

## **Alternative research questions**

### **Data**

You will be able to find most of the relevant data for the research questions below on the Chesapeake Bay Open Data Portal (<https://data-chesbay.opendata.arcgis.com>). However, depending on the research question you choose and if/how you modify it, you may need to obtain additional data (e.g., from the US Census).

### **Research questions**

Choose one of the following research questions below:

1. How has land use in the CBW changed over time and how is it predicted to change in the future? Are there any spatial patterns you can detect in this land use change?
2. How and where has sea level rise (SLR) occurred in the region, and which areas or communities might be vulnerable to future SLR?
3. What management activities have taken place (and where) that may affect the movement of Brook Trout in the region? Are there any clear spatial patterns to these habitat-altering activities?
4. How have flood hazards changed over time and space? Which areas, communities, or populations are at increased risk of flooding?
5. What are the spatial patterns of climate change over the CBW region? For example, how have temperature and precipitation changed over time and space?
6. Protected areas are designed to protect vital species habitat across the watershed and in the Bay. What are the spatial relationships among protected areas, habitat, and public access to the Bay?
7. What is the extent of hardened shoreline in specific areas of the Bay? How does the amount of protected shoreline relate to the presence/location of sensitive or protected areas?