

# **Green Rip-Rap STAC Workshop: Assessing the Water Quality, Habitat, and Social Benefits of Green Riprap**

**Sponsored by:  
Chesapeake Bay Program  
Scientific and Technical Advisory Committee**







# Shoreline Hardening in the Chesapeake Bay



## Detrimental Effects

- Loss of marsh habitat
- Deflection of wave energy, increasing the erosion potential to adjacent property
- Increase water temperature
- No vegetation to trap sediment and filter nutrients



# Green Riprap: a way to retrofit riprap shorelines



**Green Riprap:** integrating marsh vegetation into riprap shorelines

## **Benefits:**

- Easy and low-cost way to restore some fringe marsh ecological functioning
- Aesthetic change back to a more natural look

**Green Riprap is a way to retrofit hardened shorelines and is not a replacement for other shoreline restoration techniques like living shorelines.**

















# How did this idea come about?



## Magothy River (Cypress Creek)







South River-Aberdeen Cr.

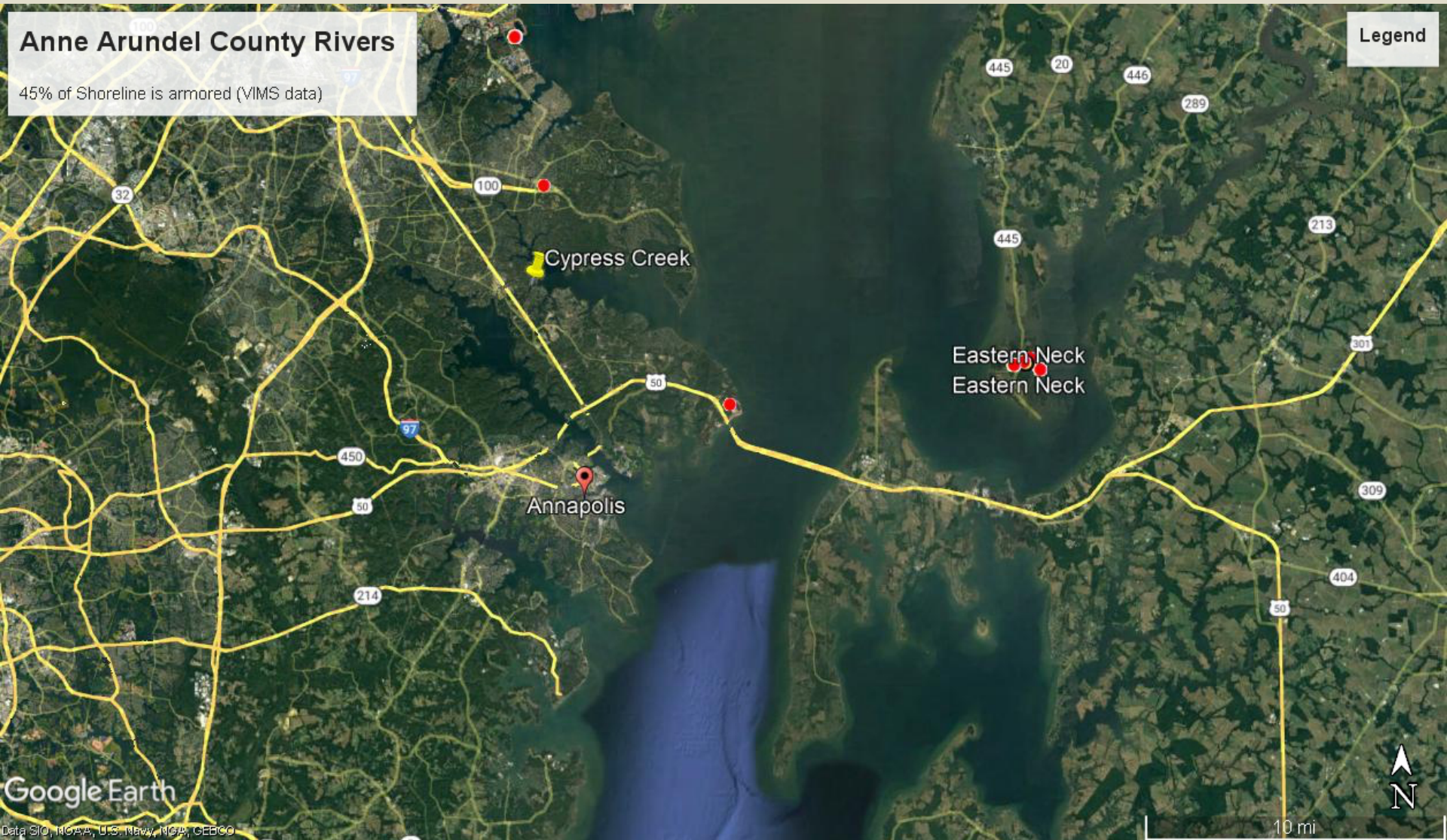








# Anne Arundel County Rivers

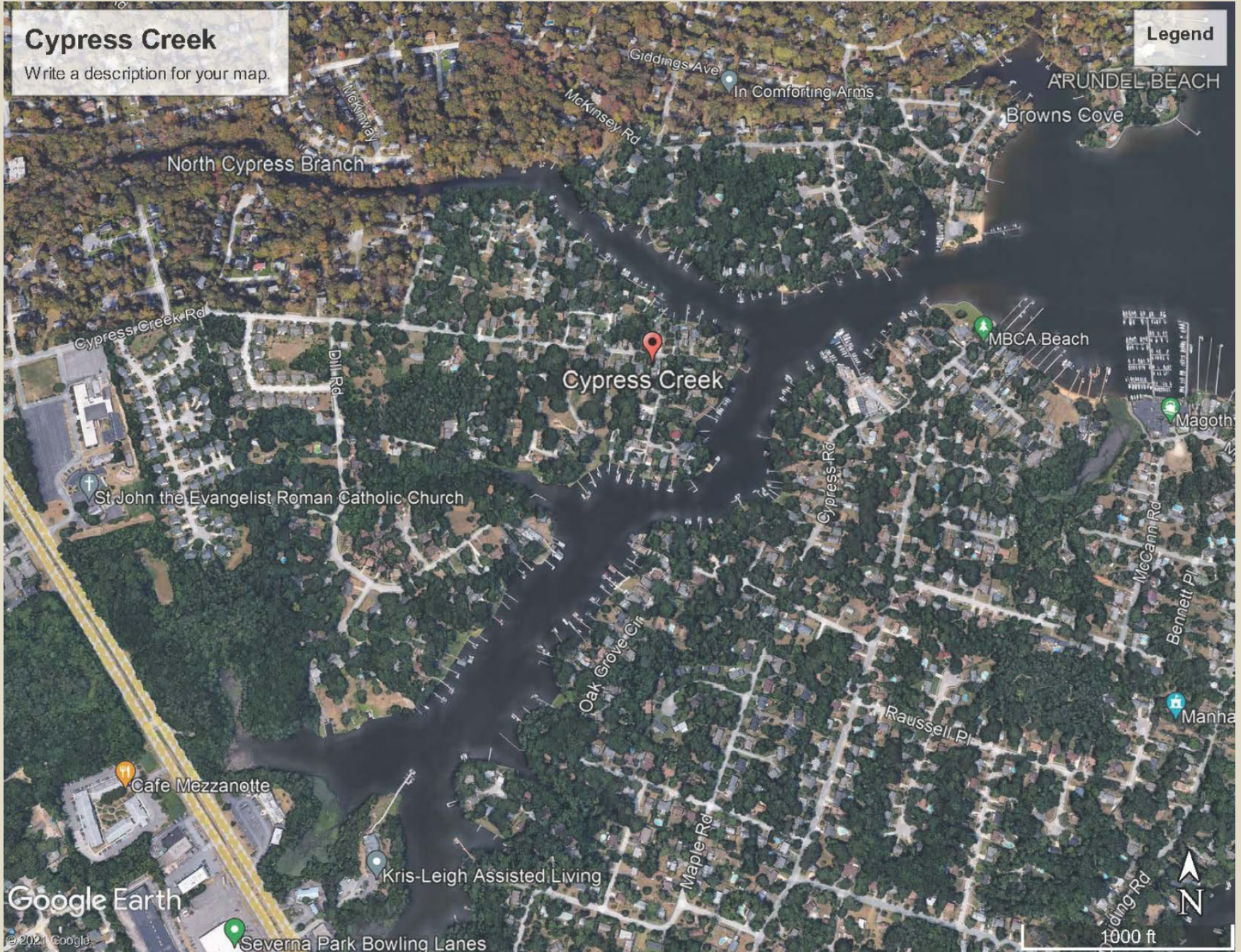




# Cypress Creek

Write a description for your map.

Legend



Google Earth

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1000 ft











