Percent Hardened Shoreline GIS Layers

Justin Shapiro (On behalf of the Fish Habitat Action Team)

Background on Shoreline Hardening Layers

- These layers were developed in response to a VIMS GIT-funded study - “Threshold effects of altered shorelines and other stressors on forage species in Chesapeake Bay”
  - Shoreline hardening of 10-30% (17% mean) as a threshold number for species decline of seven analyzed forage species
  - Juvenile blue crab showed general decline with an increase in shoreline development
- Additional information:
  - Final Report: Chesapeake Bay Program Website
  - Project Contact: Rochelle Seitz, Rom Lipcius, Troy Tuckey (VIMS)

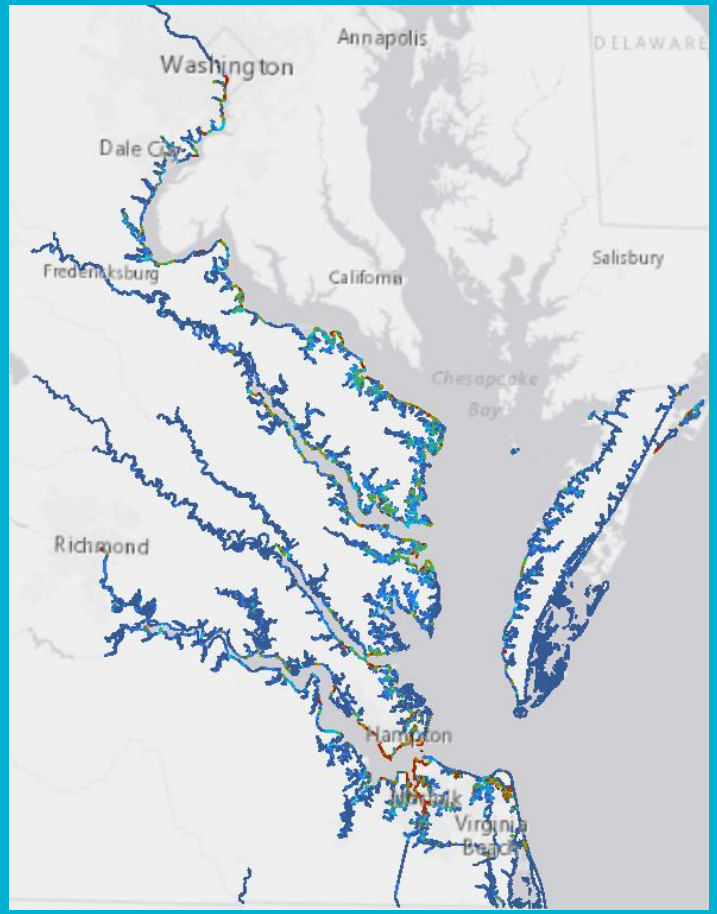
Written into Forage and Fish Habitat Action Plans

- FHAT Action 3.3: *"Develop a percent hardened shoreline GIS layer using existing shoreline inventory data and connect to shoreline threshold results - Map products showing areas of relative high shoreline development, to inform communication about shoreline management."*

- Forage Action 3.1: *"Work with CBP partners to develop a GIS product that maps shoreline conditions around the Chesapeake Bay using the shoreline development thresholds identified."*

Mapping Layers for Maryland and Virginia

- CBP GIS team used shoreline inventory data from VIMS to develop maps
  - VA: Layers complete (Using 2018 inventory data)
  - MD: Four counties complete
    - **Anne Arundel, Dorchester, Talbot, and Calvert**
    - Four more counties currently being inventoried
    - Funding needed to complete inventory of nine additional counties
- Additional information:
  - Completed layers: Maryland & Virginia
  - GIS Team Contact: Angie Wei (CBPO)



Next Steps & Questions

- Getting these products in the hands of stakeholders:
  - One audience we identified was local planners.
    - Do members have any thoughts on how to best disseminate this information to local partners?
  - Any contacts or groups who are focused on living shorelines, or funding living shorelines, that could benefit from utilizing these layers?
    - Ex. (Utilizing in RFPs)