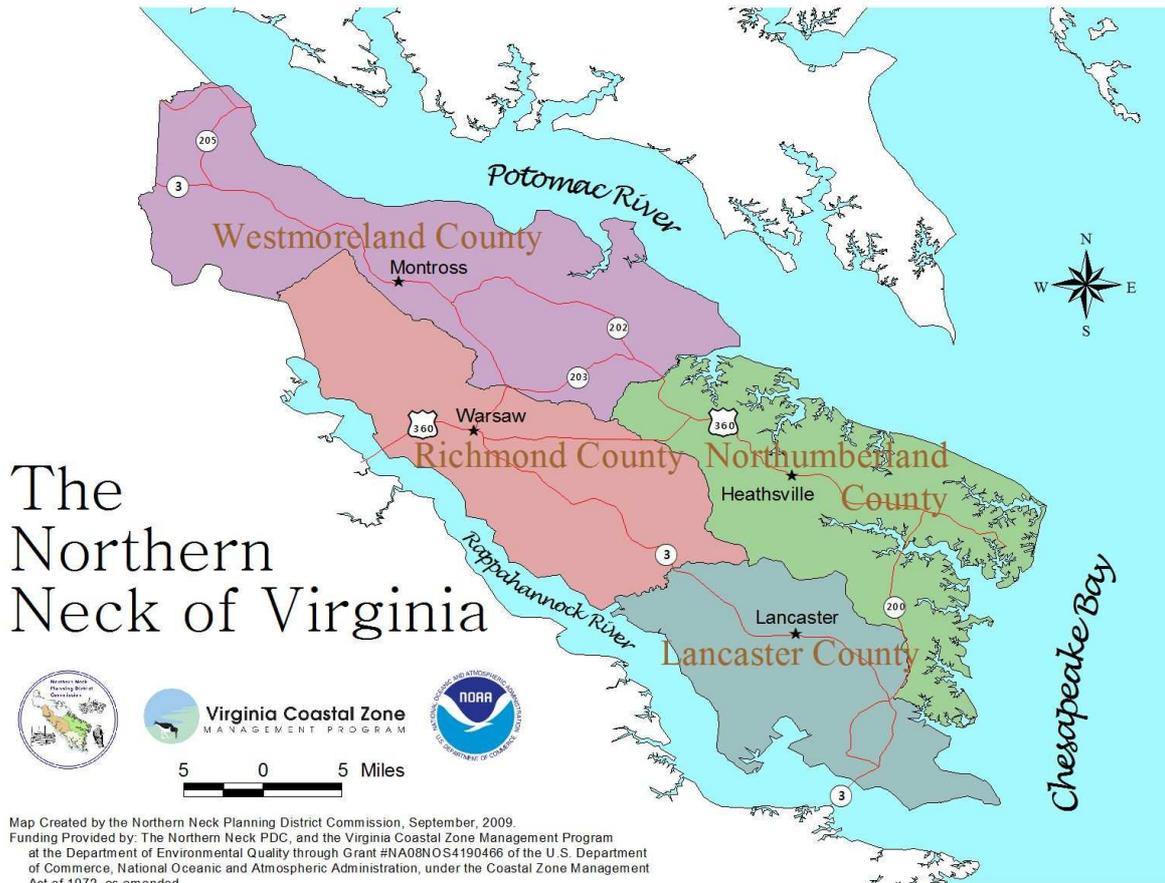


# Northern Neck Planning District Commission Virginia Coastal Zone Management Program's PDC Technical Assistance Program Task #45



This report was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. The views expressed herein are those of the author and do not necessarily reflect the views of the U.S. Department of Commerce, NOAA, or any of its sub-agencies.

# Northern Neck Planning District Commission FY08/09 Coastal Program Technical Assistance Grant, Task 45

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    2. Richmond County pages 2 – 6
    3. Westmoreland County pages 7 – 15
  - B. Private Conservation Easement Technical Assistance
    1. Narrative page 16
    2. Northumberland County pages 17- 18
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    2. Department of Conservation and Recreation  
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  - A. Narrative and Progress Map page 43
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## County Requested Maps

### Richmond County

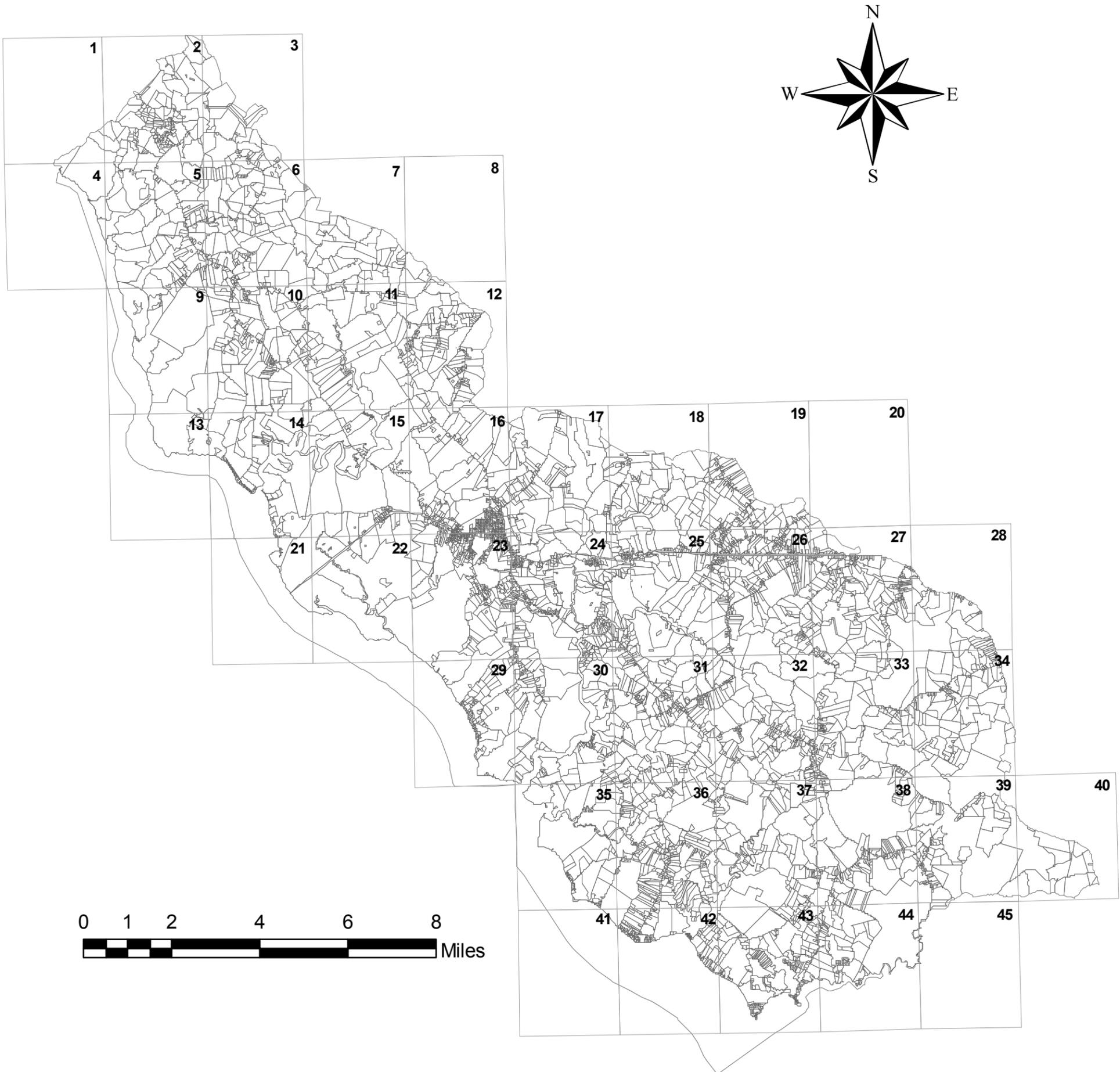
Richmond County land use staff requested a index map for their tax maps, because the old index was hand drawn and had been photocopied so many times it was almost illegible. The NNPDC was glad to provide them with a clean, digital copy of their tax map index for use in the future.

As a part of the Comprehensive Planning process, Richmond County Land Use staff requested maps to illustrate the conversion of agricultural land to other uses. Using old aerial photographs from 1987, a farm field in Richmond County was chosen to illustrate the conversion of agricultural land to other uses. Comparing the old photograph to an aerial photograph from 2007, it is evident that to the northwest portion of the photo that a farm field was converted back to forest, that a portion of the field was converted to single family residences, and that a small homestead farm was created north of the farm field. The second map illustrates many of the common conversion of agricultural land on the Northern Neck.

A subdivision request came from a landowner wishing to re-zone his property to R-3, mixed use to allow for more subdivisions for single family homes. Richmond County Land Use staff requested habitat maps for the parcels to be rezoned, and NNPDC staff created a map of the ecological model of the Virginia Conservation Needs Land Assessment, along with a map of the tax parcels with the Coastal Estuarine Land Protection Program Priority map layer underlain.

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# Richmond County Tax Map Index



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



# Agriculture Land Use Conversion

## Farm Field on Lutrellville Lane - 1987

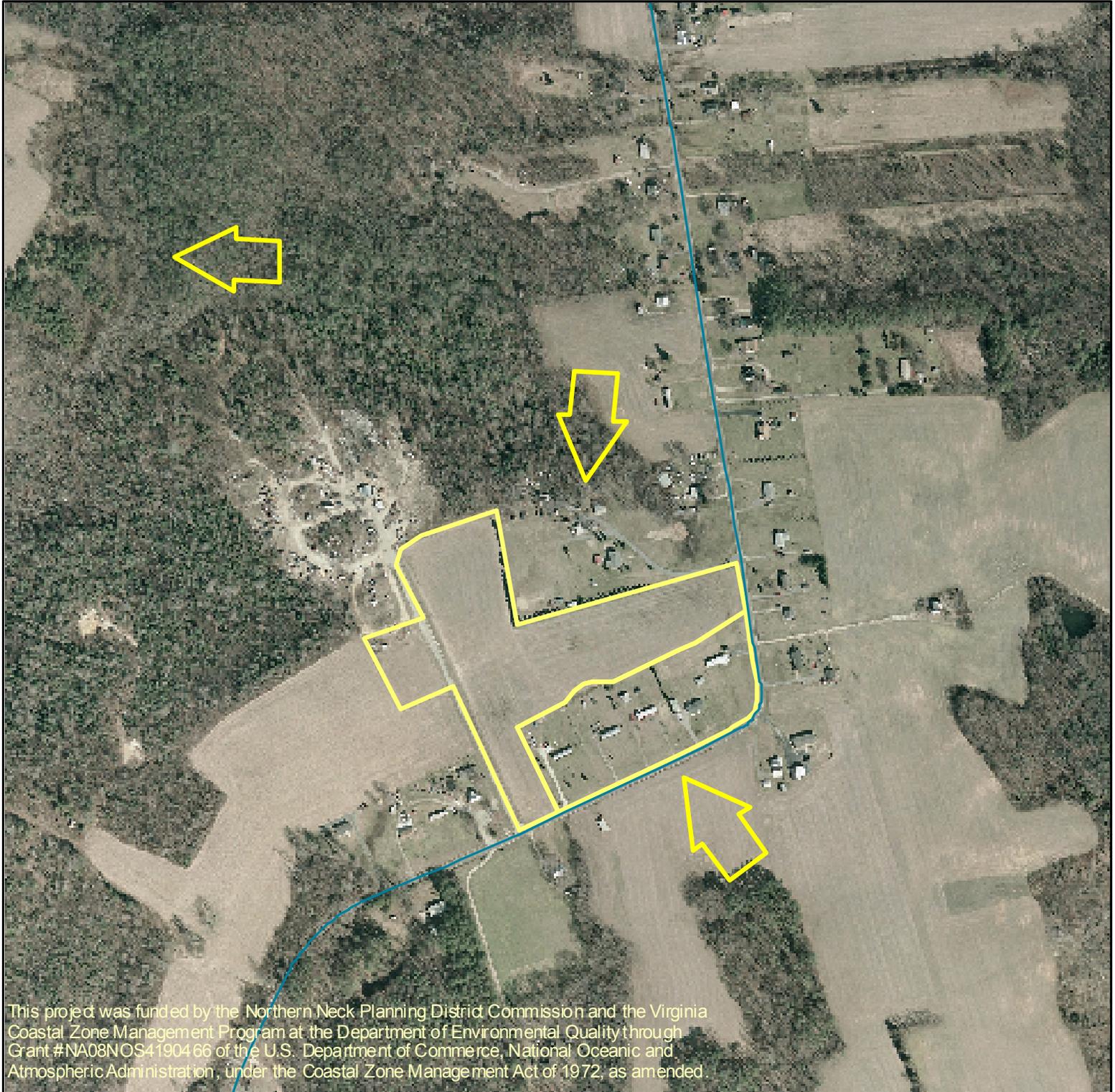


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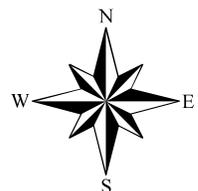


# Agricultural Land Use Conversion

## Farm Field on Luttrellville Lane - 2007

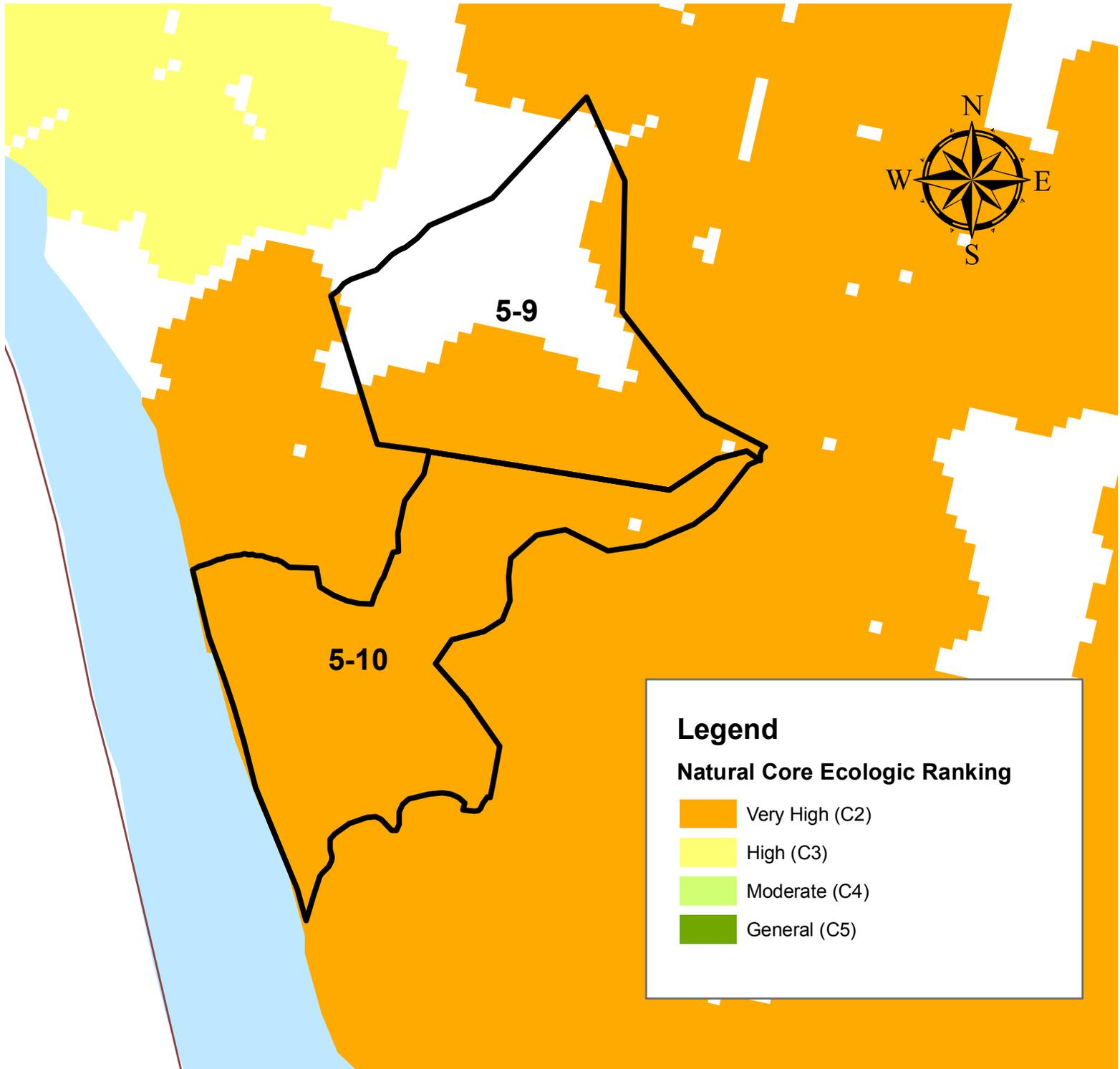


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# Parcels 5-9 and 5-10

## Department of Conservation and Recreation's Virginia Conservation Land Needs Assessment (VCLNA) Ecological Model Ranking



