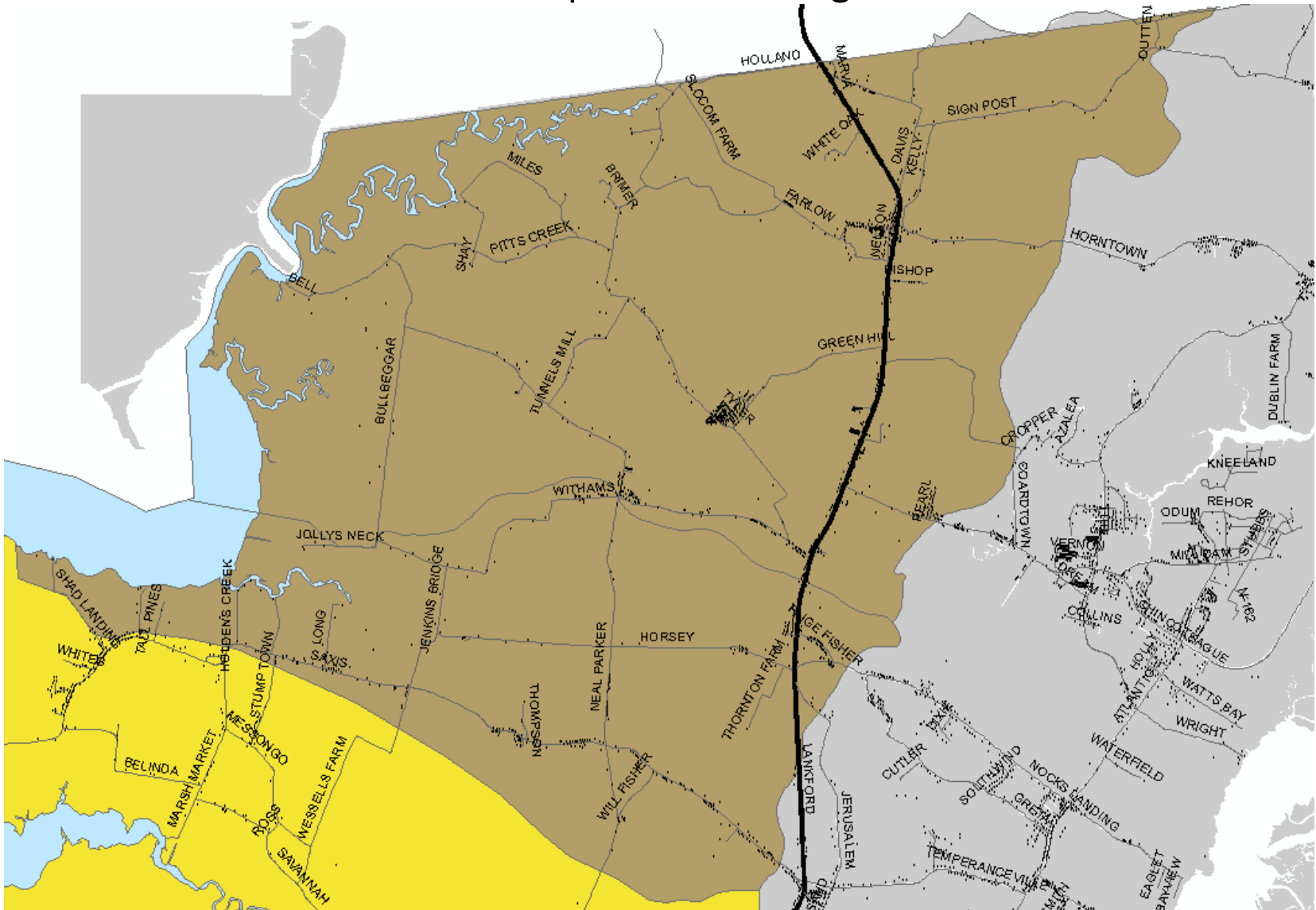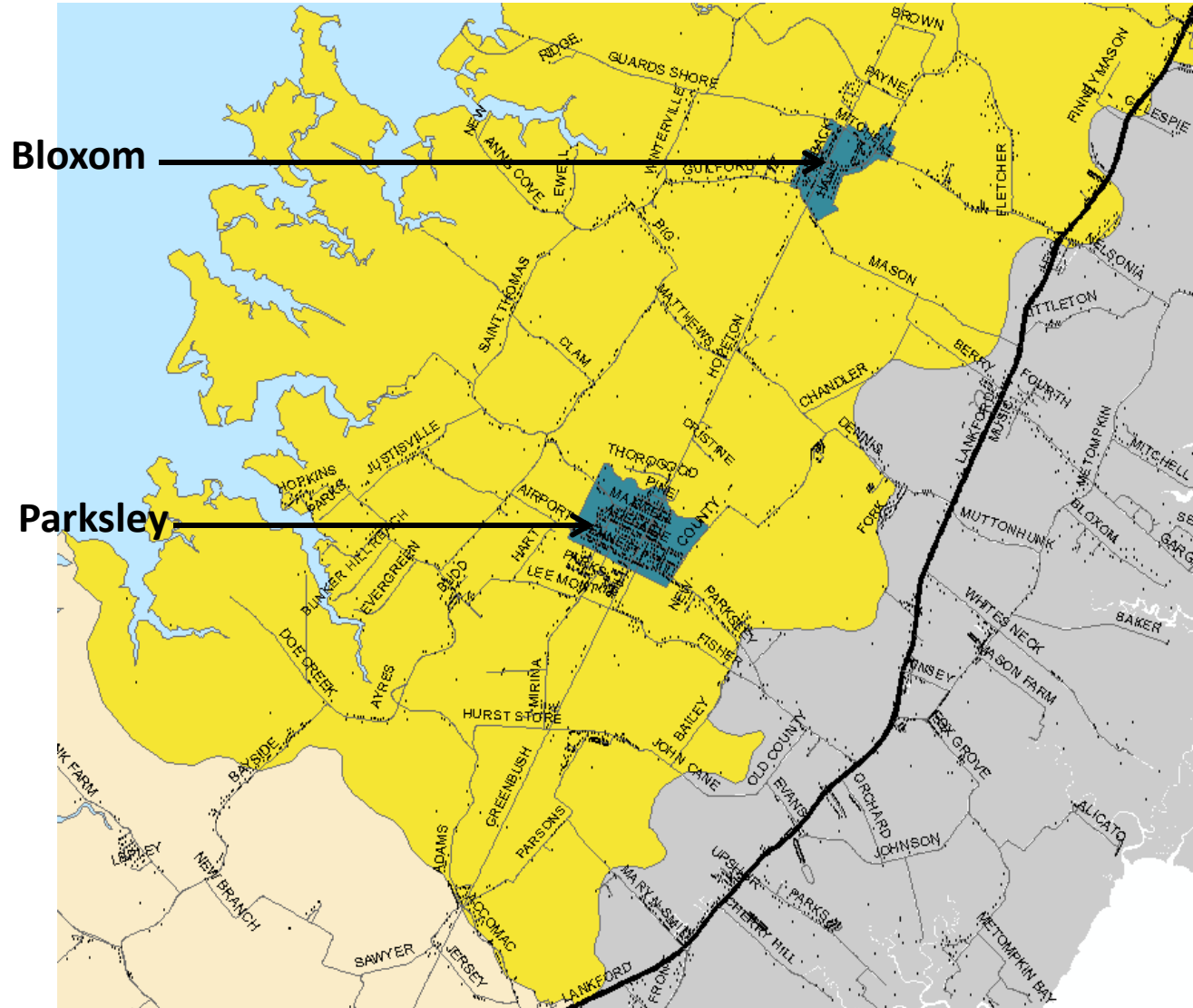# Middle Pocomoke River (POCOH_VA)

