

## Anonymous Anonymous

Page 29 of

(<https://www.epa.gov/system/files/documents/2022-06/tmdl-columbia-snake-temperature-errata-update.pdf>) shows that the major tributaries that are too hot are between RM 250 and RM 700. Please help the salmon by finding ways to cool down tributaries in that reach. An odd observation that I have made is water that comes out of long culverts is cooler than the upstream or way downstream. I so hope that farmers and others who discharge water to tributaries in that section can help save salmon by helping water stay cool especially in August. If groundwater is oxygenated would it be appropriate for salmon? I believe a source of the heat is also the area that is beyond the immediate riparian zone. Are there crops that could be planted that keep the soil cooler in tributaries of RM 250 to 700? If its hay or alfalfa, that is often harvested in summer. Heat can transmit through the soil. I buy hay in western washington from farmers in eastern Washington. I'd be happy to buy other feed sources that did not heat the soil. I believe heat transmits from soils a long ways to tributaries and rivers. I believe this can heat up the tributaries and river.  
thank you. Its so important to cool things off in that reach!!