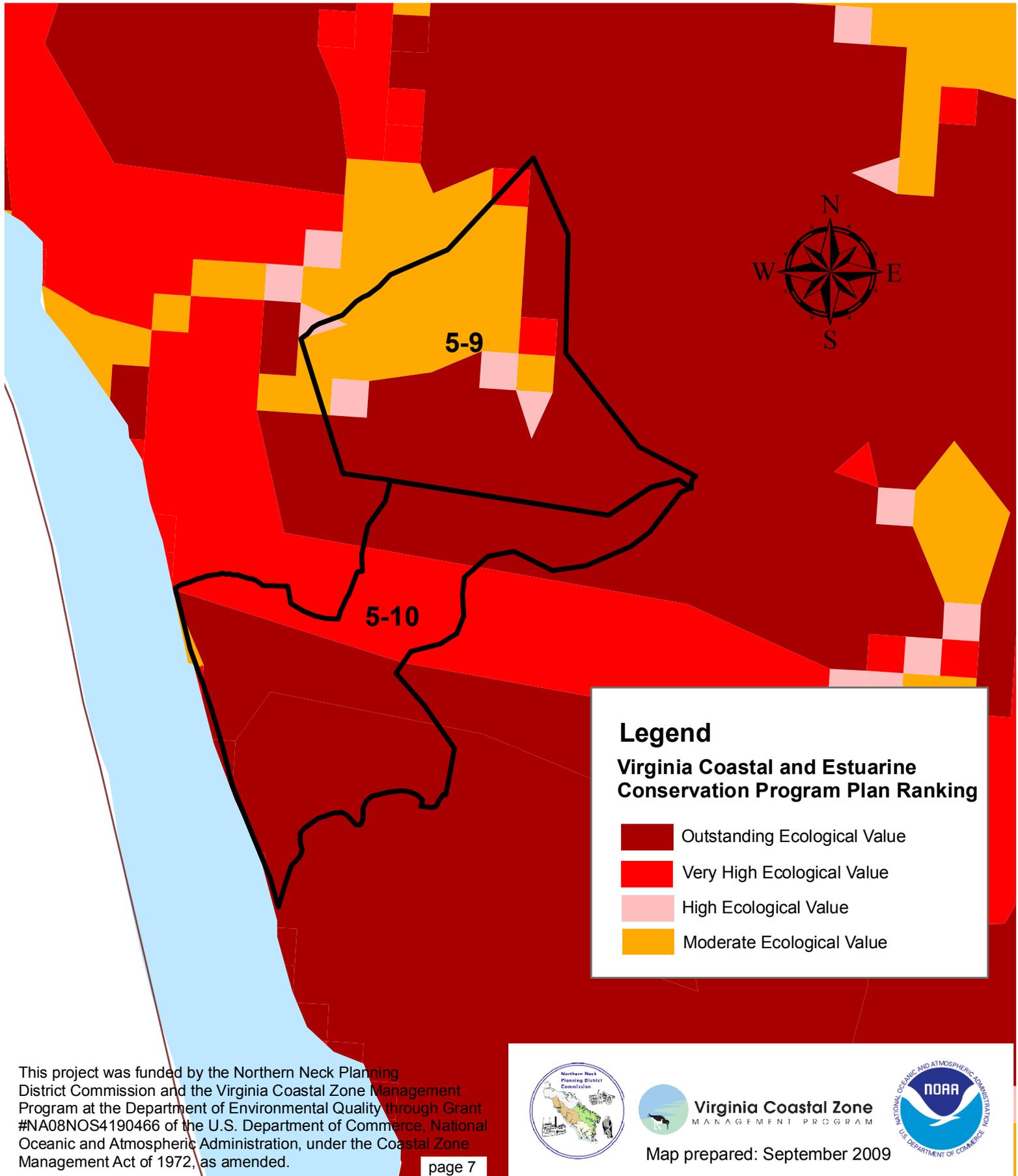
Virginia Coastal Zone  
MANAGEMENT PROGRAM

Map prepared: September 2009



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

# Parcels 5-9 and 5-10 Virginia Coastal Program's Coastal Estuarine and Land Conservation Program (CELCP) Plan



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



Map prepared: September 2009

## County Requested Maps

### Westmoreland County

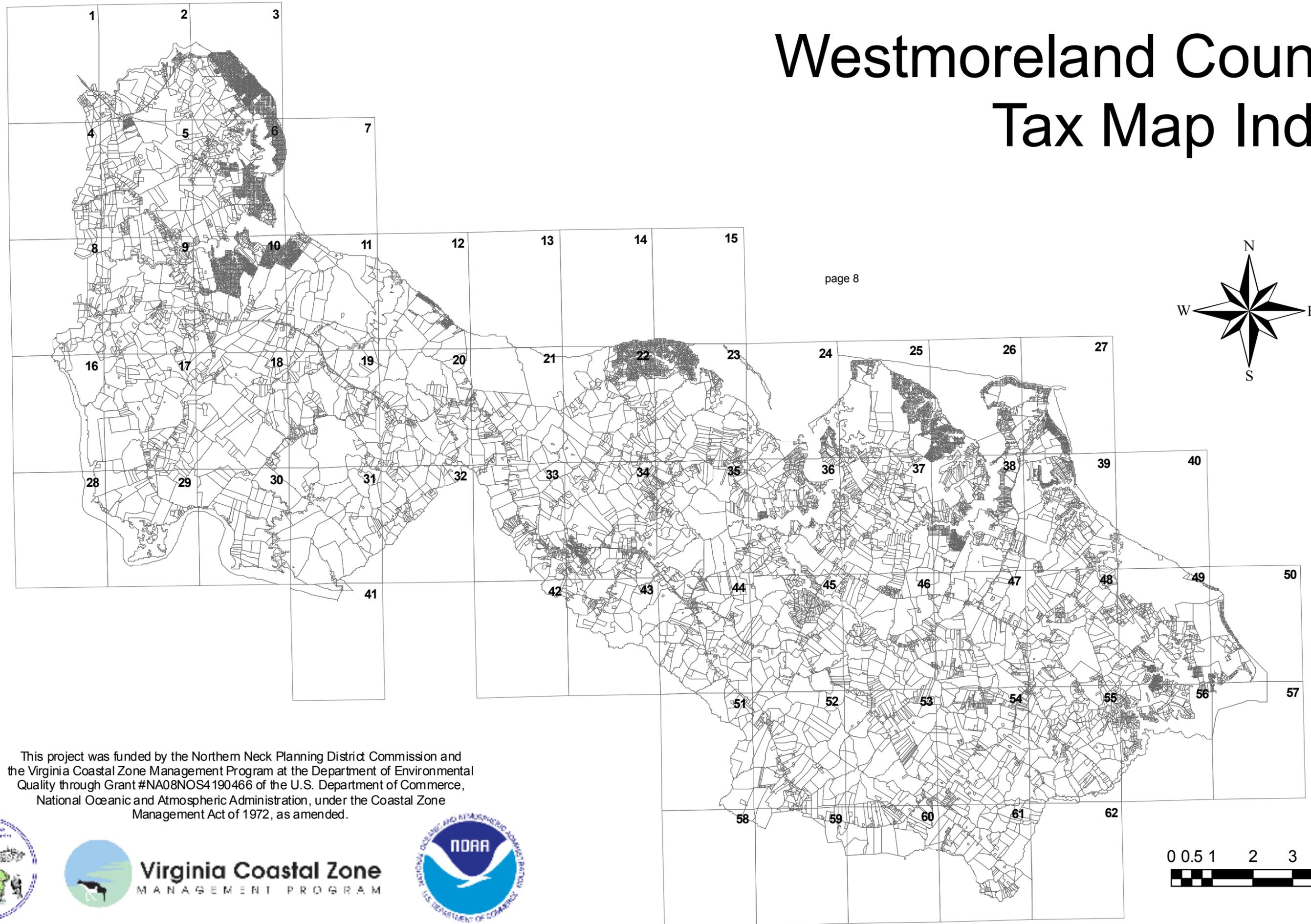
Westmoreland County land use staff requested a index map for their tax maps, because the old index was hand drawn and not professional looking. The NNPDC was glad to provide them with a clean, digital copy of their tax map index for use in the future.

Westmoreland County Administration requested a map to help support a Department of Housing and Community Development (DHCD) Block Grant application to upgrade housing conditions to minimum standards throughout the county. Westmoreland County requested that instead of a specific neighborhood, as was the original intention of block grants, that the whole county could be a project area. DHCD agreed, and this map was created to show properties in the county that potentially needed repair, upgrade or maintenance to improve living conditions for the lowest income residents of the county. The substandard housing candidates were identified by 1) a steering committee, 2) a visual windshield survey, and finally 3) county administration staff. All of these points are referenced with this map, and will be used to further narrow down potential clients for housing, potable water and waste water rehabilitation.

Westmoreland County is currently undergoing a Comprehensive Plan revision, and county staff requested maps for the comprehensive plan. Revised maps created for the comprehensive plan include a zoning map, watershed map, topography map, hurricane surge maps, National Wetland Inventory maps, hydric soils map, high water table soils map, highly permeable soils map, and a FEMA 100 and 500 year floodplain map. The high water table soils map and the highly permeable soils maps are not included in this report due to file size limitations.

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# Westmoreland County: Tax Map Index

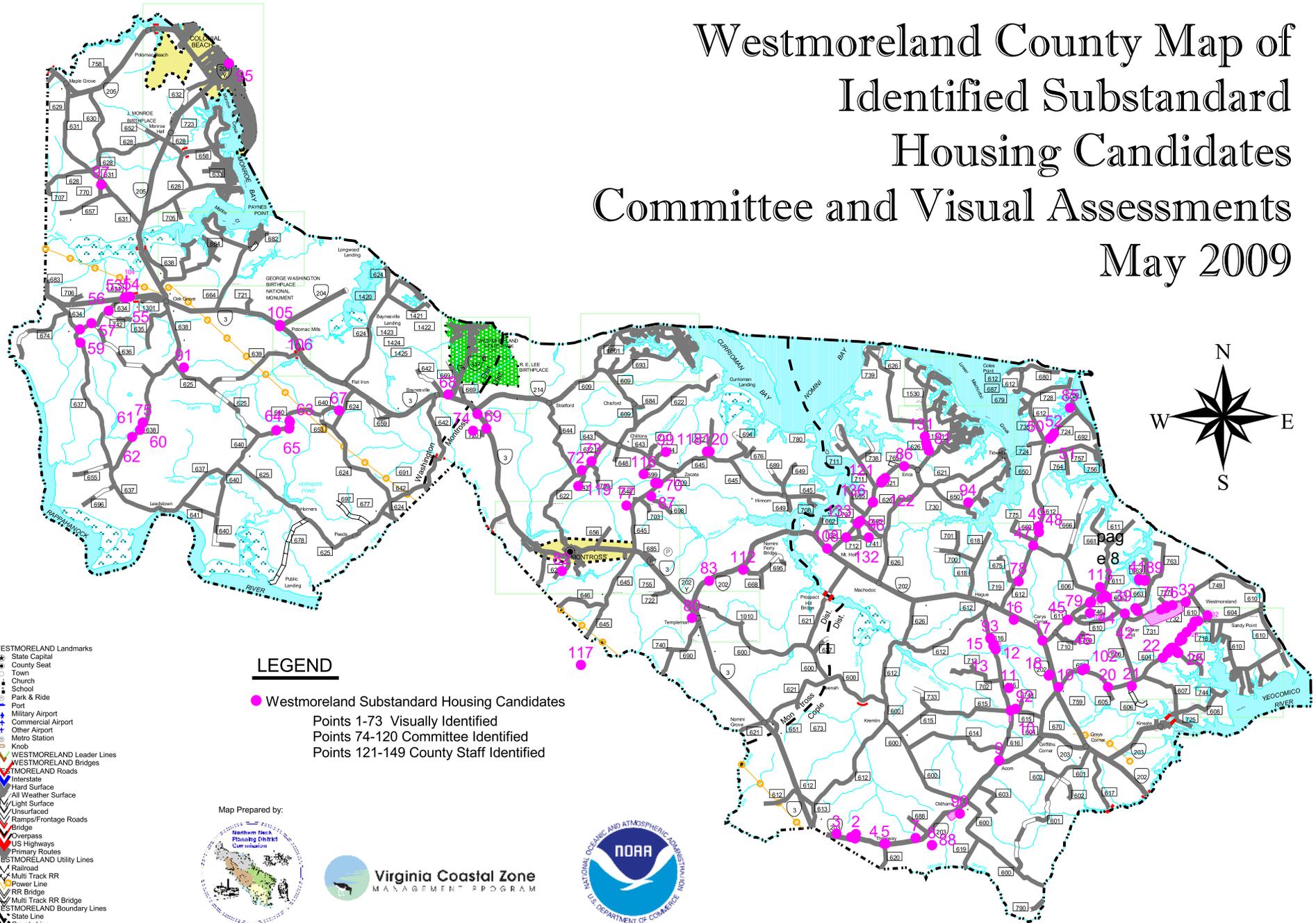


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# Westmoreland County Map of Identified Substandard Housing Candidates Committee and Visual Assessments

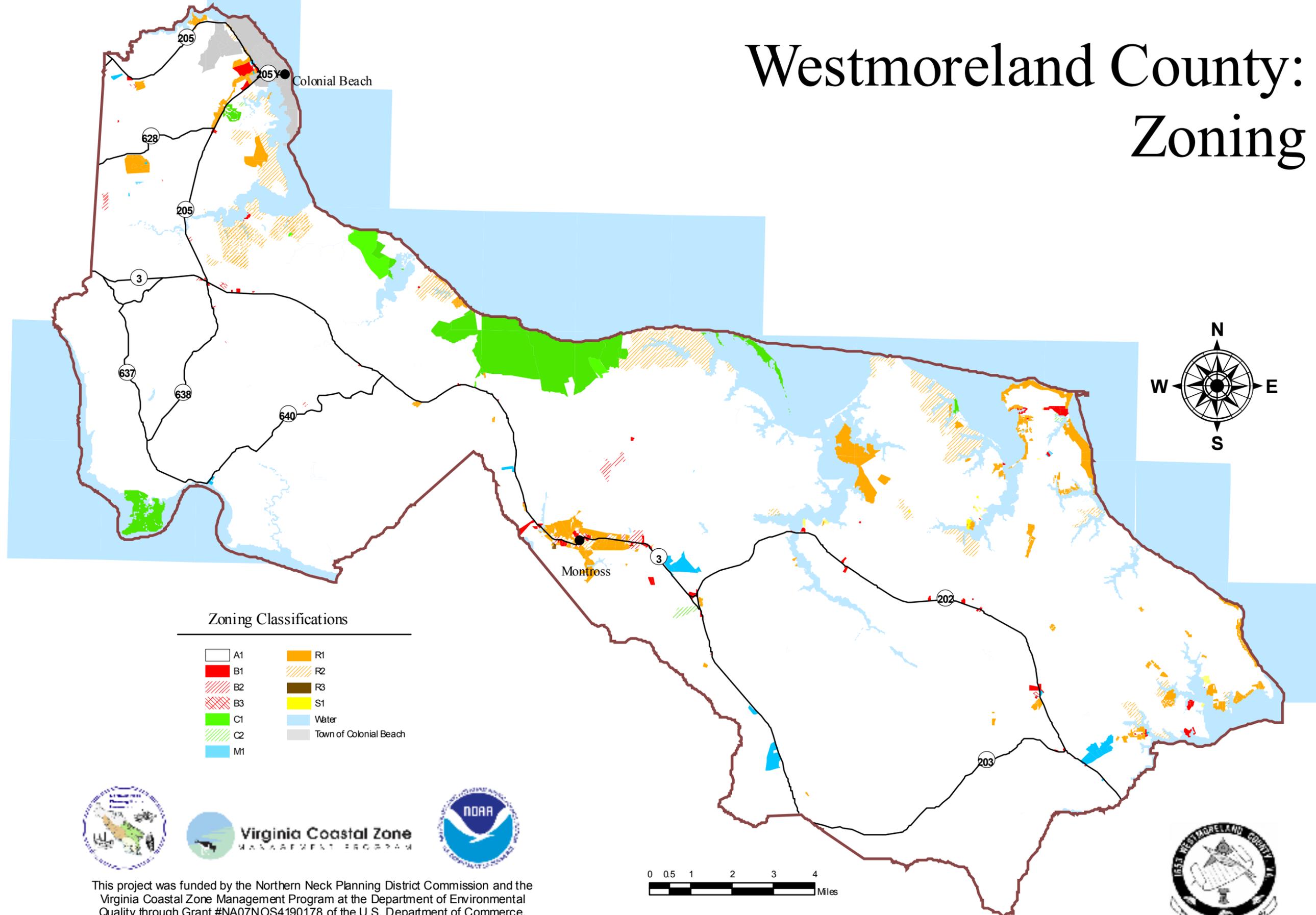
## May 2009



Map Created by the Northern Neck Planning District Commission, February, 2009.  
Funding Provided by: The Northern Neck PDC, and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

Data Source: 2001 Virginia Department of Transportation County Road Map Series.  
Copyright, The Commonwealth of Virginia.