Colored Area represents the segment shed

Lower Pocomoke River (POCMH_VA)

Colored Area represents the segment shed, continued on next slide
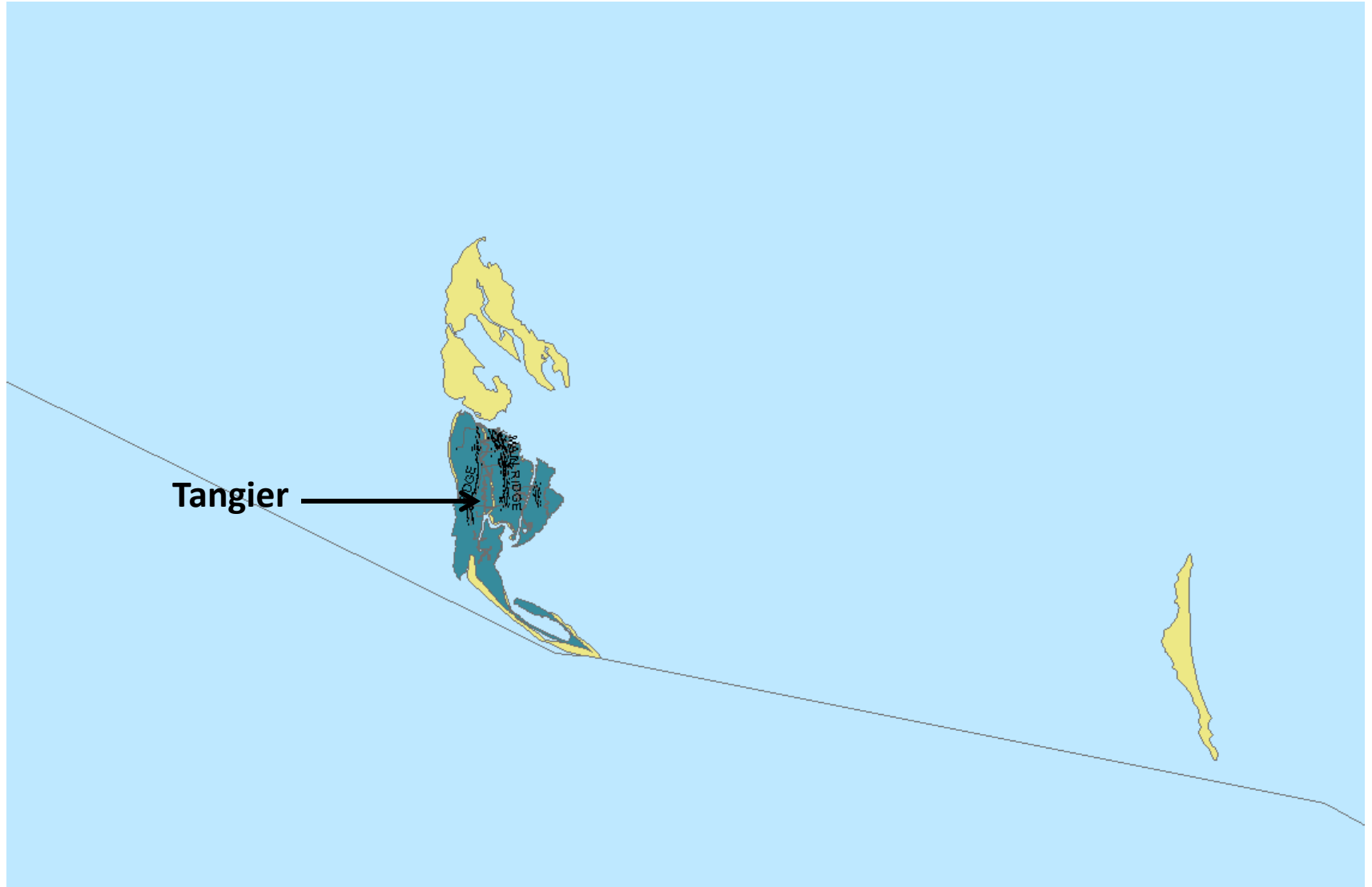
Lower Pocomoke River (POCMH_VA)

