completed cumulative effects assessment should guide limits and thresholds on habitat disturbances (linear and non-linear) for both upland areas, watersheds, and riparian areas. This should inform the proposed approach to “review regulations, planning, guidelines and compliance monitoring used to manage human-caused priority threats”.

### **Section 8: Critical Habitat**

CPAWS has serious concerns with the approach used to identify critical habitat, which mirror concerns raised in the recommendations on the Draft Westslope Cutthroat Trout Recovery Strategy and Action Plan in 2019, and in our comments on the draft Draft Recovery Strategy for the Bull Trout (*Salvelinus confluentus*), Saskatchewan-Nelson Rivers populations.

We reiterate that we do not agree with the two-fold approach to identifying critical habitat, basing critical habitat on bounding boxes and then further by narrow criteria and site attributes. The approach does not acknowledge that land-use and associated disturbances outside the area of occupancy can impact habitat conditions within these areas. This is particularly relevant for areas upstream that could impact habitat conditions and attributes downstream.

We request that each HUC 8 watershed within which ARTR occurs should be designated as Critical Habitat. Barring such a holistic approach, at a minimum all areas described as “Area within which critical habitat is found” in Appendix E should be designated as Critical Habitat. Without Critical Habitat level protection on this entire area, potentially damaging activities may not be adequately assessed and managed to protect downstream or adjacent important areas of occupancy or potential recovery areas. We also believe that the entire HUC8 watershed that contains this Critical Habitat should be designated for special management to ensure that upland land uses that affect instream habitat are properly managed to protect and recover ARTR.



We also acknowledge the importance of riparian areas in providing high quality trout habitat. While we are glad to see that part of the riparian area will be included in the critical habitat definition, we assert that 30 m from the high water mark is insufficient to adequately protect the habitat. We acknowledge that this was identified as further research to be conducted, however there is existing literature for other native trout species that identifies 100 m as a minimum buffer distance<sup>2</sup>, and the precautionary principle should be used in defining Critical Habitat.

The Government of Alberta currently uses 100 m from the high water mark for forest management guidelines, watercourse crossing guidelines and land use planning. Aligning Critical Habitat with existing science and standards creates better protection for trout and clarity for land users. At minimum, a 100-m buffer from the high water mark on both sides of the stream or the extent of the floodplain - whichever is greater - should be included as Critical Habitat.

Finally, there is no mention of climate refugia in the description of critical habitat. Climate change is one of the most significant risks facing this species; this oversight in relation to critical habitat is very concerning. CPAWS suggests that critical habitat be reassessed to include areas of climate refugia, with regular reevaluations and adaptive management built in as models and data will change over the lifespan of this Plan.

### **Section 9: Measuring progress**

Additional measures should be included as performance indicators, including:

- Increased connectivity between stream reaches through restoration of human barriers and a reduction in habitat loss from industrial activities; and,
- Maintenance or increasing habitat quantity within the reaches where critical habitat can be found.

### **Appendix D: Hydrologic Unit Code (HUC)-level threat**

The removal of the Coal Policy's Category 2 designation will directly impact two HUC 8s that feed into the Athabasca River - HUC 8 # 17010301 (Berland River) and HUC 8 # 17010302 (Wildhay River) (Figure 1). There are currently coal lease applications in these two HUC8s, and these will no longer be subject to the restrictions of the Coal Policy. Therefore, threat risk levels should be reassessed for these HUC 8s. In Table 7 (HUC8: 17010301 – Berland River) and Table 8 (HUC8: 17010302 – Wildhay River), we suggest threat level for mining should be increased for under Habitat Fragmentation: Land use practices, as follows:

- Likelihood of occurrence: **Likely**
- Threat impact: **Medium** or **High**
- Causal certainty: **High**
- Threat risk: **High**

The “level of impact” and “likelihood of occurrence” of coal mines on the survival or recovery of the population should be re-assessed considering the context that there are ongoing coal mine expansion projects that would cause ARTR habitat loss within the McPherson Creek watershed (HUC8 #17020101). For example, the Coalspur Ltd. Vista Mine Phase 2 Expansion project planned in that watershed could