# Westmoreland County: Zoning



**Zoning Classifications**

A1	R1
B1	R2
B2	R3
B3	S1
C1	Water
C2	Town of Colonial Beach
M1	



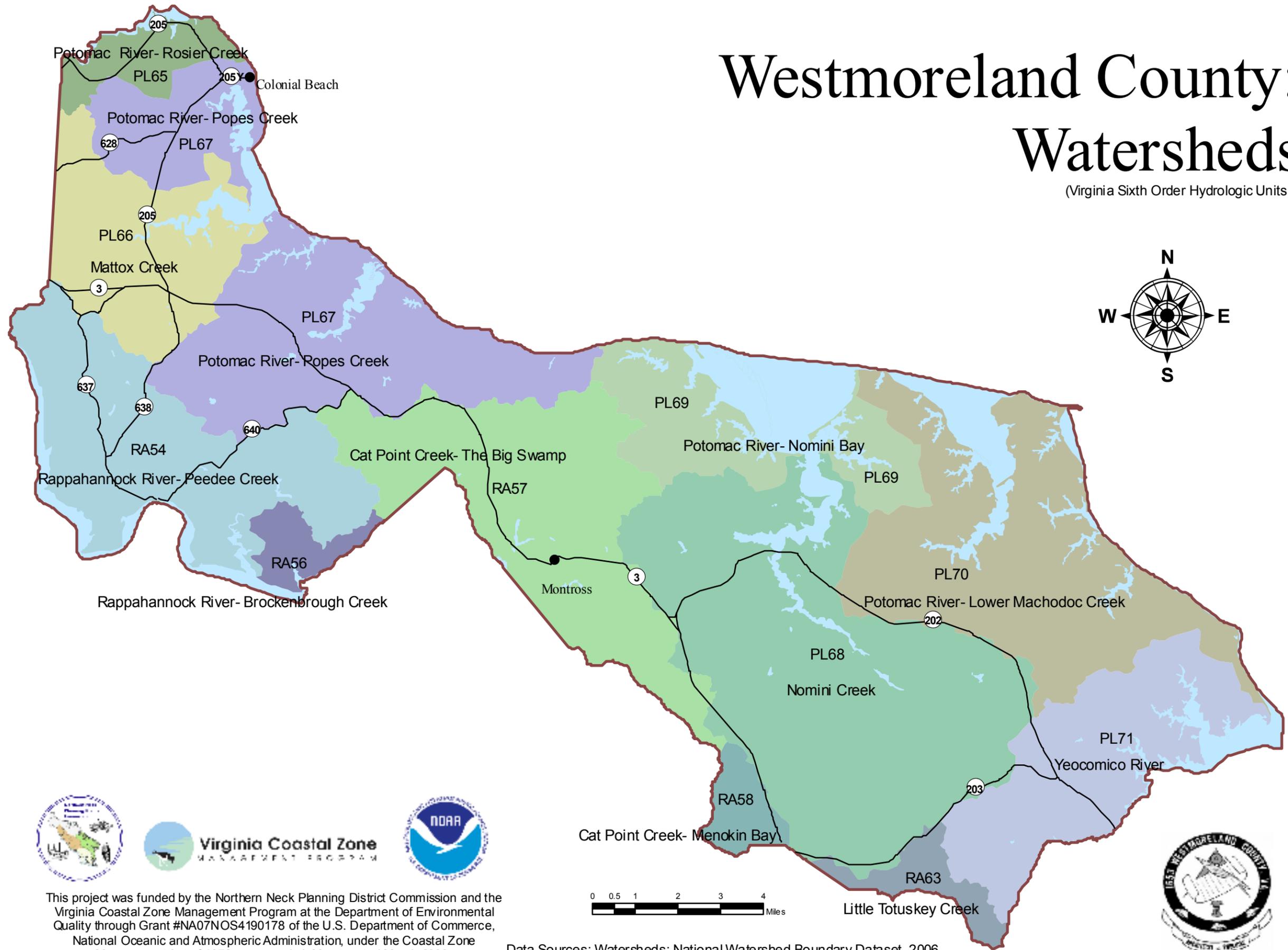
This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. Map created March 2009.



Data Sources: Westmoreland County Zoning Map  
 Shoreline: USGS 1:100,00 DLG's  
 Roads: USGS 1:100,000 DLG's

# Westmoreland County: Watersheds

(Virginia Sixth Order Hydrologic Units)

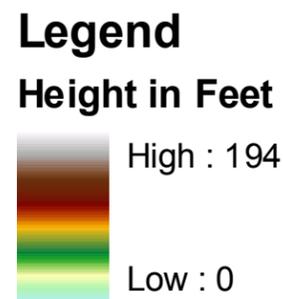
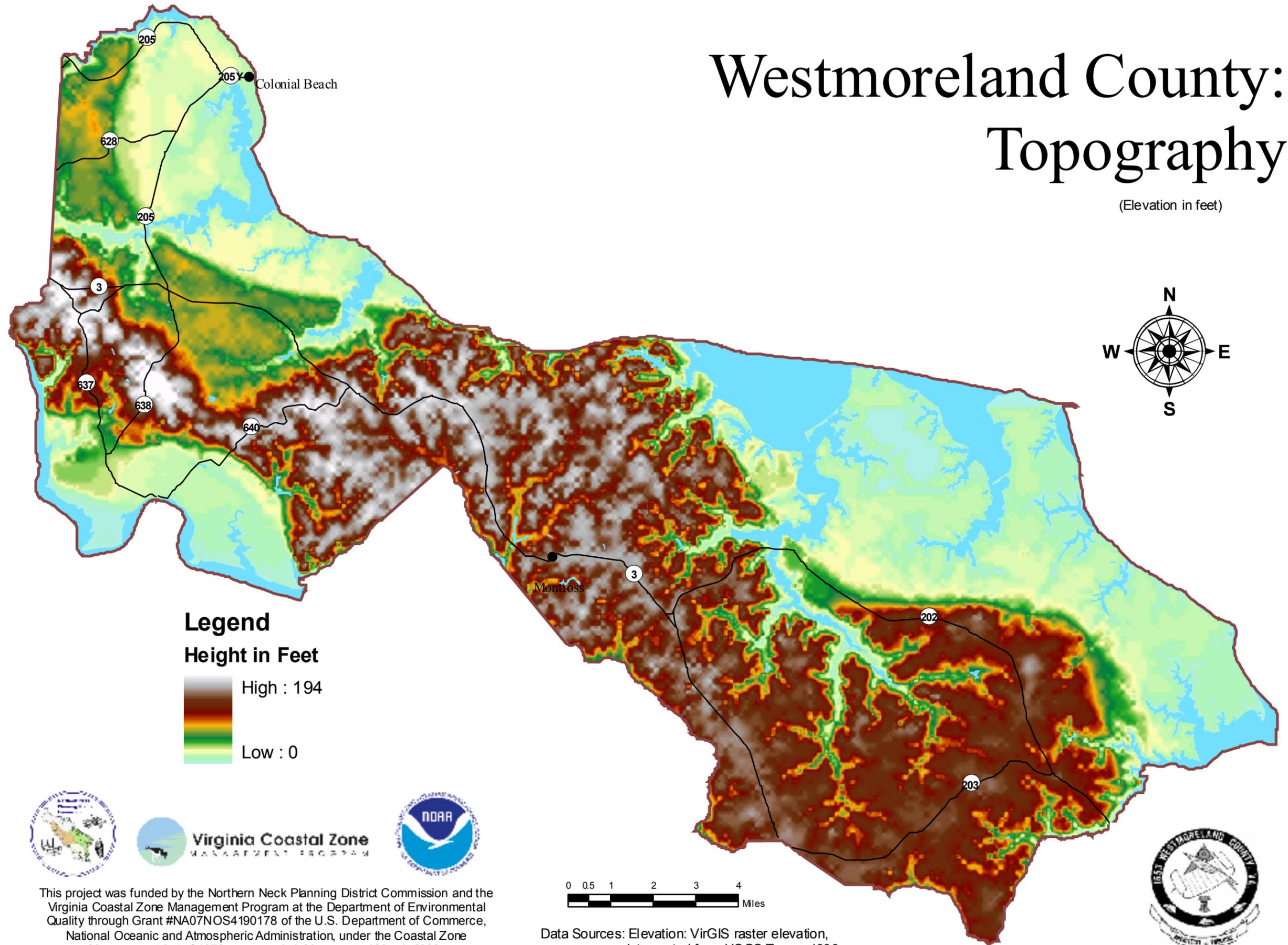


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Data Sources: Watersheds: National Watershed Boundary Dataset, 2006.  
 Shoreline: USGS 1:100,000 DLG's  
 Roads: USGS 1:100,000 DLG's

# Westmoreland County: Topography

(Elevation in feet)



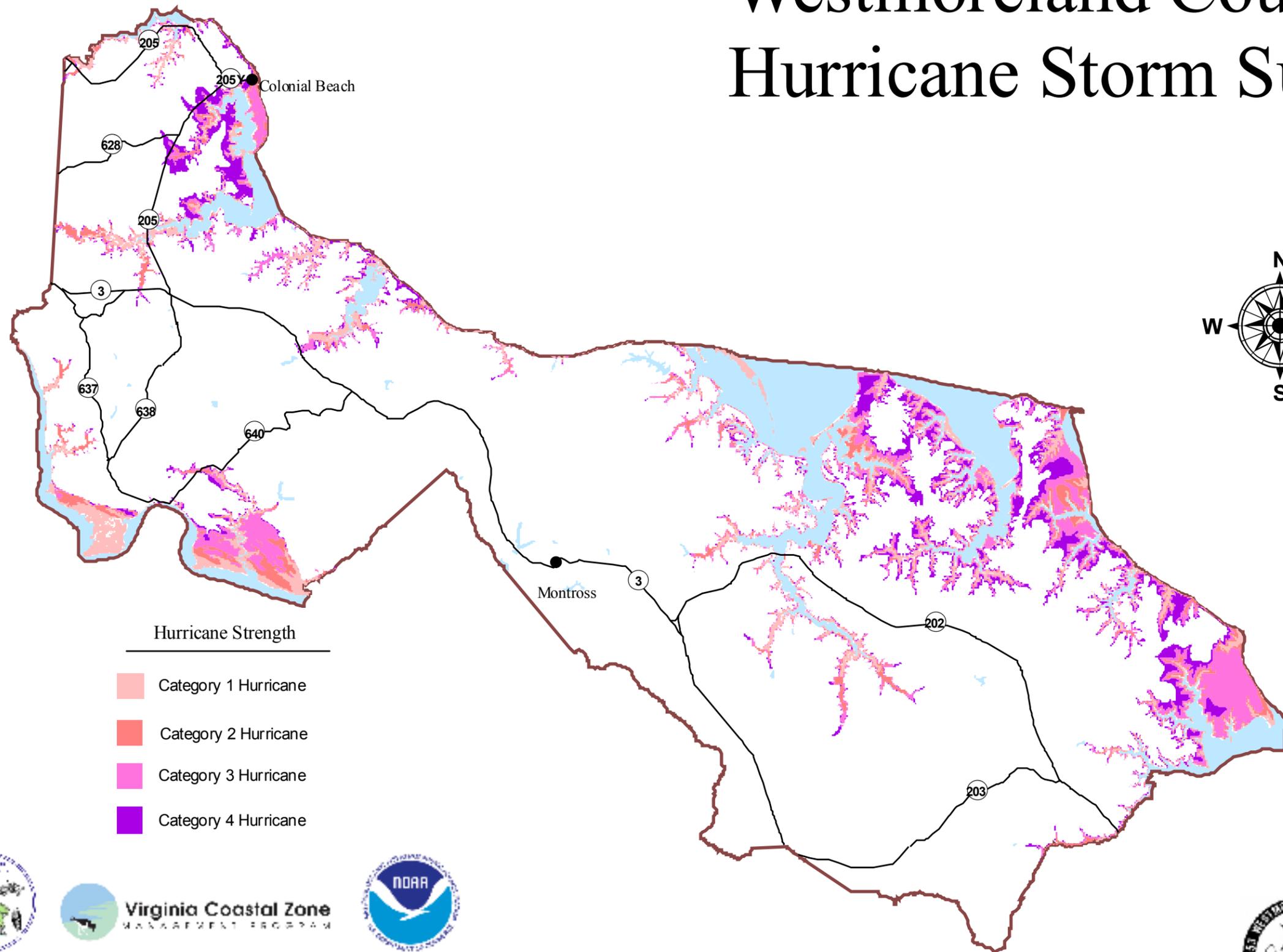
This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. Map created March 2009.