Colored Area represents the segment shed, continued from previous
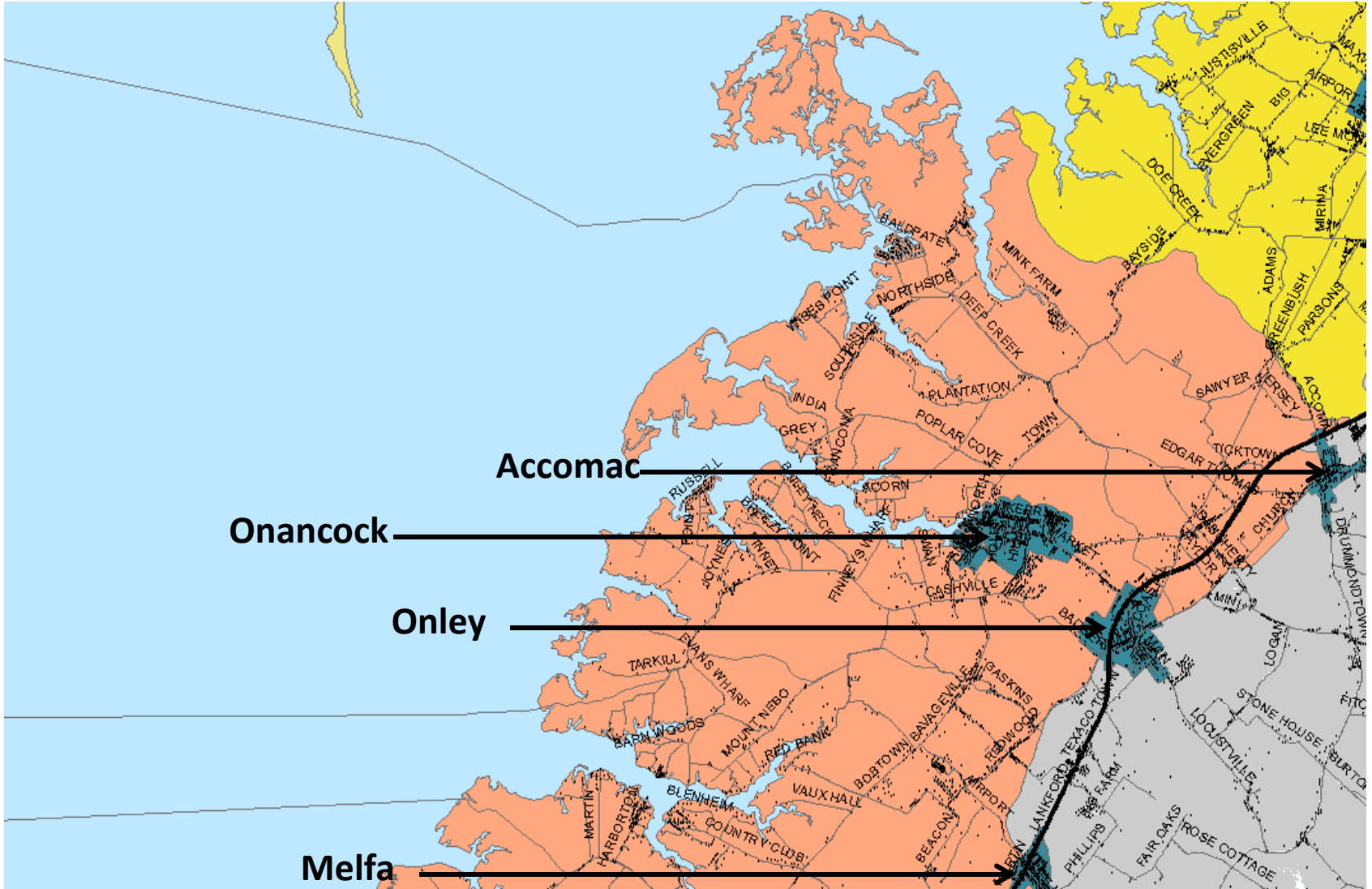
Tangier Sound (TANMH_VA)

Colored Area represents the segment shed

Eastern Lower Chesapeake Bay (CB7PH)
Colored Area represents the segment shed, continued on next slides

