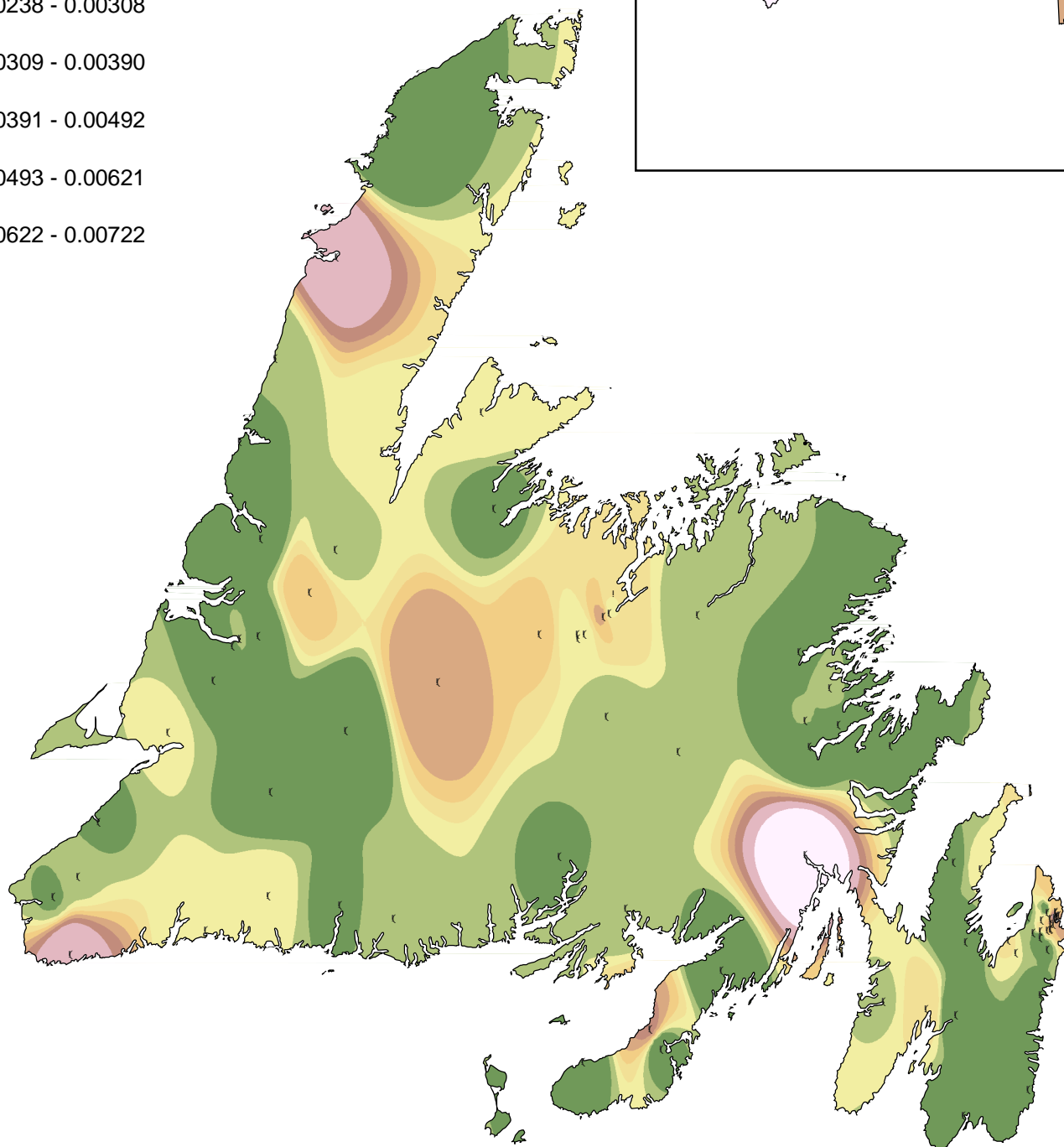
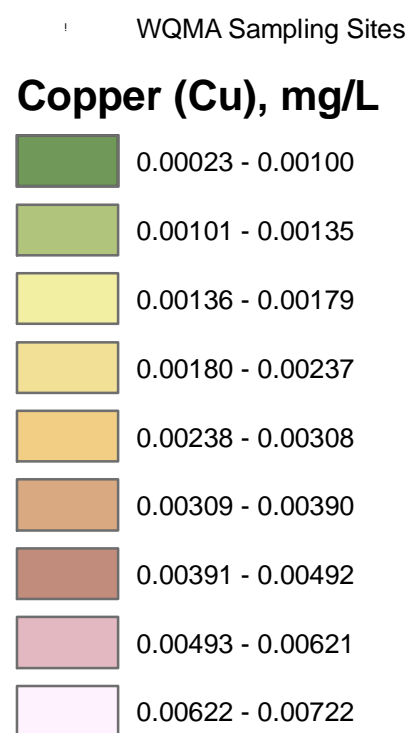
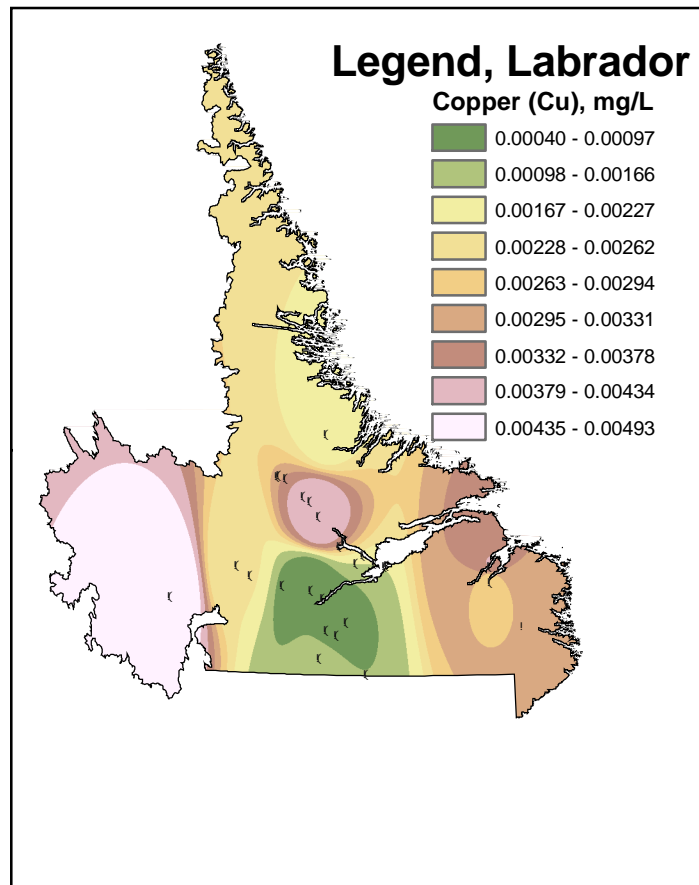
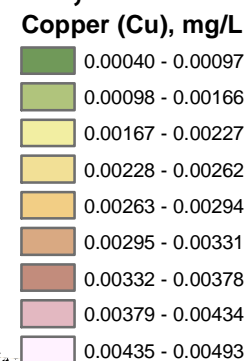


# Copper Contours Based on Canada-Newfoundland Water Quality Monitoring Agreement Data

## Legend, Newfoundland



## Legend, Labrador



A contour map displays regions, each of which represents a constant value for a particular parameter. These regions are approximations based on average recorded values at WQMA sites for all data collected between 1985-2000. The contour regions were estimated using a geostatistical approach known as Inverse Distance Weight (IDW), with a power of 5. The maps will be updated for every five years of new water quality data collected. Values are compared against the Canadian Council of Ministers of the Environment Water Quality Guidelines for the Protection of Aquatic Life.

Levels of copper found in water across the province are primarily influenced by natural geology. It can also be raised by fossil fuel emissions and sewage effluent from corroded brass or copper pipes. The copper guideline for the Protection of Aquatic Life is 0.002-0.004 mg/L. There are some sites across the province that exceed this limit, due to geology. The guideline value represented as a range because copper is dependent on the presence of other water quality parameters such as hardness (the concentration of  $\text{CaCO}_3$ ), and needs to be adjusted for site specific conditions.