Copper Toxicity to Salmonids in the Bristol Bay Watershed, AK

Peer-Reviewed Publications

Porter, D.E., J.M. Morris, M.P. Trifari, M.J. Wooller, P.A.H. Westley, K.B. Gorman, and B.D. Barst. 2023. Acute toxicity of copper to three species of Pacific salmon fry in water with low hardness and low dissolved organic carbon. Environmental Toxicology and Chemistry 42(11): 2440-2452. Available: https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/etc.5724.

Morris, J.M., S.F. Brinkman, M.W. Carney, and J. Lipton. 2019. Copper toxicity in Bristol Bay headwaters: Part 1 – Acute mortality and ambient water quality criteria in low-hardness water. *Environmental Toxicology and Chemistry* 38(1):190–197. Available: https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/etc.4252.

Morris, J.M., S. Brinkman, R. Takeshita, A. McFadden, M. Carney, and J. Lipton. 2019. Copper toxicity in Bristol Bay headwaters: Part 2 – Olfactory inhibition in low-hardness water. *Environmental Toxicology and Chemistry* 38(1):198–209. Available: https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/etc.4295.

Presentations

Morris, J.M., D.E. Porter, M. Trifari, M.J. Wooller, P.A.H. Westley, K.B. Gorman, T.A. Radenbaugh, and B.D. Barst. 2023. Acute toxicity of copper to sockeye, Chinook, and coho salmon under low hardness and organic carbon conditions similar to the Bristol Bay Watershed. Southwest Alaska Interagency Meeting (SWIM), Dillingham, AK. April 3-4.

Porter, D., J. Morris M., Wooller, and B. Barst. 2022. Evaluation of copper toxicity to salmonids exposed in low-hardness/low dissolved organic carbon water. 14th Southwest Alaska Interagency Meeting (SWIM). April 20.

Porter, D., J. Morris M., Wooller, and B. Barst. 2022. Evaluation of copper toxicity to salmonids exposed in low-hardness/low dissolved organic carbon water. 14th Western Alaska Interdisciplinary Science Conference and Forum. April 21-22.

Porter, D., M. Wooller, J. Morris, and B. Barst. 2021. Assessing copper toxicity to salmonid fry under water quality conditions analogous to the freshwaters within the Bristol Bay watershed. 42nd Annual Meeting of the Society of Environmental Toxicology and Chemistry (SETAC), Virtual Meeting. November 14–18. Abstract available: https://www.setac.org/.

Barst, B. D. Porter, J. Morris, T. Radenbaugh, and M. Wooller. 2021. Copper toxicity to salmon fry under water quality conditions similar to the freshwaters of the Bristol Bay watershed. Virtual Meeting. Southwest Alaska Interagency Meeting (SWIM). May 12.

- Porter, D., M. Wooller, J. Morris, T. Radenbaugh, and B. Barst. 2021. Assessing copper toxicity to salmonid fry under water quality conditions analogous to the freshwaters within the Bristol Bay watershed. 13th Western Alaska Interdisciplinary Science Conference and Forum. Virtual Meeting. May 13-14.
- Porter, D., M. Wooller, J. Morris, T. Radenbaugh, and B. Barst. 2021. Assessing copper toxicity to salmonid fry under water quality conditions analogous to the freshwaters within the Bristol Bay watershed. One Health, One Future Conference. Virtual Meeting. April 6-11
- Porter, D., M. Wooller, J. Morris, T. Radenbaugh, and B. Barst. 2021. Assessing copper toxicity to salmonid fry under water quality conditions analogous to the freshwaters within the Bristol Bay watershed. Alaska Marine Science Symposium. Virtual Meeting. January 26-28.
- Morris, J.M., S. Brinkman, R. Takeshita, A. McFadden, M. Carney, J. Lipton 2021. Copper toxicity in Bristol Bay Headwaters: Olfactory inhibition in low-hardness water. 13th Western Alaska Interdisciplinary Science Conference and Forum. Virtual Meeting. May 13-14.
- Morris, J.M., J. Lipton, and S. Brinkman. 2014. Acute and Olfactory Copper Toxicity to Fish Using Laboratory and Site-Collected Water from Alaska. 35th Annual Meeting of the Society of Environmental Toxicology and Chemistry (SETAC), Vancouver, BC, Canada. November 9–13. Abstract available: https://www.setac.org/.
- Morris, J.M., J. Lipton, and S. Brinkman. 2014. Acute and Olfactory Copper Toxicity to Fish Using Laboratory and Site-Collected Water from Alaska. 27th Annual Meeting of the Rocky Mountain Chapter of the Society of Environmental Toxicology and Chemistry (RMSETAC), Denver, CO. April 17–18.
- Brinkman, S., J. Anderson, and J.M. Morris. 2013. Interaction of Temperature and Toxicity of Zinc and Copper to Cutthroat and Brook Trout. Southwest Alaska Salmon Science Workshop, Anchorage, AK. December 4–5.
- Morris, J.M., J. Lipton, and S. Brinkman. 2013. Copper Toxicity to Rainbow Trout and Fathead Minnows in Low-Hardness Waters: Comparisons of BLM Predictions of Toxicity to Bioassay Results Using Laboratory Water and Site-Collected Water from Upper Talarik Creek in Bristol Bay. Southwest Alaska Salmon Science Workshop, Anchorage, AK. December 4–5. Available: www.southwestsalmon.org/symposium/2013-2/.