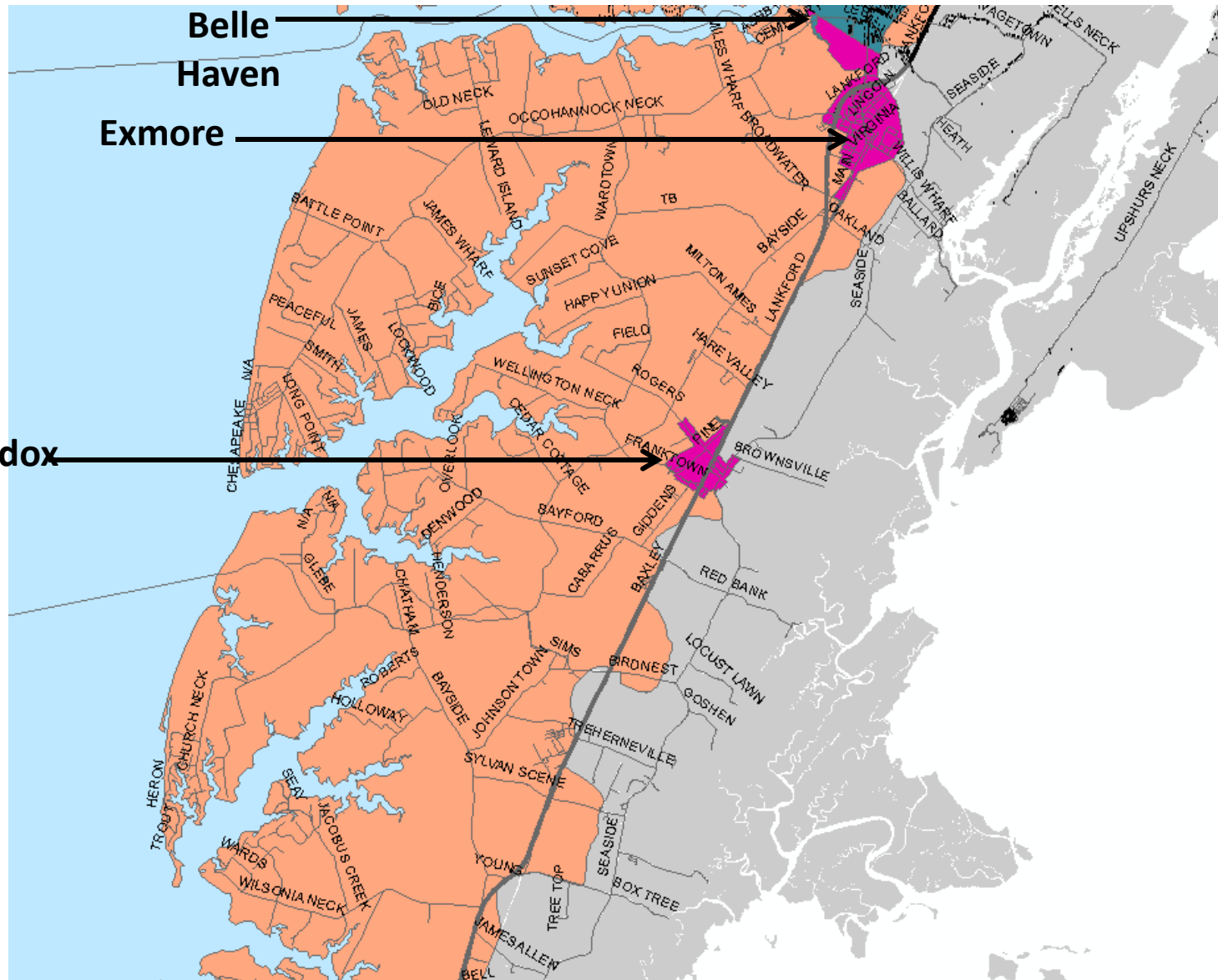# Eastern Lower Chesapeake Bay (CB7PH)
Colored Area represents the segment shed, continued

Eastern Lower Chesapeake Bay (CB7PH)

