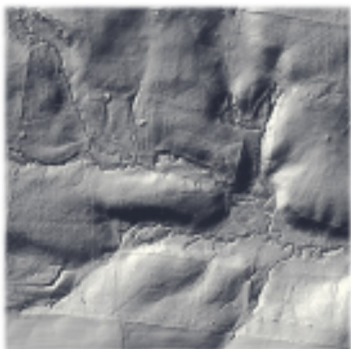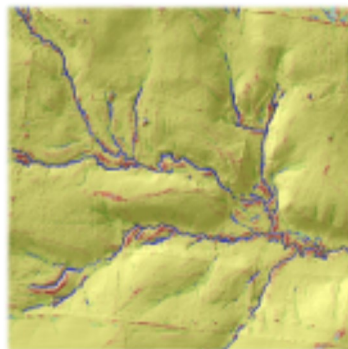# Mapping Stream Channels with High-Resolution Data

Leveraging partnership and innovation to protect valuable waterways
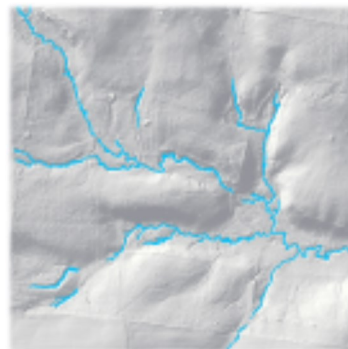
The Conservation Innovation Center (CIC), working in partnership with University of Maryland Baltimore County (UMBC) and the Chesapeake Bay Program, is redefining the way stream channels are mapped. Using high-resolution terrain data and recent advancements in the fields of geomorphology and computer vision, we are developing objective, scalable methodologies for accurately mapping stream channels over broad geographies such as the Chesapeake Bay watershed. These maps are important for a number of environmental applications including: assessment of riparian zones, estimation of sediment and nutrient impacts, habitat mapping, and more.
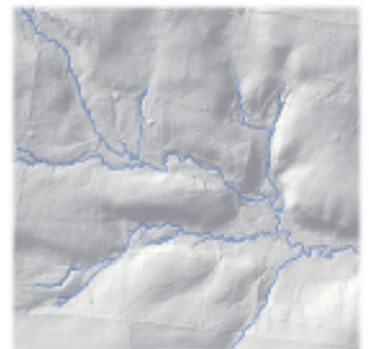

LiDAR data → *Classify terrain* → *Identify channels* → *Extract stream centerlines*