

Responses of Arctic Char to habitat change

Arctic char are responding to more than one change in their habitat. This creates opportunities and challenges.

Navigating risks

Warming river water

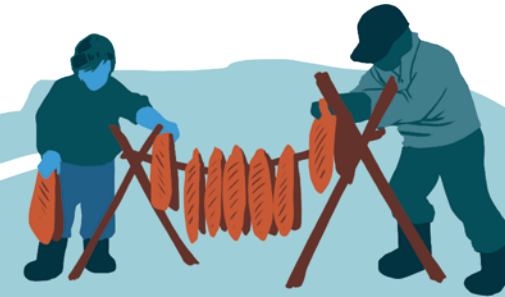
Some rivers are already warming to over 20 °C

Warming habitats can harm Arctic char activity and health

Char will need to change their behaviour to find cooler habitats

Char may be forced to change the timing or location of upstream migrations to avoid high river temperatures

Char typically winter and spawn in lakes and migrate to the ocean in summer to feed



Arctic char is culturally important for Indigenous communities

They are critical for nutrition, local food security, culture, and well-being

Gaining benefits

A longer ice-free season

Char can access the ocean earlier and stay there longer to eat more marine prey



Char may have more fat and be in better condition

Measurements of char activity shows there are risks to increasing temperatures.


16 °C
Heart stressed


20 °C
Heart failing, activity slowing


23 °C
Swimming not possible

Previous exposure to warm water may help char tolerate some warming temperatures.

May result in higher-quality fish for community harvest