Colored Area represents the segment shed, continued
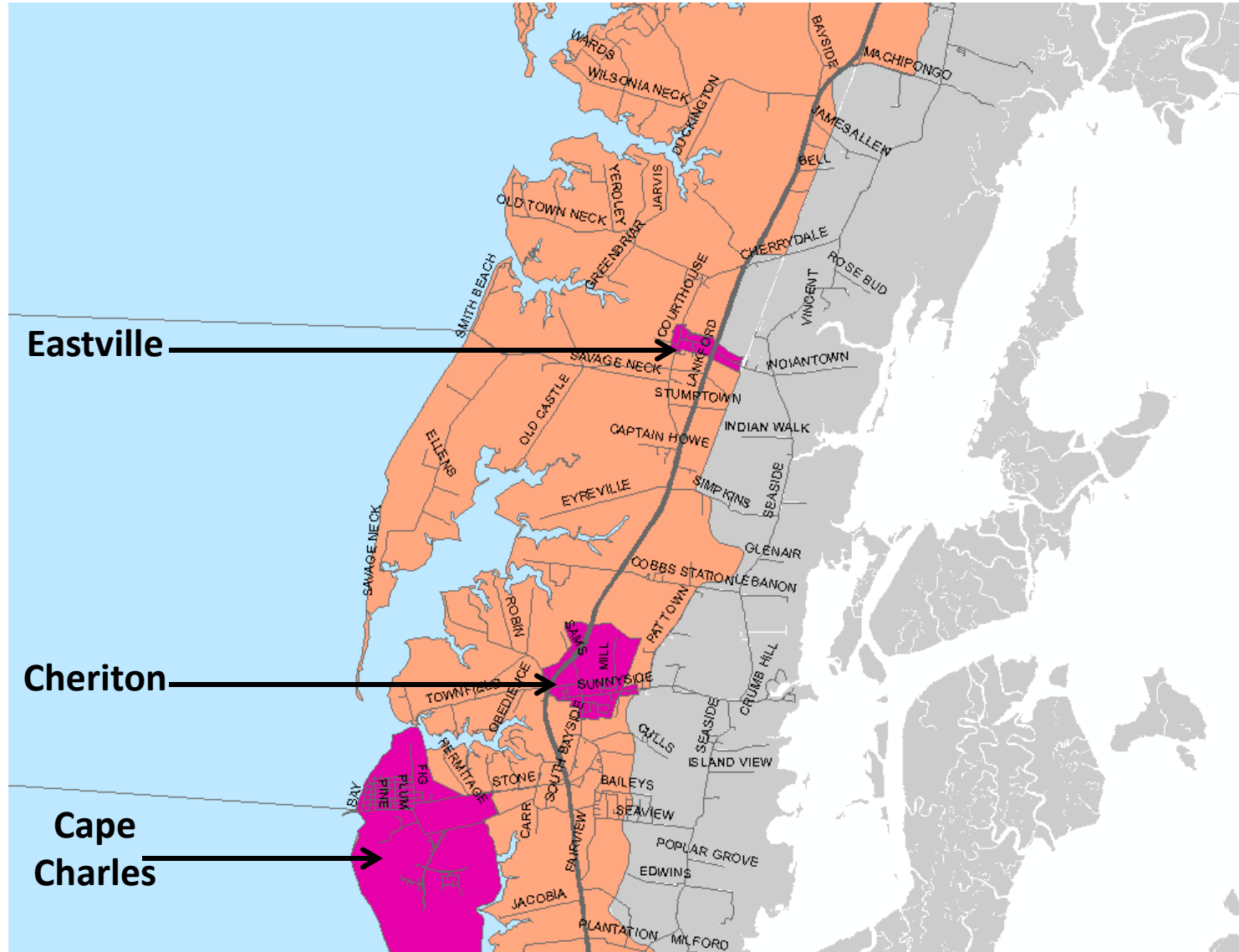