Data Sources: Elevation: VirGIS raster elevation, interpreted from USGS Topos, 1999.  
Shoreline: USGS 1:100,000 DLG's  
Roads: USGS 1:100,000 DLG's



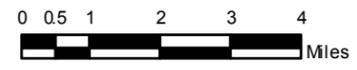
# Westmoreland County: Hurricane Storm Surge



- Hurricane Strength**
- Category 1 Hurricane
  - Category 2 Hurricane
  - Category 3 Hurricane
  - Category 4 Hurricane



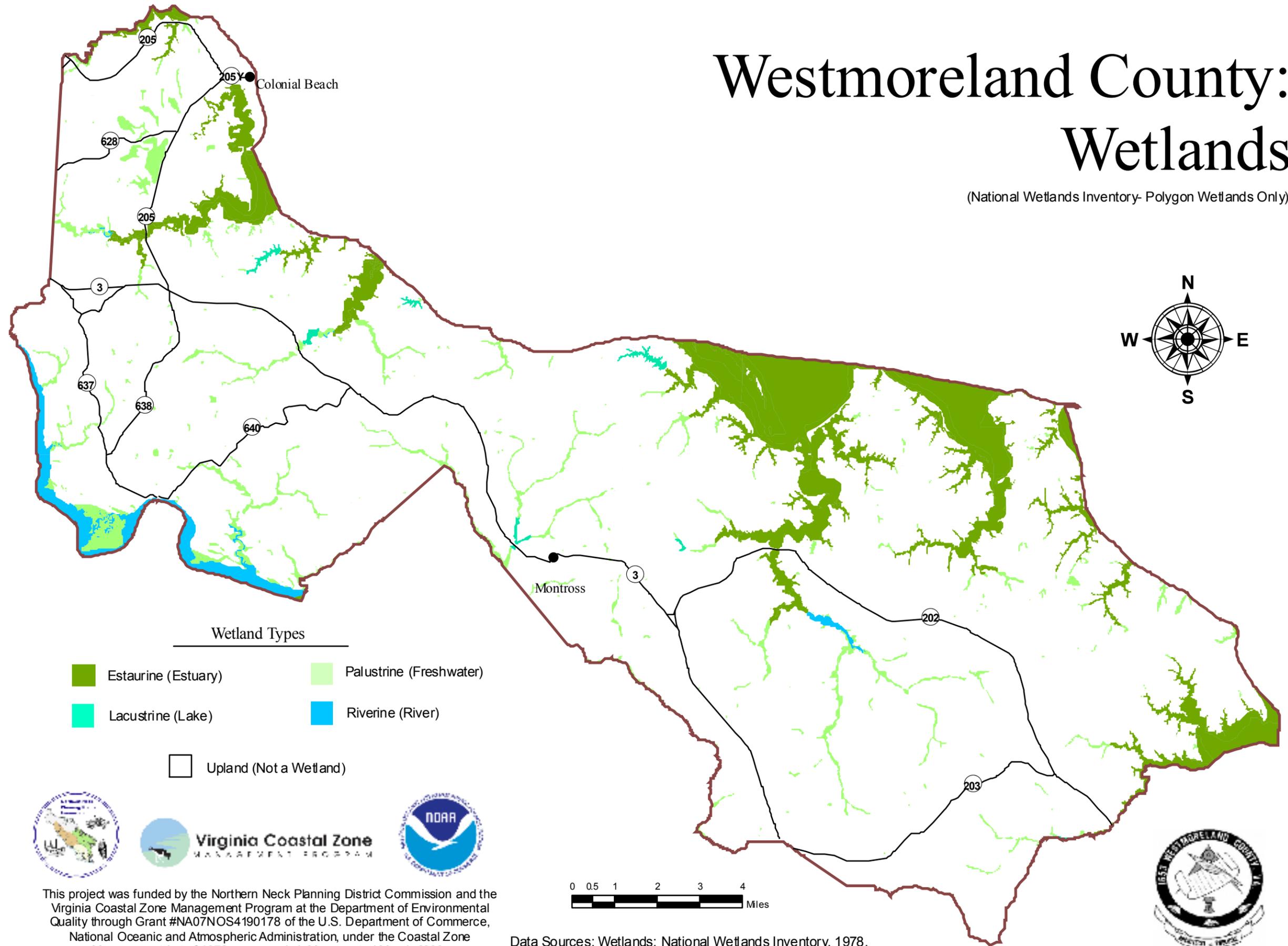
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Data Sources: Hurricane Surge Zones: Virginia Department of Emergency Management, (VDEM) 2006.  
Shoreline: USGS 1:100,000 DLG's  
Roads: USGS 1:100,000 DLG's

# Westmoreland County: Wetlands

(National Wetlands Inventory- Polygon Wetlands Only)



**Wetland Types**

- Estaurine (Estuary)
- Palustrine (Freshwater)
- Lacustrine (Lake)
- Riverine (River)
- Upland (Not a Wetland)

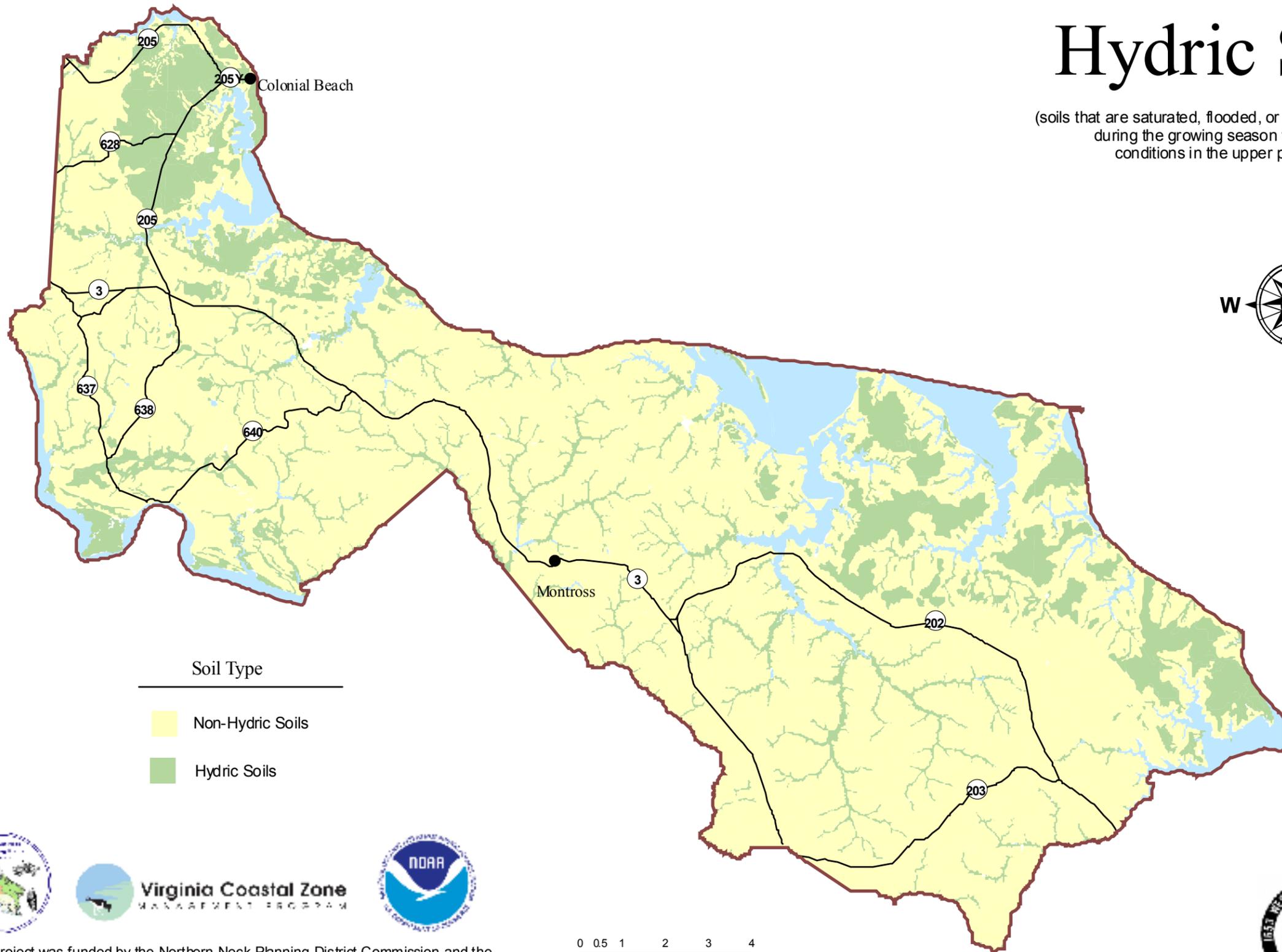


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Data Sources: Wetlands: National Wetlands Inventory, 1978.  
 Shoreline: USGS 1:100,000 DLG's  
 Roads: USGS 1:100,000 DLG's

# Westmoreland County: Hydric Soils

(soils that are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil profile)

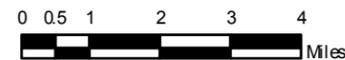


Soil Type

- Non-Hydric Soils
- Hydric Soils



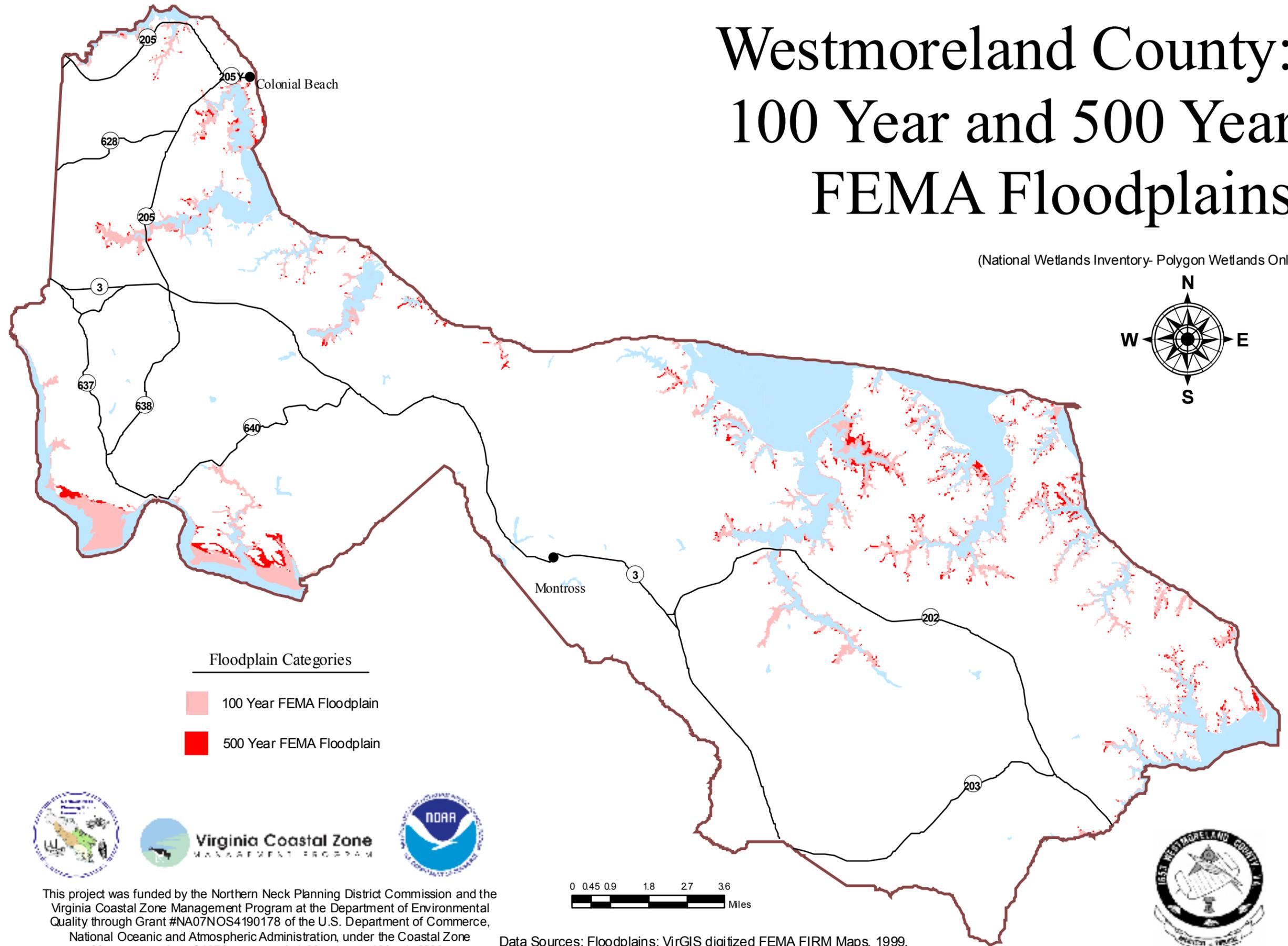
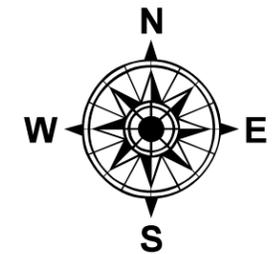
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Data Sources: Hydric Soils: USDA SSURGO Soils, 2006 and USDA Soil Survey, 1981.  
Shoreline: USGS 1:100,000 DLG's  
Roads: USGS 1:100,000 DLG's

# Westmoreland County: 100 Year and 500 Year FEMA Floodplains

(National Wetlands Inventory- Polygon Wetlands Only)

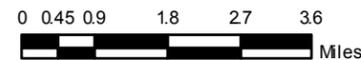


### Floodplain Categories

- 100 Year FEMA Floodplain
- 500 Year FEMA Floodplain



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. Map created March 2009.



Data Sources: Floodplains: VirGIS digitized FEMA FIRM Maps, 1999.  
Shoreline: USGS 1:100,000 DLG's  
Roads: USGS 1:100,000 DLG's



## Private Conservation Easement Technical Assistance

Individuals and persons working with landowners to enter into conservation easements need accurate maps of the properties in question to properly assess the conditions of the land for tax purposes. The NNPDC has been assisting various appraisers, individual citizens, as well as staff of the Northern Neck Land Conservancy to assist anyone interesting in conserving their land for future generations with mapping products.

### Northumberland County

Mr. G. Harris property was a property that mapping was requested in Northumberland County to aid in formulation of a conservation easement, as is the Hall Family parcels that are shown on the following pages.

### Lancaster County

The Ownings family was interested in pursuing a conservation easement and an appraiser requested both a topographic map to show elevation contours and wetlands, as well as an aerial photo of the property owned by the family which follow. The NNPDC is happy to provide this service to help conserved rural, open space in the Northern Neck Region.

### Westmoreland County

Northern Neck Land Conservancy requested a map showing currently conserved parcels within the village of Kinsale in Westmoreland County, and the NNPDC provided that map so they might approach landowners neighboring conserved parcels to increase conserved acreage within this area.

The Devine family was interested in learning about conservation easements and a map was created for the Northern Neck Land Conservancy to help them assess conditions on their land holdings.

The Latane family contacted the NNPDC for maps for their property for use in a conservation easement. They were familiar with the mapping services the NNPDC provides and contacted us directly.

The Virginia Crop Cooperative, through the Northern Neck Land Conservancy, requested maps for their land holdings near the Mt. Holly area in Westmoreland County. This conservation easement will protect many miles of the eastern shore of the upper reaches of the Nomini River from development in the future, and the NNPDC is more than happy to assist them in their efforts.

