

Phase 7 Watershed and Tidal Water Model Boundaries

Modeling Workgroup Quarterly Review

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Previous Actions and Decisions

- The decision was made to use the VIMS Chesapeake Bay shoreline, modified in a few locations by the NOAA 0' (Mean Higher High Water) Sea Level Rise dataset.
- With the completion of a tidal shoreline for the estuary, this project has moved on to the development of draft Phase 7 watershed model segmentation and Atlantic/Delaware Bay shorelines.

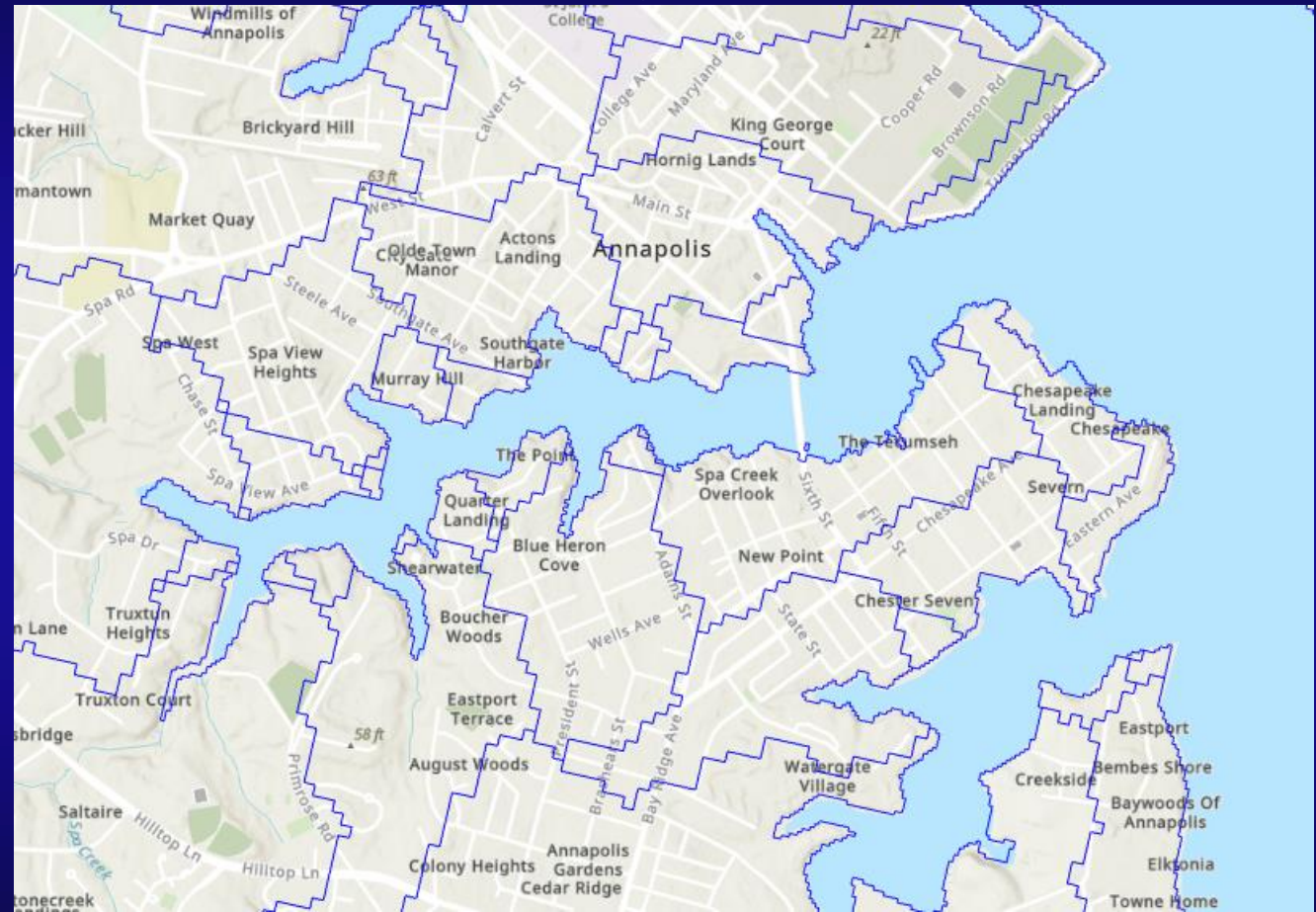
Completed estuary shoreline based on VIMS data



Draft Phase 7 Segmentation

- Based on union of NHD catchments, shorelines, and county boundaries
- The goal for the initial draft is to align the segments with the 10m land use data by converting the component data layers to 10m rasters before combining them into a segmentation layer.