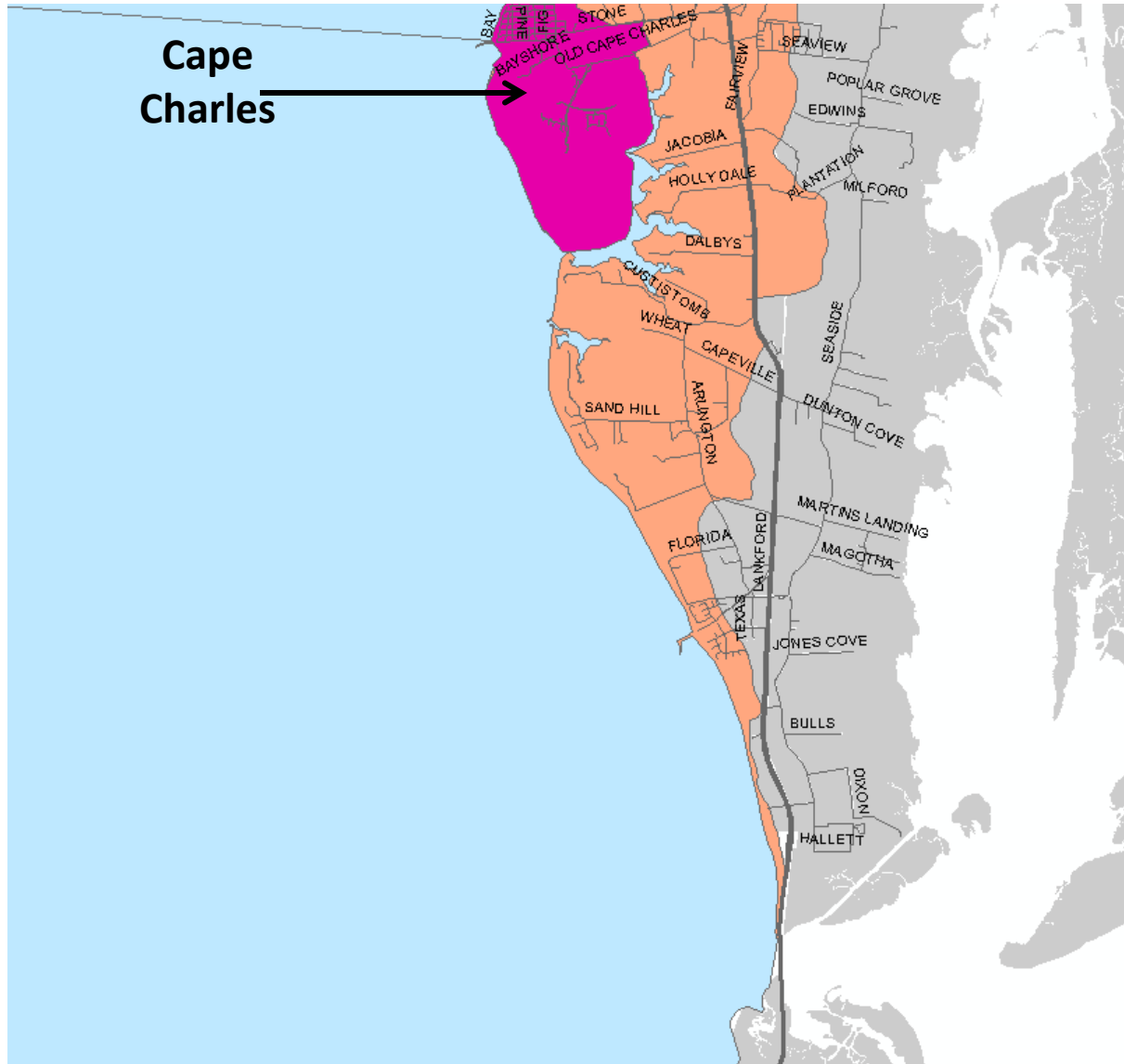
Eastern Lower Chesapeake Bay (CB7PH)
Colored Area represents the segment shed, continued