# G. Harris Parcels, Northumberland County

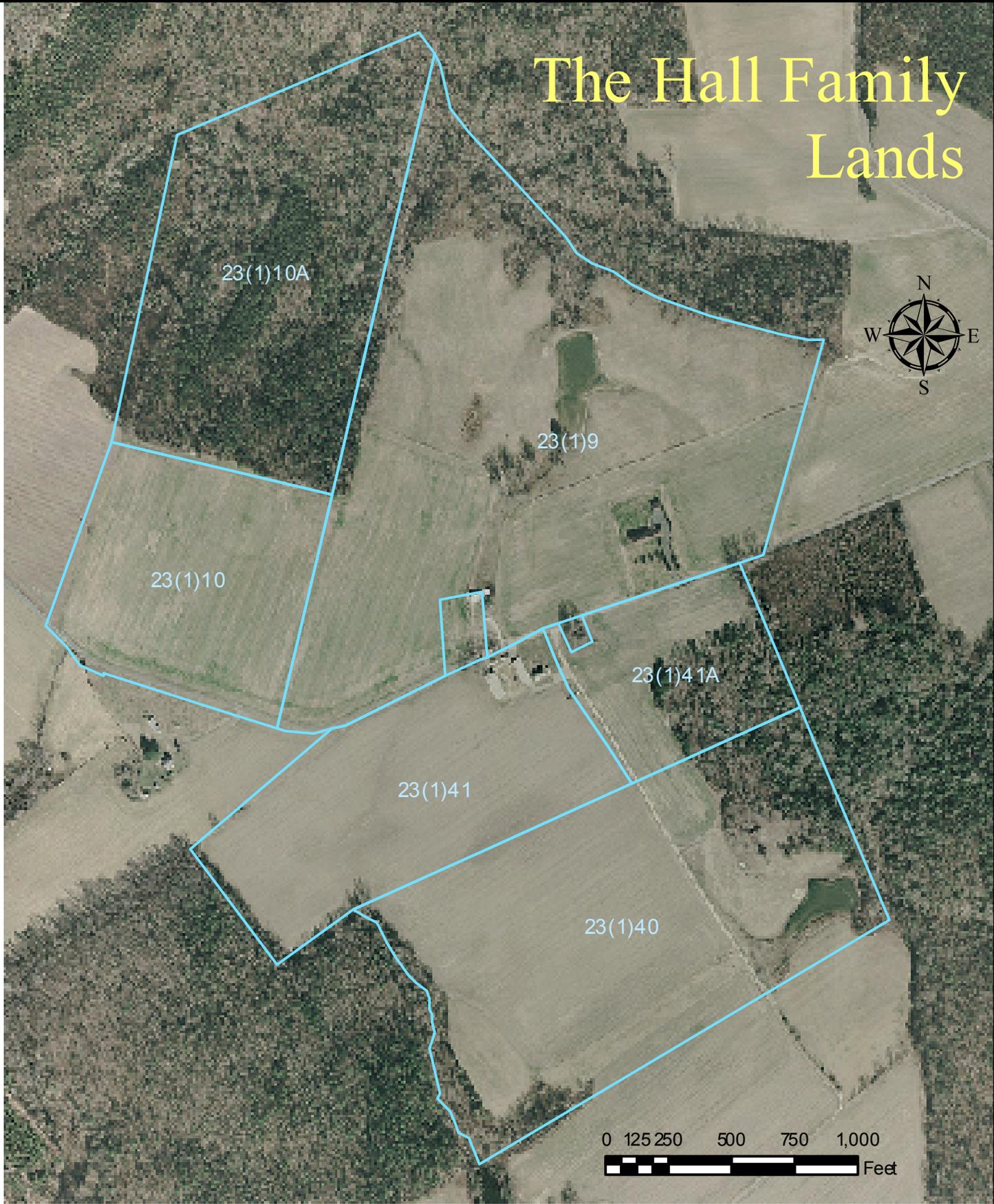


Virginia Coastal Zone  
MANAGEMENT PROGRAM



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS 4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

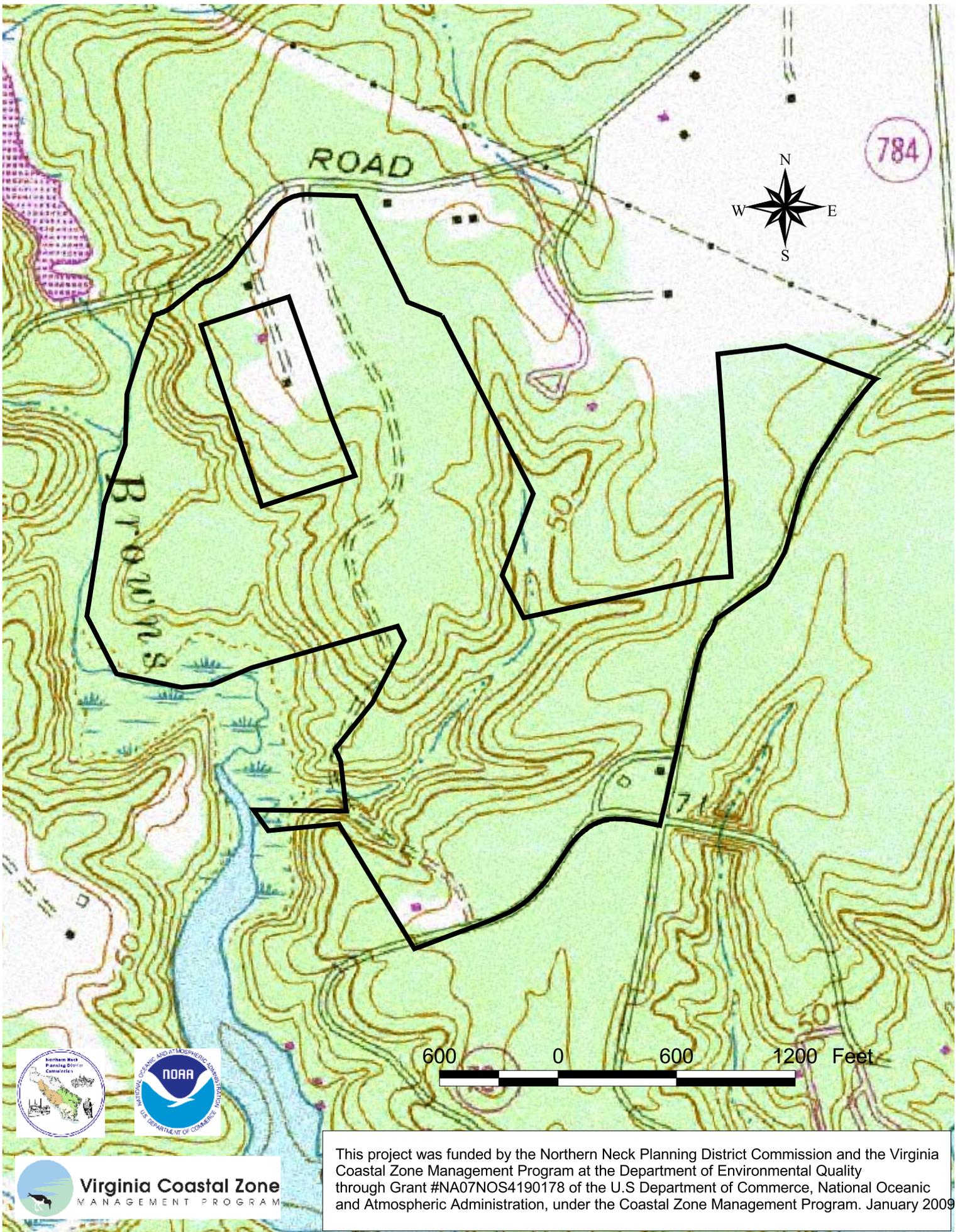
# The Hall Family Lands



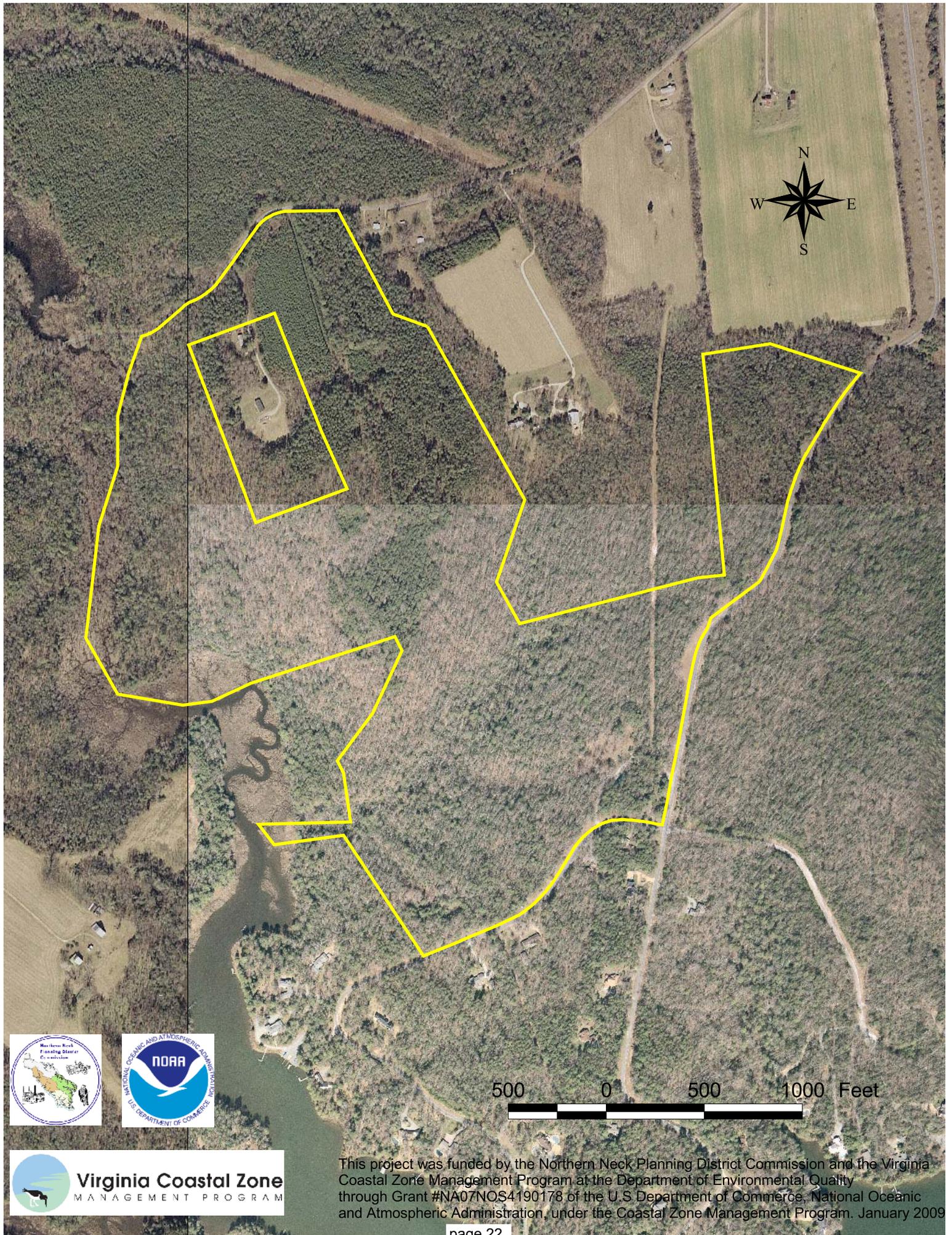
Virginia Coastal Zone



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



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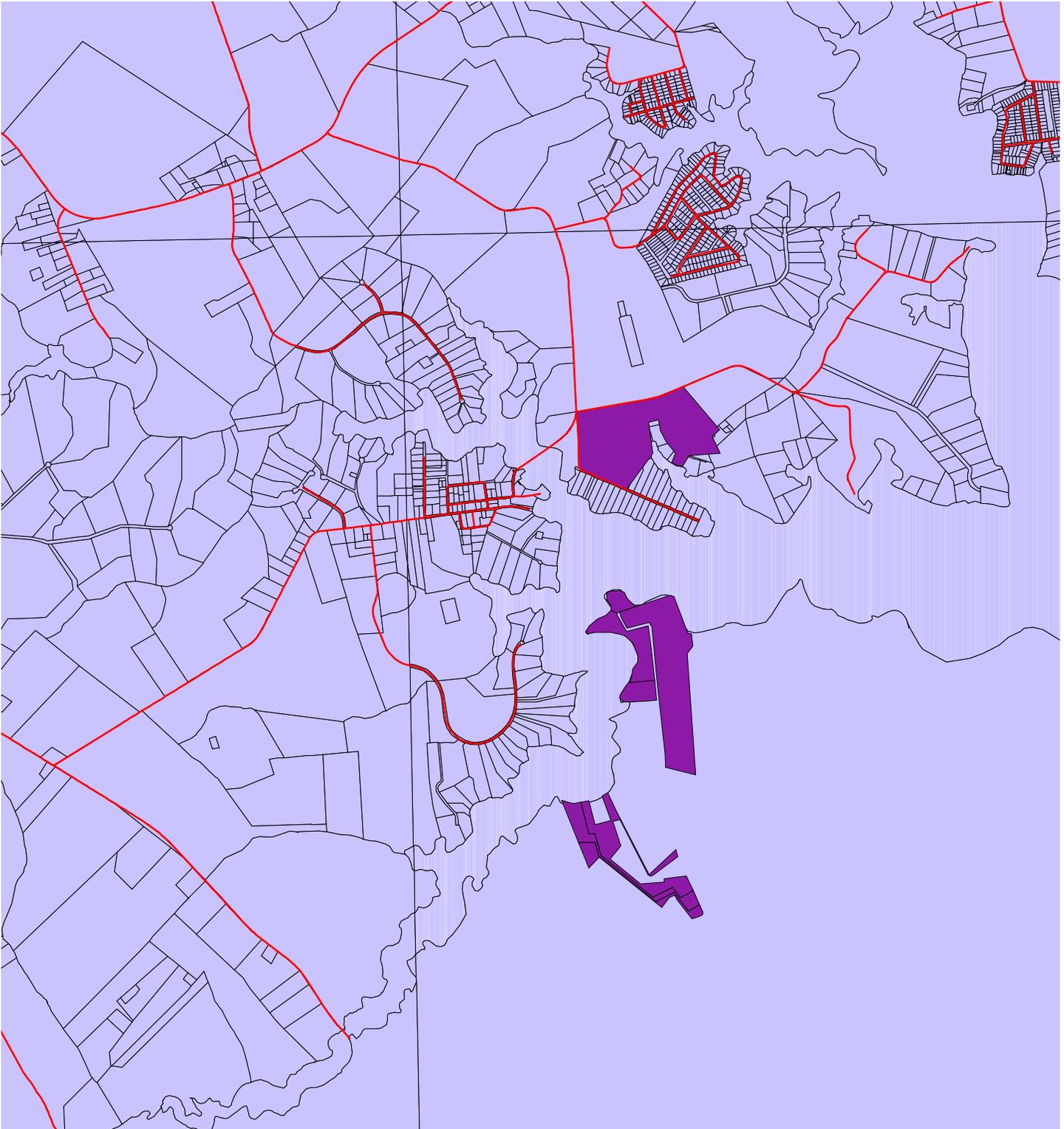