Draft Phase 7 watershed segmentation in the Annapolis area



Draft Phase 7 Segmentation

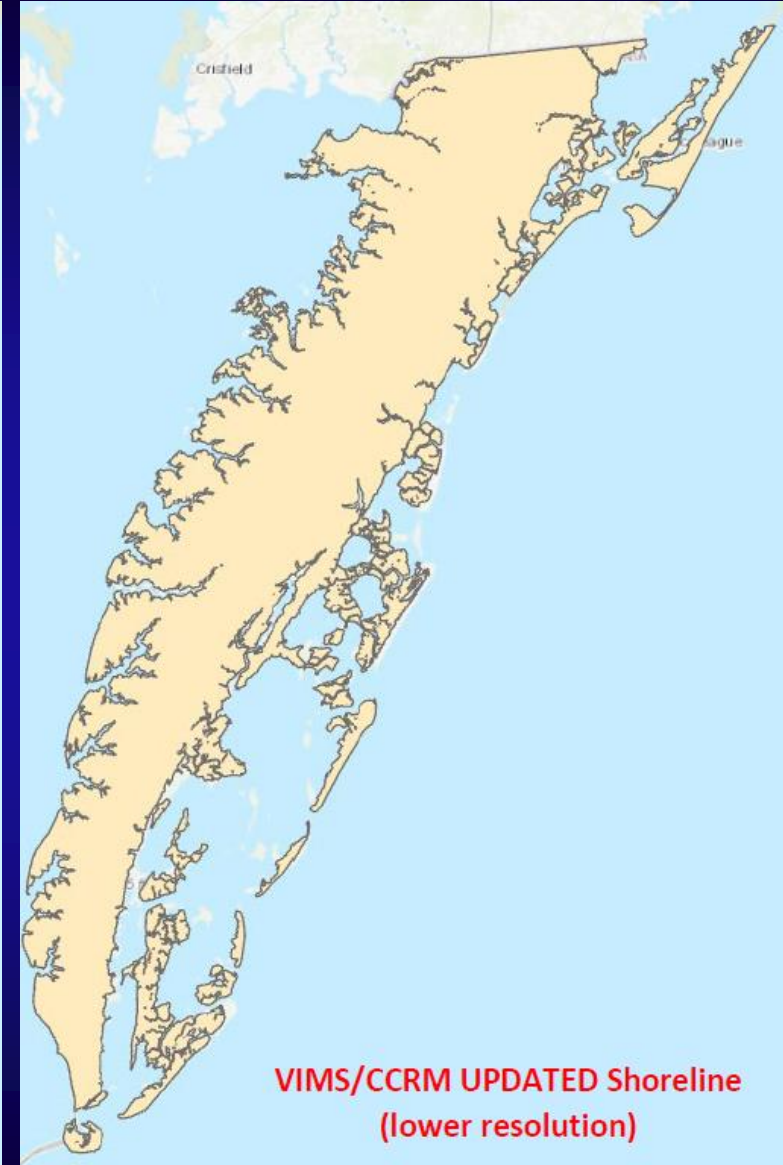
Phase 6 segmentation on the Lower Eastern Shore

- The watershed model segmentation needs to include all area for counties within or intersecting with the Chesapeake watershed boundary.
- This requires a shoreline layer for the Atlantic coasts of MD, VA, and DE, as well as the Delaware Bay and Delaware River.



Ocean Shorelines

- In addition to the need for an ocean shoreline for watershed model segmentation, there may be a need for water quality modeling in coastal bays.
- Karinna Nunez of VIMS has developed a medium-resolution dataset suitable for both watershed model segmentation and water quality monitoring.



Next Steps

- VIMS finished updating the entire MD shoreline, and this dataset has been incorporated into the VIMS estuary and coastal shorelines, and will be incorporated into the CBP shoreline and P7 segmentation.
- DE shorelines will be incorporated from a NOAA medium resolution dataset or the Phase 6 segmentation.

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