Eastern Lower Chesapeake Bay (CB7PH)

Colored Area represents the segment shed

Did I understand the maps correctly?

- Accomack County has land within four segmentsheds (POCMH_VA, POCOH_VA, TANMH_VA, and CB7PH).

- All of Northampton County lies in one segmentshed (CB7PH).

The Chesapeake Bay Airshed

There is a lot of **Nitrogen** in the Bay that is deposited from the air to tidal waters. This **Nitrogen** comes from the Chesapeake Bay airshed.

It is <u>not</u> regulated in the Chesapeake Bay TMDL because air deposition is regulated by the Clean Air Act.

Phosphorus and **sediment** are not deposited by air.

CHESAPEAKE BAY AIRSHED AND WATERSHED

Watershed

Airshed

Air Deposition Non-Point Sources

Air Deposition is a non-point Source that has long-range transport ability or is made up of multiple locations in a general area.

Data is from Chesapeake Bay TMDL Tables 9-1 (EPA)

Air deposition is the largest source of Nitrogen in the Eastern Shore segments overall.

POCOH_VA	2.7% from air deposition	Northern Accomack
POCMH_VA	23.4% from air deposition	Saxis to South of Parksley
TANMH_VA	98.1% from air deposition	Tangier and Watts Islands
CB7PH	57.2% from air deposition	Northampton and southern portion of Accomack

After meeting the TMDL air deposition will become a larger source by percentage.

POCOH_VA	3.8% from air deposition
POCMH_VA	39.5% from air deposition
TANMH_VA	98.2% from air deposition
CB7PH	65.3% from air deposition

Point Sources

Point Sources are single identifiable locations point of origin for the material specified. An example is overboard discharge of wastewater with nitrogen from a wastewater treatment facility.

Significant point sources on the Eastern Shore of Nitrogen and Phosphorus that discharge to the Chesapeake Bay as of January 1, 2012 (Virginia Department of Environmental Quality)*

Cape Charles Wastewater Treatment Plant

Onancock Wastewater Treatment Plant

Shore Memorial Hospital

Tangier Island Wastewater Treatment Plant

Tyson Foods - Temperanceville

*Other point sources may be regulated with an individual or general Virginia Pollution Discharge Elimination System (VPDES) permit or a Virginia Pollution Abatement (VPA) permit.