500 0 500 1000 Feet



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Program. January 2009

# Kinsale Conserved Lands



1000 0 1000 2000 Feet



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. March 2009

# Devine Property

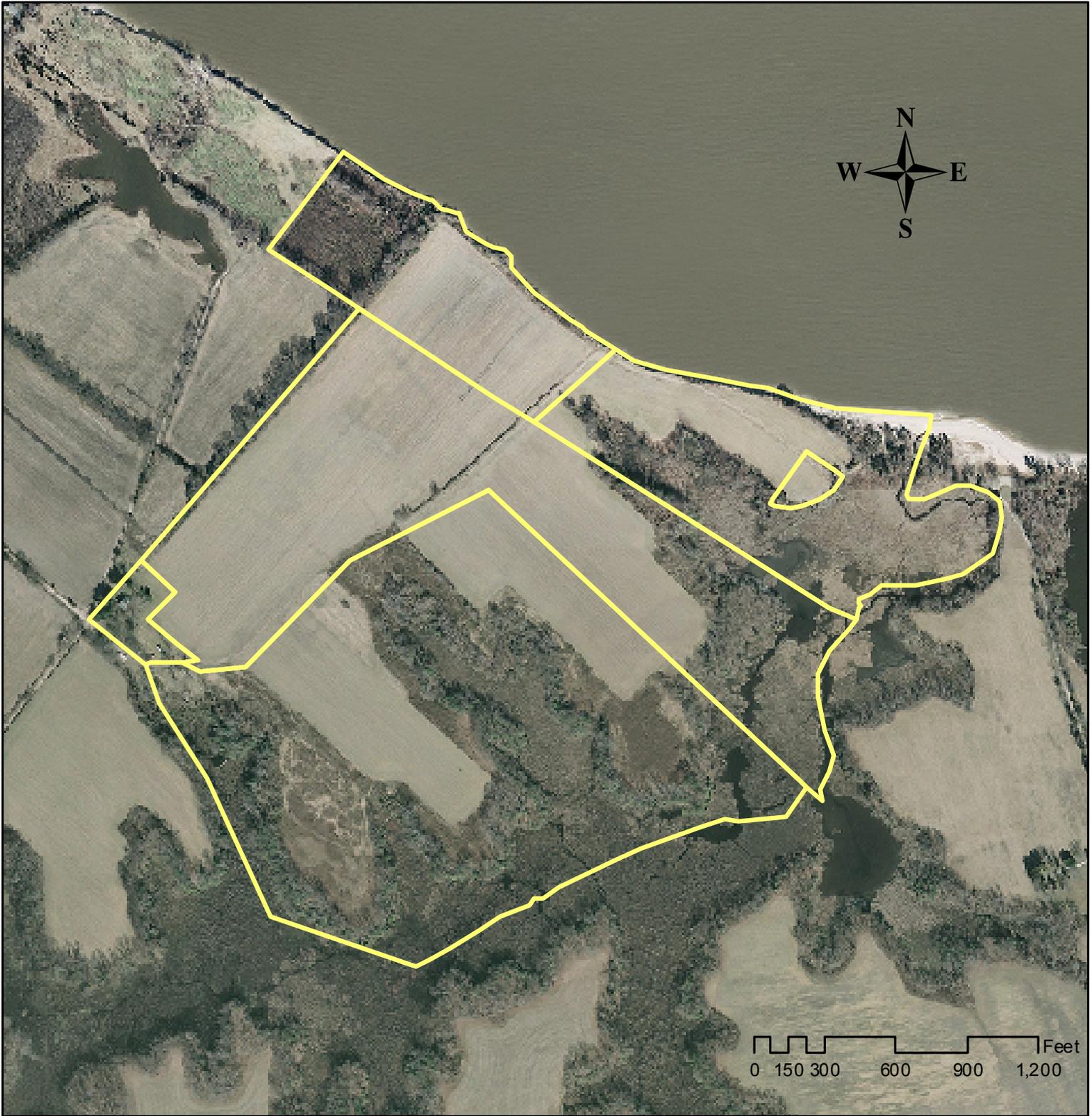


500 0 500 1000 Feet



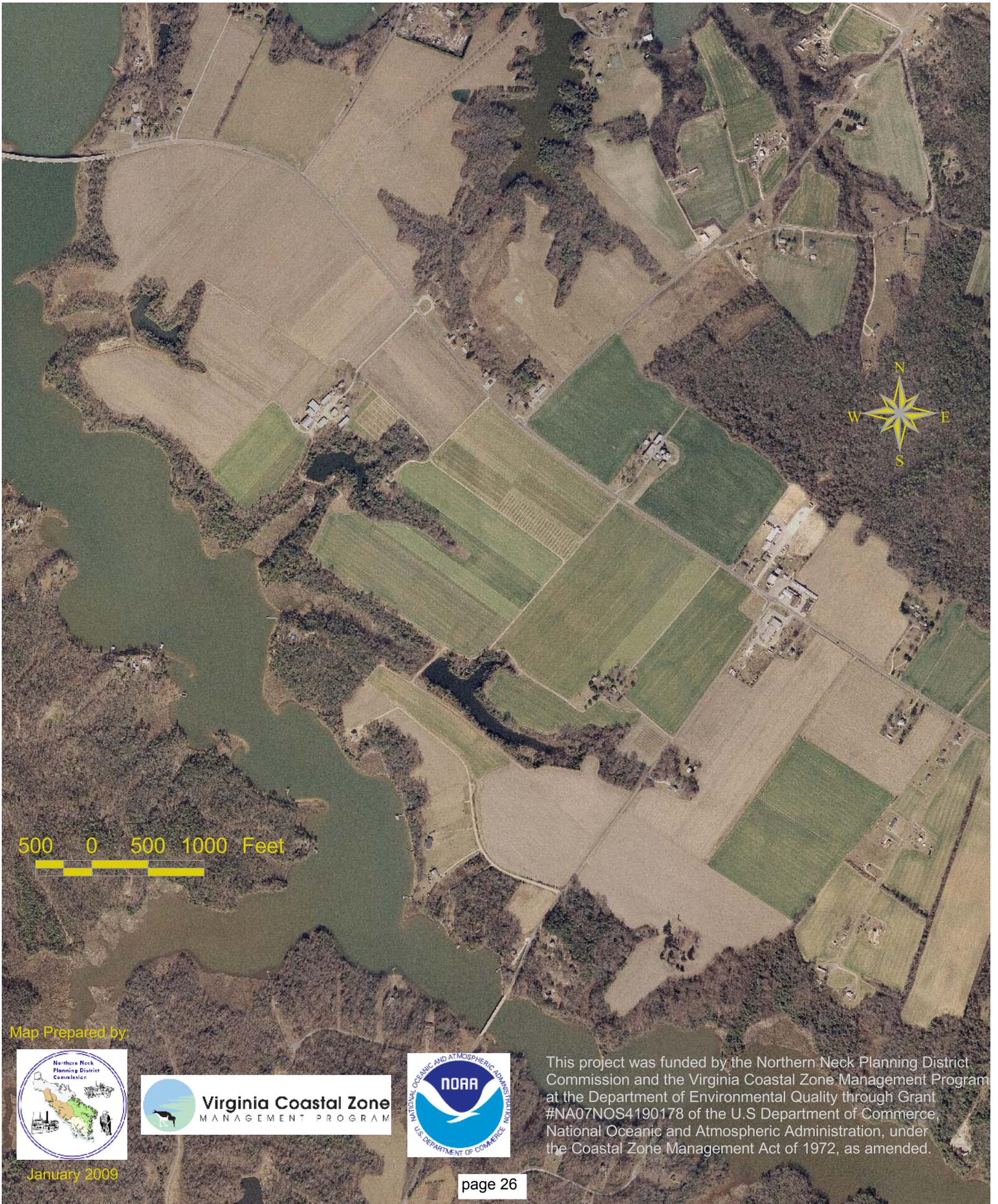
This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended. March 2009

# Westmoreland County: Parcels 11-4B, 5, 5A, 5B, 5C & 5D



This mapping project was funded by the Northern Neck Planning District Commission, and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

# Virginia Crop Cooperative, Mt. Holly



500 0 500 1000 Feet

Map Prepared by:



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA07NOS4190178 of the U.S Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

January 2009

## Virginia Coastal Zone Management Coastal Partner Support

### Department of Conservation and Recreation Support

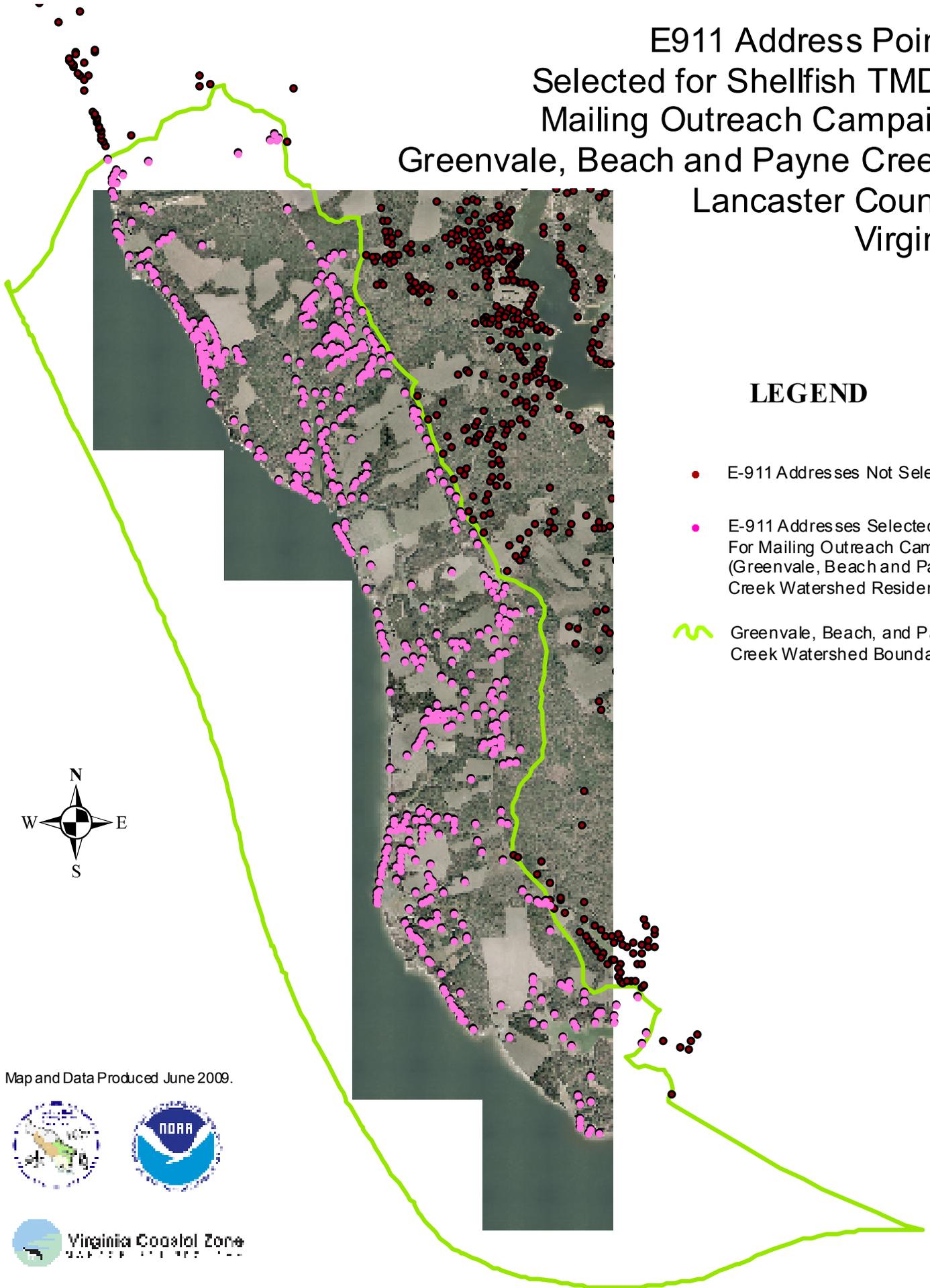
Department of Conservation and Recreation (DCR) staff at the Tappahannock office requested assistance in compiling a mailing address list for citizens residing in three shellfish impaired watersheds in Lancaster County. The watersheds are the first shellfish TMDL implementation plan in the Northern Neck, and they are Greenvale Creek, Paynes and Beach Creek. NNPDC staff used the county's E-911 address database and clipped out E-911 addresses of structures within the three watershed boundaries. From the attribute file of the GIS point file, the addresses were converted to a MS Excel database so that DCR staff could create a mailing list for education and outreach to increase citizen education and participation in the formulation of an shellfish TMDL implementation plan.

Several months (and many meetings) later DCR staff requested an aerial photo of the three watersheds to be used in the final TMDL Implementation Plan. In addition to the photos, roads streams, watersheds and water quality monitoring points were depicted on this map.

### Citizen Requested Shellfish TMDL Data Sets

A citizen that has been heavily involved in the Greenvale Creek Shellfish TMDL Implementation planning process requested NNPDC data for several watersheds in Northumberland county which were in the process of having shellfish TMDL's written. He was interested in examining the differences from local data on land use and number of households compared to the states' data sets. Maps were created for Presley, Hull, Hack, Cubbitt and Cod Creek in Northumberland County all of which empty into the Potomac River. Forest cover from the Department of Forestry 2005 forest assessment, as well as farm fields from the NNPDC's 2000 farm inventory were used to calculate acreages for agriculture and forestry for each sub-watershed. In addition, county E-911 structures were clipped to the watershed boundaries, total per watershed calculated and were used as a proxy for number of households in the watersheds. These maps were also provided to DCR staff so that they could use the data in their TMDL calculations if they so desired.

# E911 Address Points Selected for Shellfish TMDL Mailing Outreach Campaign Greenvale, Beach and Payne Creeks Lancaster County, Virginia



## LEGEND

- E-911 Addresses Not Selected
- E-911 Addresses Selected For Mailing Outreach Campaign (Greenvale, Beach and Payne Creek Watershed Residents)
- ~ Greenvale, Beach, and Payne Creek Watershed Boundary

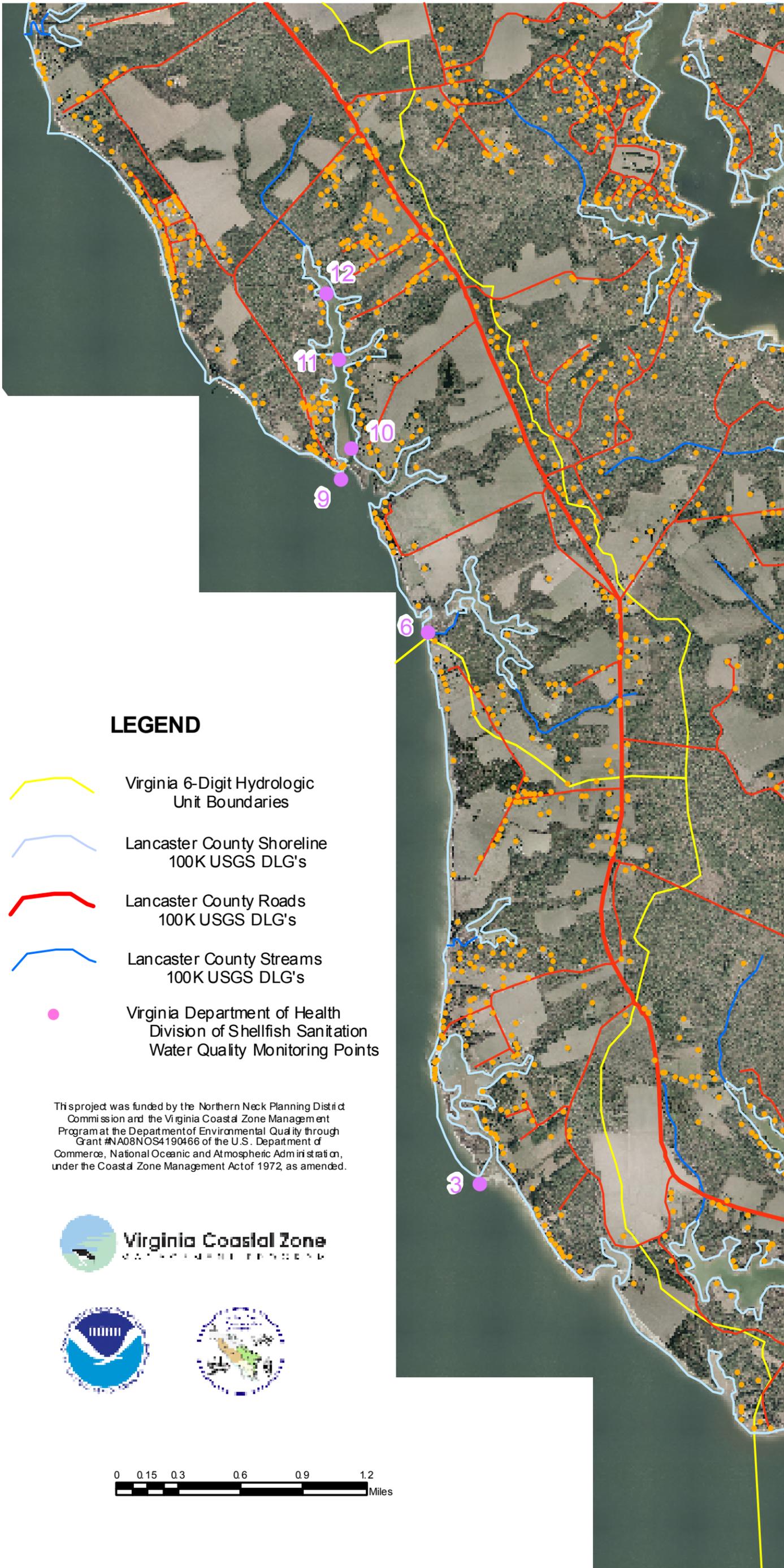


Map and Data Produced June 2009.



