



Protecting Montana's wildlife, land, waters, and hunting & fishing heritage for future generations.

## **Board Resolution on Climate Change and Coldwater Fisheries**

Whereas trout, prized by anglers, will see habitat shrink in many Montana rivers due to climate change in the coming decades, potentially putting at risk cold-water fisheries and associated recreational economies;

Whereas cold-water fish species require cold-water with sufficient flows and levels of dissolved oxygen and are especially vulnerable to climate change;

Whereas trout fisheries have enormous cultural, economic and ecological importance in Montana and worldwide;

Whereas climate extremes, such as drought resulting in high water temperatures and low water, are shifting abundance and distribution of trout and, in effect, anglers. A recent study found that by 2080 35% of stream miles tracked and currently suitable for trout may be lost;

Whereas there are numerous challenges facing Montana's fisheries including climate change, habitat alteration, and stream dewatering;

Whereas Montana Fish, Wildlife & Parks is tasked with managing the state's fisheries and addressing these challenges;

Whereas climate change will alter the timing and volume of runoff, trout habitat will be frequently diminished by reduced streamflow, higher water temperatures, higher algae growth and lower dissolved oxygen;

Whereas portions of streams will become unsuitable for cold-water species, forcing fish into isolated upper tributaries that are genetically isolated and more vulnerable to extinction;

Whereas Montana's angling industry is now among the most important segments in the state's tourism economy, valued at more than \$750 million annually;

Whereas cold-water fisheries saw 10 times the number of anglers as nearby warmer waterbodies; a trend certain to continue and likely to see trout anglers concentrate on even fewer river miles. Studies project that 17% of river miles will exceed temperature thresholds for trout by 2040, and 35% by 2080; and

Whereas spending by fishing guides, fishing retailers, and fishermen is predicted to decline in 65% of the river sections being fished by 2040 and 76% by 2080, with the Yellowstone, Madison, Big Hole and Bitterroot rivers having the largest potential changes in spending; now,



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therefore, be it resolved that the Montana Wildlife Federation (MWF) urges the State of Montana to:

1. Protect fisheries during high water temperatures or low flows. FWP should impose partial or total angling closures on rivers and tributaries if temperatures reach critical thresholds.
2. Maintain in-stream flows and high water quality.
3. Maintain a healthy and diverse cold-water fishery in Montana with its importance to the state's economic and ecological health.
4. Ensure adequate funding to protect and enhance highest priority cold-water habitats.
5. Create a cold-water fisheries task force to proactively work to develop a science-based long-term solution to the challenges of climate change on Montana cold water fisheries.

Moved: Jim Vashro

Second: Tom Puchlerz

Passed 14 for and 0 against

April 15, 2023, at the 87th Annual Meeting of the Montana Wildlife Federation