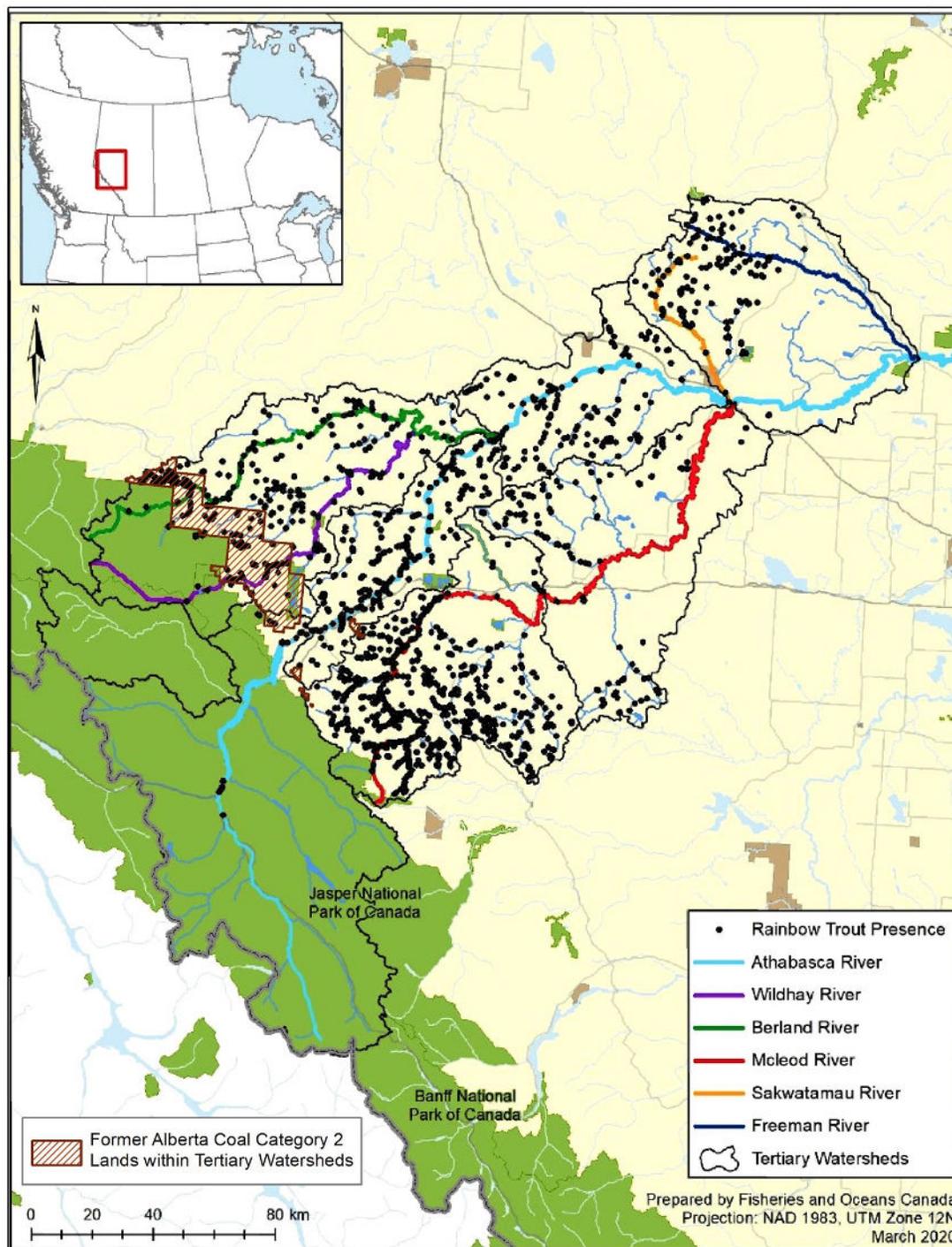
---

<sup>2</sup> Valdal, E. J., & Quinn, M. S. (2011). Spatial Analysis of Forestry Related Disturbance on Westslope Cutthroat Trout (*Oncorhynchus clarkii lewisi*): Implications for Policy and Management. *Applied Spatial Analysis and Policy*, 4, 95-111.



result in the destruction of waterways where critical habitat can be found, and in which ARTR are known to occur.

Due to the many indirect impacts of mining, as noted throughout the recovery strategy, we would also suggest re-assessing the risk levels for nutrient loading, contaminants and toxic substances, and suspended and deposited sediments for HUC8 #17020101 (Upper McLeod River) and downstream watersheds, including HUC8 #1702021 (Lower McLeod River). Given the existing and proposed mines that are reasonably foreseeable it is essential that the effects of coal development be appropriately evaluated in the threat risk assessment.



**Figure 1: Distribution of Rainbow Trout (Athabasca River populations) and major rivers in the Athabasca watershed, and the former Alberta Coal Category 2 lands (red hashed area).**