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

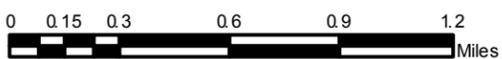
# Greenvale and Beach Creek: 2007 Aerial Photos, Roads, Streams, E911 Structures, Watershed Boundaries and VDH-DSS Monitoring Points



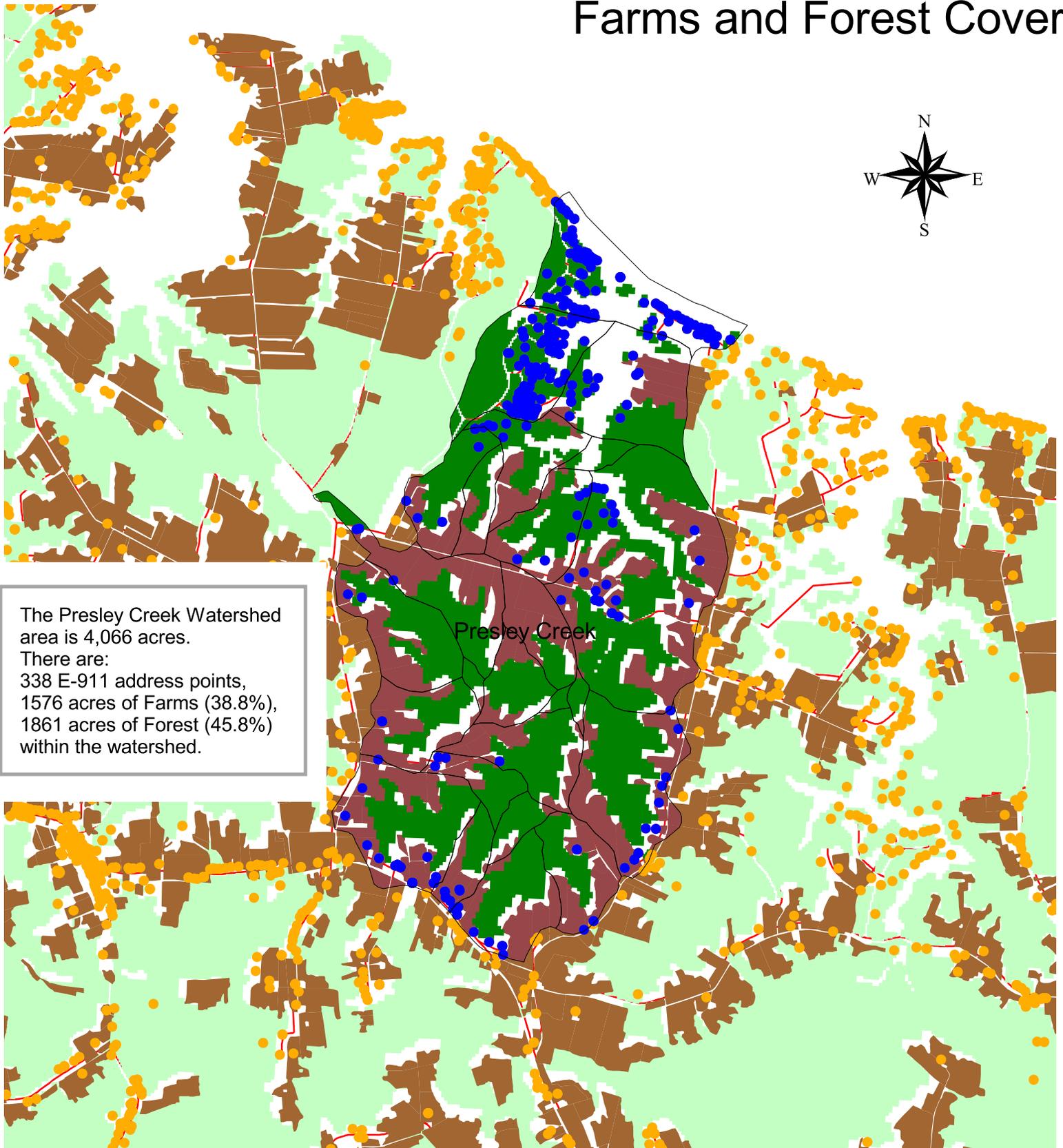
## LEGEND

-  Virginia 6-Digit Hydrologic Unit Boundaries
-  Lancaster County Shoreline 100K USGS DLG's
-  Lancaster County Roads 100K USGS DLG's
-  Lancaster County Streams 100K USGS DLG's
-  Virginia Department of Health Division of Shellfish Sanitation Water Quality Monitoring Points

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

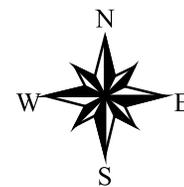


# Presley Creek with 911 Address Points, Farms and Forest Cover



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through GrantNA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

# Hull Creek with 911 Address Points, Farms and Forest Cover



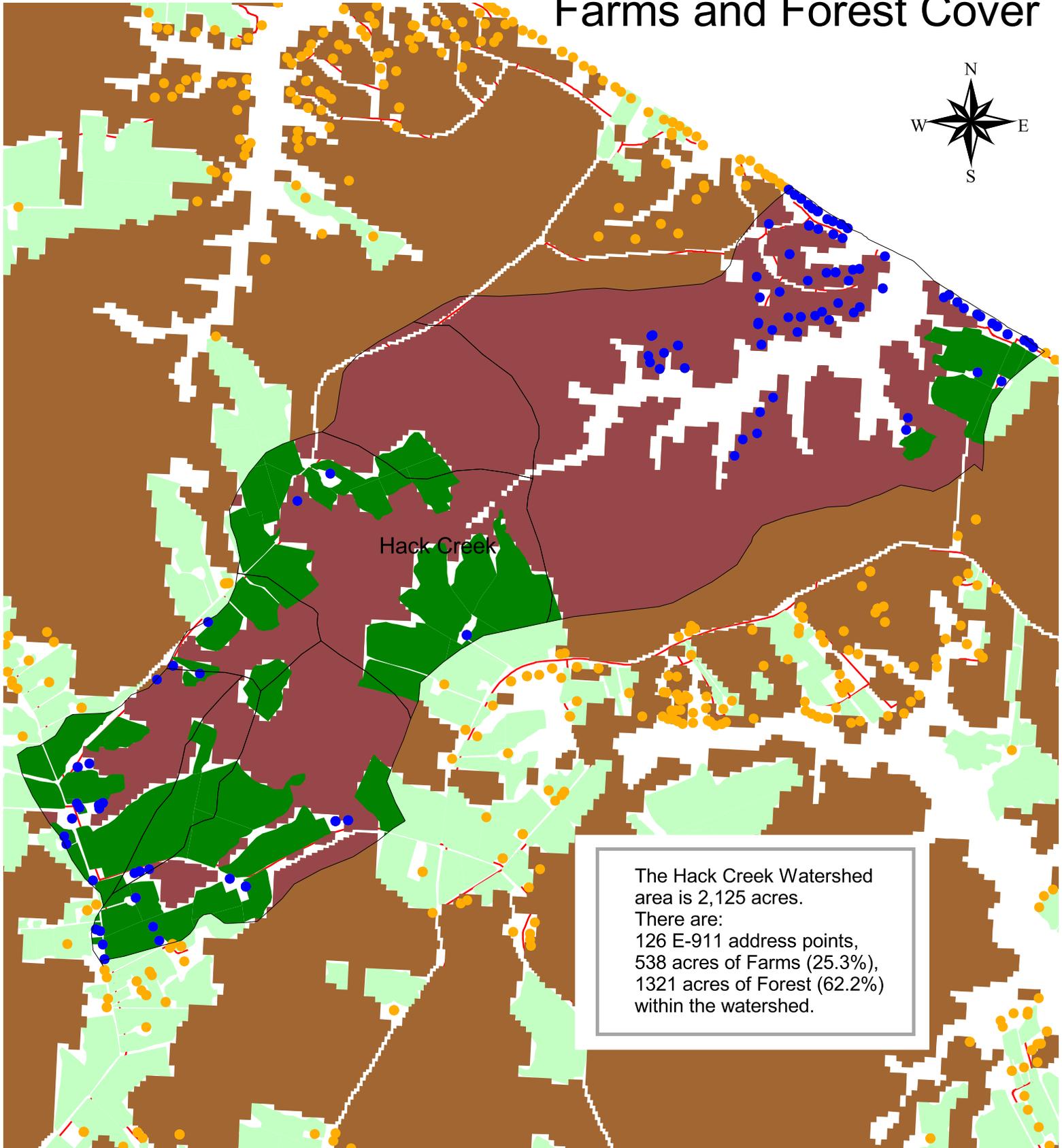
The Hull Creek Watershed area is 6,725 acres.  
There are:  
511 E-911 address points,  
1775 acres of Farms (26.4%),  
3706 acres of Forest (55.1%)  
within the watershed.

Hull Creek



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

# Hack Creek with 911 Address Points, Farms and Forest Cover

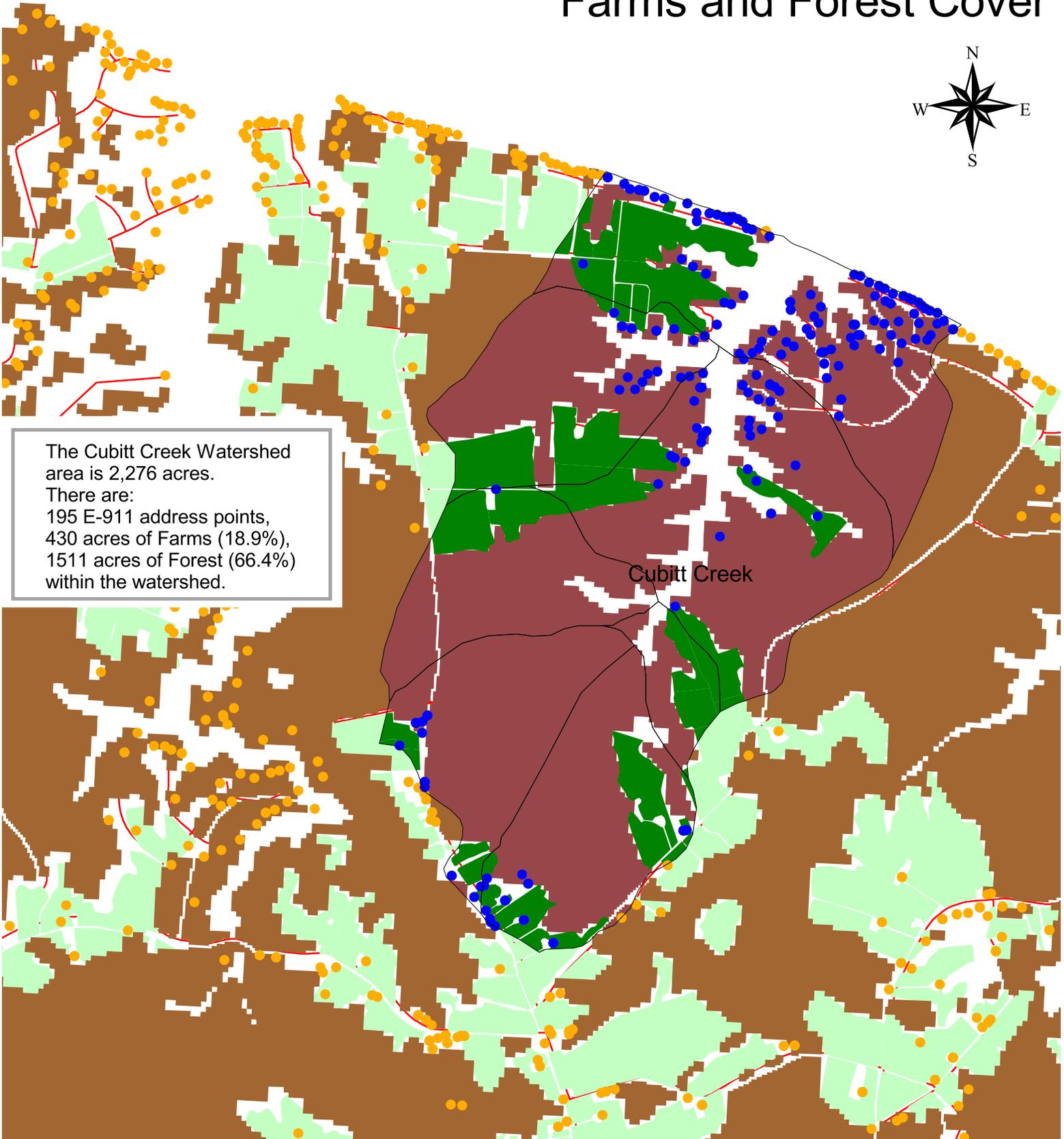
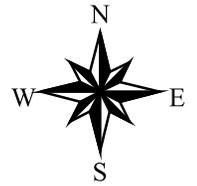


The Hack Creek Watershed area is 2,125 acres. There are: 126 E-911 address points, 538 acres of Farms (25.3%), 1321 acres of Forest (62.2%) within the watershed.



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

# Cubitt Creek with 911 Address Points, Farms and Forest Cover



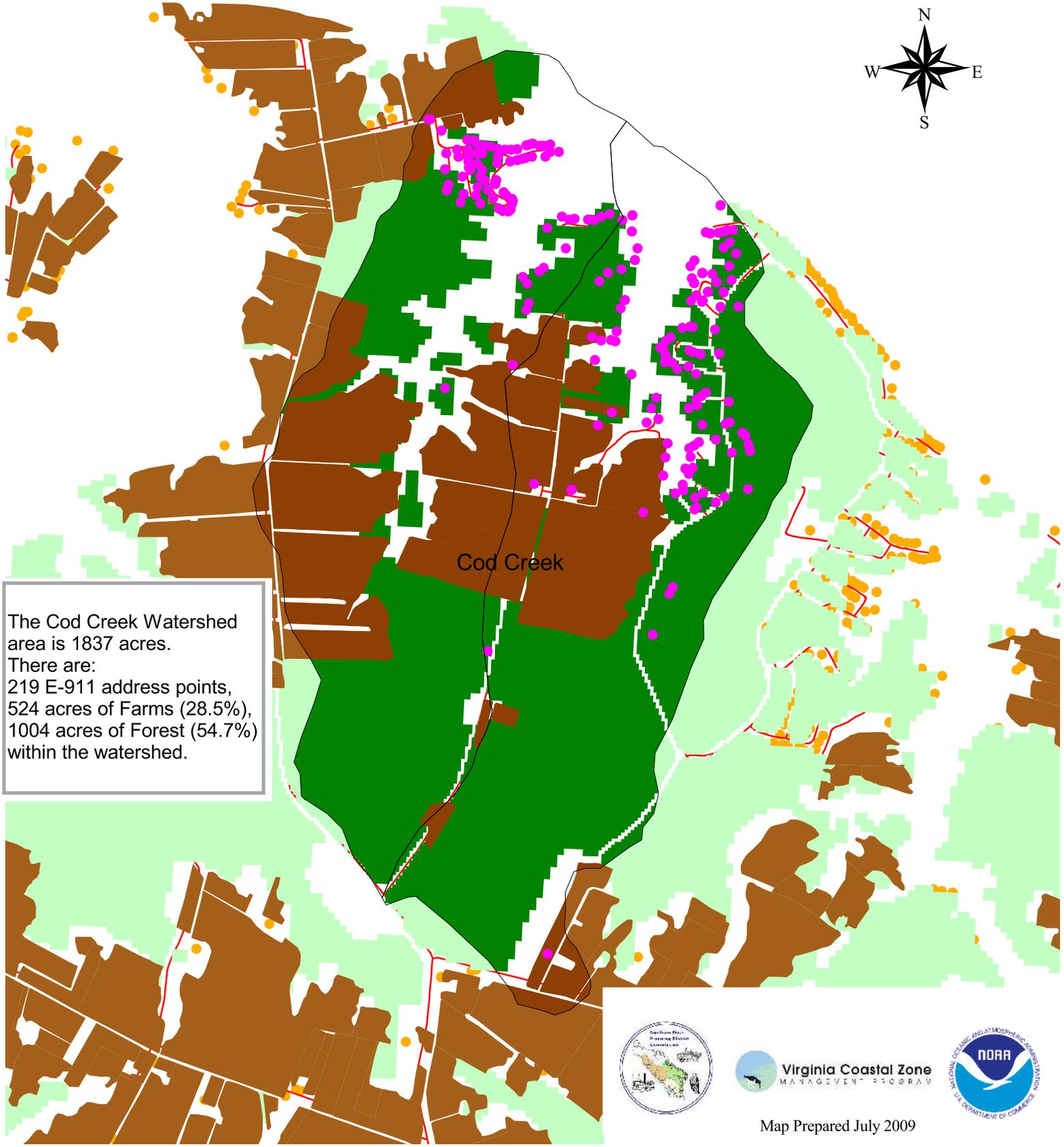
The Cubitt Creek Watershed area is 2,276 acres.  
There are:  
195 E-911 address points,  
430 acres of Farms (18.9%),  
1511 acres of Forest (66.4%)  
within the watershed.

Cubitt Creek



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

# Cod Creek with 911 Address Points, Farms and Forest Cover



Map Prepared July 2009

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through GrantNA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.