Non-Point Sources

(excluding a i r d e p o s i t i o n)

Non-point Sources are sources that have long-range transport ability or are made up of multiple locations in a general area. An example is sediment running off of a construction site.

Excluding **Nitrogen**, land based non-point sources is the majority source of nutrients to the Bay. **Nitrogen** in the Eastern Shore's segments is dominated by a i r d e p o s i t i o n . As each version of the model is completed, the results for our local region change. The source of land based non-point sources is listed below by <u>largest to smallest</u> and these are based on version 5.3.2.

Accomack County Land Use Non-Point Source for **Nitrogen** Across All Segments:
1. Crop Land
2. Forest Land
3. Rural – Lawns, Parks (Unregulated Urban Pervious)
4. Animal Operations
5. Septic Systems
6. Rural – Paved Areas, Driveways, Roofs (Unregulated Urban Impervious)
7. Regulated Animal Operations
8. Pasture
9. Construction
10. Nurseries
11. Unmanaged Grass
12. Hay
13. Surface Mine

Non-Point Sources

As each version of the model is completed, the results for our local region change. The source of land based non-point sources is listed below by <u>largest to smallest</u> and these are based on version 5.3.2.

Accomack County Land Use Non-Point Source for Phosphorus Across All Segments:

1. Crop Land
2. Animal Operations
3. Rural – Lawns, Parks (Unregulated Urban Pervious)
4. Forest Land
5. Rural – Paved Areas, Driveways, Roofs (Unregulated Urban Impervious)
6. Regulated Animal Operations
7. Hay
8. Nurseries
9. Construction
10. Pasture
11. Unmanaged Grass
12. Surface Mine

Non-Point Sources

As each version of the model is completed, the results for our local region change. The source of land based non-point sources is listed below by <u>largest to smallest</u> and these are based on version 5.3.2.

Accomack County Land Use Non-Point Source for **Sediment** Across All Segments:
1.   Crop Land
2.   Rural – Paved Areas, Driveways, Roofs (Unregulated Urban Impervious)
3.   Forest Land
4.   Rural – Lawns, Parks (Unregulated Urban Pervious)
5.   Construction
6.   Unmanaged Grass
7.   Surface Mine
8.   Hay
9.   Pasture
10.   Nurseries
11.   Animal Operations
12.   Regulated Animal Operations

Non-Point Sources
(excluding `air deposition`)

Non-point Sources are sources that have long-range transport ability or are made up of multiple locations in a general area. An example is sediment running off of a construction site.

Excluding **Nitrogen**, land based non-point sources is the majority source of nutrients to the Bay. **Nitrogen** in the Eastern Shore's segments is dominated by `air deposition`. As each version of the model is completed, the results for our local region change. The source of land based non-point sources is listed below by <u>largest to smallest</u> and these are based on version 5.3.2.

Northampton County Land Use Non-Point Source for **Nitrogen** Across All Segments:
1. Crop Land
2. Rural – Lawns, Parks (Unregulated Urban Pervious)
3. Septic Systems
4. Nurseries
5. Forest Land
6. Rural – Paved Areas, Driveways, Roofs (Unregulated Urban Impervious)
7. Pasture
8. Animal Operations
9. Hay
10. Unmanaged Grass
11. Surface Mine

Non-Point Sources

As each version of the model is completed, the results for our local region change. The source of land based non-point sources is listed below by <u>largest to smallest</u> and these are based on version 5.3.2.

Northampton County Land Use Non-Point Source for Phosphorus Across All Segments:

1. Crop Land
2. Nurseries
3. Rural – Lawns, Parks (Unregulated Urban Pervious)
4. Rural – Paved Areas, Driveways, Roofs (Unregulated Urban Impervious)
5. Forest Land
6. Pasture
7. Animal Operations
8. Hay
9. Unmanaged Grass
10. Surface Mine

Non-Point Sources

As each version of the model is completed, the results for our local region change. The source of land based non-point sources is listed below by <u>largest to smallest</u> and these are based on version 5.3.2.

Northampton County Land Use Non-Point Source for **Sediment** Across All Segments:

1. Crop Land
2. Rural – Paved Areas, Driveways, Roofs (Unregulated Urban Impervious)
3. Rural – Lawns, Parks (Unregulated Urban Pervious)
4. Nurseries
5. Pasture
6. Forest Land
7. Unmanaged Grass
8. Hay
9. Surface Mine
10. Animal Operations