

## **Geostatistical Framework for Estimating Mercury Along North Carolina Rivers**

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This research focuses on the use of space/time geostatistics to integrate existing datasets to better assess water quality at un-sampled locations along North Carolina rivers. In order to evaluate water quality, good and reliable data are essential to accurately assess current and future trends. However, due to the number of water bodies to assess, as well as budget and resource limitations, data is oftentimes limited in its spatial and temporal extent. The scope of this research will center around the use of spatiotemporal geostatistics to assess fish tissue mercury along river networks on a basinwide scale. The end result will be informative maps that depict the spatial and temporal variability of fish tissue Mercury and how geostatistical methods can improve the accuracy of these estimations along un-monitored reaches, ultimately providing a useful framework to develop more targeted monitoring and advisory programs.