## Other Mapping Support

### S.A.I.F. Water Well Inventory Map

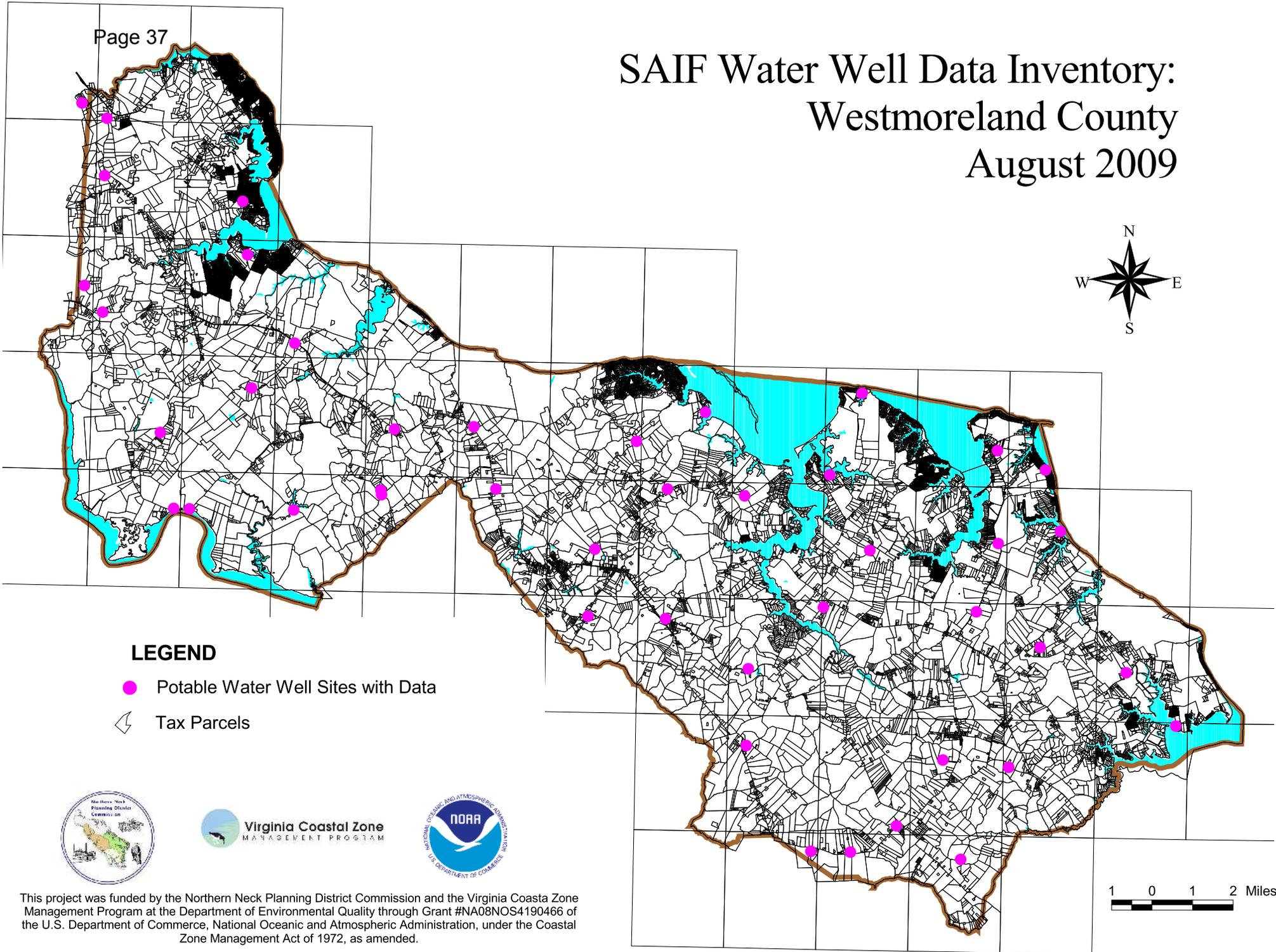
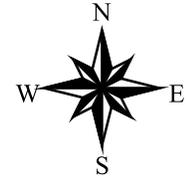
S.A.I.F. Water is a non-profit, faith based group interested in providing potable drinking water to low income citizens. The S.A.I.F. acronym stands for S= Safe, A= Affordable, I=Investigated, F= For All. (For more information about the group, visit <http://www.saifwater.org>.) The NNPDC supports the efforts of this organization in providing safe, potable water to low income residents throughout the Northern Neck. To that end, S.A.I.F. Water had a research project to analyze well drilling data from Virginia Department of Health data from at least one well in each of the county's individual taxmaps. The purpose of this project to have a guidance document to assist well drillers when providing new wells to constituents in areas nearby of the well inventory. Location coordinates were provided for each well, but some location were not accurate according to the ancillary data, so some wells were digitized with the help of e-911 address points. The hoped for result was to have a depth and a target aquifer to reach based on surrounding well data for any new citizens that might require a new well. So far, the NNPDC has only mapped one county, Westmoreland, but hope to map the other counties where S.A.I.F. water has locational well data inventoried, as time and resources allow. NNPDC staff is also investigating ways to depict the well data as a 3 dimensional map representation.

### Virginia Department of Emergency Management - Hazard Mitigation Plan Revision Application Support

The NNPDC is preparing to update the Northern Neck Regional Hazard Mitigation Plan, and for the grant application form requested a physiographic sub-province map of the Northern Neck. The photocopied map that was available was very small and depicted the whole state of Virginia, instead of the Northern Neck. NNPDC staff used elevation data to subset out the physiographic sub-provinces for the map. Basically, it shows the scarp that separates the upland of the Northern Neck with the flat low land adjacent to the surrounding water bodies. This map was included in the NNPDC Hazard Mitigation Plan Revision Grant Application.

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# SAIF Water Well Data Inventory: Westmoreland County August 2009



### LEGEND

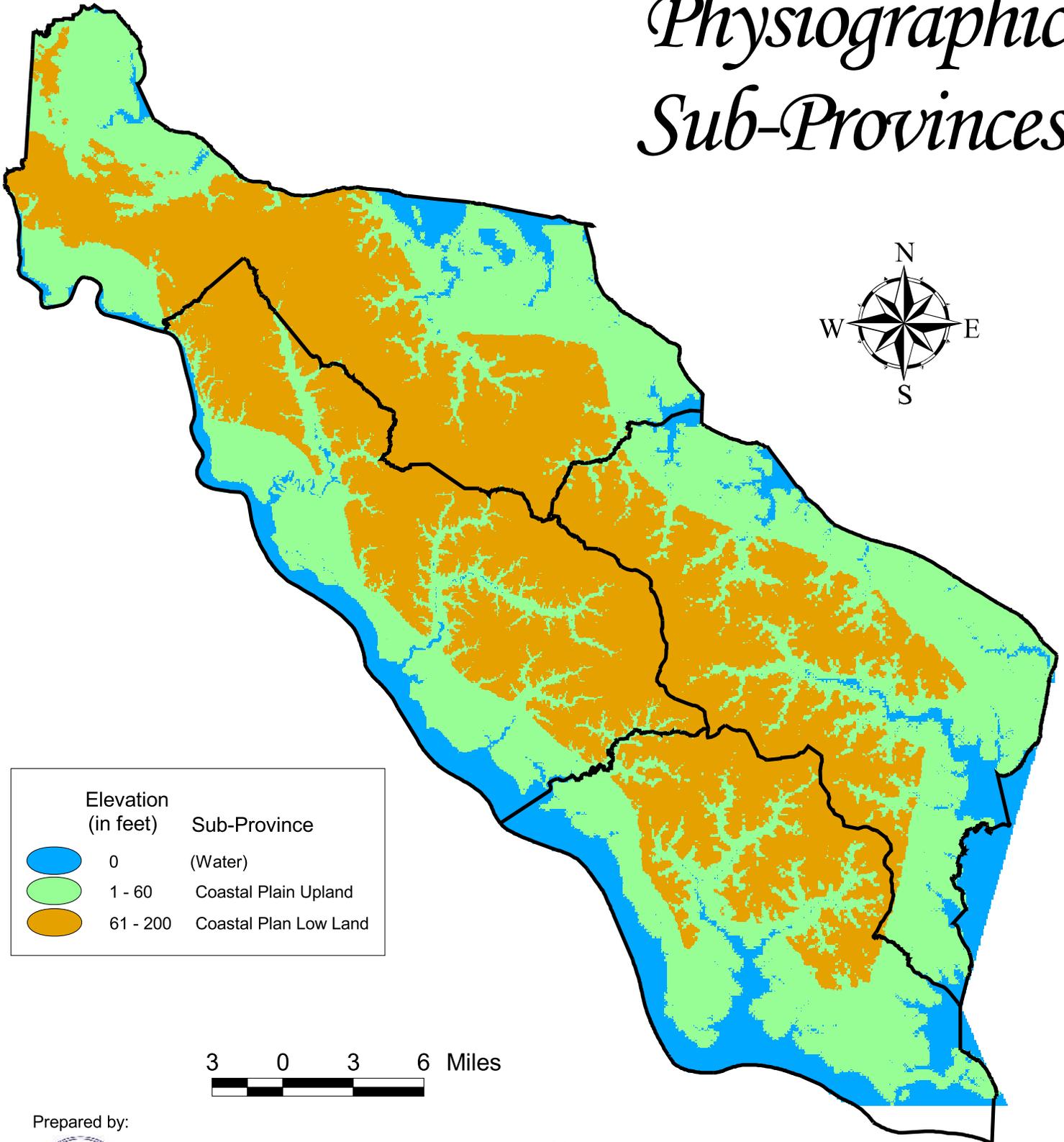
- Potable Water Well Sites with Data
- Tax Parcels



This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



# Northern Neck: Physiographic Sub-Provinces



Elevation (in feet)	Sub-Province
0	(Water)
1 - 60	Coastal Plain Upland
61 - 200	Coastal Plain Low Land



Prepared by:



**Virginia Coastal Zone**  
MANAGEMENT PROGRAM



Funding Provided by: The Northern Neck Planning District Commission; Department of Environmental Quality's Coastal Program through Grant #NA08NOS4190446 of the U.S. Department of Commerce, National Oceanic Administration, under the Coastal Zone Management Act of 1972, as amended,

September 2009

## Local Planning Coordination

The Northern Neck Planning District Commission's local planning coordination function of the NNPDC Technical Assistance Program is an invaluable resource for state agencies, as well as the local governments, in addition to citizens and non-profit organizations. Some highlights of the outcomes of the quarterly Land Use Administrator's meetings, as well as outcomes from meetings with regional watershed roundtables, will be highlighted in this report to illustrate the effectiveness of these meetings.

At the first quarterly Northern Neck Land Use Administrator's meeting, which included several members from the counties Wetlands Boards, Virginia Institute of Marine Science (VIMS) staff presented a training session on integrated shoreline management. VIMS staff discussed how to reach and educate landowners about non-structural approaches before they contact a marine contractor and invest a lot of time designing a structural shoreline protection measure. County staff attending questioned VIMS staff on the wisdom of the recent elimination of site visits for advice on county wetlands board projects. VIMS staff responded that the shift to a desktop review of the materials submitted in each wetland board application is a cost saving mechanism, and until adequate funding was available for financing site visits, this would be the standard review procedure. With the downturn in the economy, adequate funding will not become available in the near foreseeable future. This is a good example of state agencies (and more specifically Virginia Coastal Program networked agencies) receiving valuable feedback from local government staff that are impacted by their decisions. The issue now is to try to locate funding to reinstate the wetland board field support to assess conditions and tailor shoreline protection approaches that have the least impact on coastal resources.

During the second Northern Neck Land Use Administrator's meeting, Virginia Department of Conservation and Recreation's (DCR) Regional Manager Robert Bennett briefed county staff on upcoming revisions and procedural changes regarding Virginia storm water regulation. The state has received authority from EPA to regulate storm water through the Department of Conservation and Recreation and is beginning the process to start handing storm water authority to local governments that have approved storm water plans and staffing in place. Since engineered plans must be submitted, county staff commented that they do not have the technical expertise to review the plans that are required. Mr. Bennett responded that there are training courses being developed, modeled after the successful Erosion and Sediment Control Training Program the state currently runs. Mr. Bennett also mentioned the course would be in modules so that there would be different levels of accreditation, so there would be flexibility for some staff to take the lower level courses, while fewer staff would become accredited at the highest level. Another question raised was the premise that this new storm water program is to be self-funded by application fees. This requires fee hikes of anywhere of \$200-\$300 on a single family lot application, and county staff commented that this will not be seen positively by the citizenry. County staff noted that the DCR staff do not have to answer phone calls from angry residents and constituents regarding the new application fees, instead the local Board of Supervisors and local government staff have that task. DCR staff stated that this is the only way a new program of this type could be created under the

current economic and political climate and that eventually the public will get used to it as a cost of development. Northern Neck PDC staff noted that this very well might be true cost of development and that residents and developers have never been paying enough to offset the effects of development in the past, resulting in the listing of the Chesapeake Bay as an impaired water body. Discussion of the new program continued, with most county staff stating that they did not think that their county would take on the localized storm water program and would instead defer the authority to the Department of Conservation. Mr. Bennett reminded the local government staff that the regulations state the Bay Act localities cannot opt out of the storm water program and are required to institute one. These meetings are important for the local government enforcement personnel so they obtain accurate information to report back to their county administrator about the options with which the County has to comply. In addition, state staff can relay the concerns that they hear from the eventual implementers of a proposed program to help reduce potential stumbling blocks before they occur.

At the third Northern Neck Land Use Administrator's meeting, Department of Conservation and Recreation staff Chip Rice detailed the efforts underway with a National Fish and Wildlife Foundation Grant focused in Richmond County to attempt to create a model that other localities can follow to reduce nutrients to the required state's Tributary Nutrient Reduction Strategy levels. Difficulties in obtaining Best Management Practice locational data from the state and NRCS, as well as the format of the data was discussed. NNPDC staff who are working on this project noted that the GIS BMP data received from the state was represented in point format. Each point represented polygon areas with differing acreages treated by a specific BMP. Therefore accurately using this information to locate which drainage basin each farm field with a BMP are in was not possible. NNPDC staff has recommended to Department of Conservation and Recreation staff that in the future, BMP Information referencing polygon areas be represented with geo-referenced polygons, not points. Other challenges with the grant were brought about by partner delays; however, a strategy has been developed to target specific watersheds nonetheless. Local water quality monitoring, both chemical and biological was performed and strategies will be developed based on the water quality sampling criteria. With so much controversy surrounding the Chesapeake Bay Programs Water Quality Model, the steering committee thought it best to focus on real world conditions to prioritize efforts. With the upcoming Chesapeake Bay TMDL being implemented, this project will be watched closely.

During the fourth Northern Neck Land Use Administrator's meeting, staff from the Division of Chesapeake Bay Local Assistance (DCBLA), under the Department of Conservation and Recreation (DCR) briefed the attending county staff members on Phase III Implementation of the Chesapeake Bay Act. In order to facilitate the Phase III intent, county ordinances will be reviewed against a comprehensive checklist to gauge whether a county is actually implementing Chesapeake Bay Act policies in their day to day land use decisions. In order to facilitate implementation, DCBLA Locality Liaisons will be contacting the localities for copies of the latest Comprehensive Plan, copies of the Zoning and Subdivision ordinances, and will be performing the review for the counties. Suggested changes will be sent to the county when the review is completed, and in future

Chesapeake Bay Act compliance reviews, the Chesapeake Local Assistance Board will expect these changes to be made to remain compliant with the Chesapeake Bay Preservation Act. County staff mentioned that in these economic times, any changes that require new funding might not be feasible. DCBLA staff noted that by the time all the compliance reviews are completed, hopefully the economy will be in better shape.

NNPDC staff participates in the Rappahannock River Basin Commission Subcommittee, the Non-Point Source Working Group (RRBC-NPSWG) and is a member of the Potomac Watershed Roundtable. NNPDC staff attends these meetings to foster regional understanding of issues that occur far upstream from the region, as well as to develop strategies to reduce our impact on the aquatic resources that surround us. The RRBC-NPSWG put forth eight recommendations for the commission to consider. One of those considerations, #5, dealt with establishing a No Discharge Zone (NDZ) in the lower Rappahannock River Basin has come close to occurring. Following a Rappahannock River Basin Commission Meeting presentation by DEQ staff regarding boat waste water discharge, a state General Assembly delegate drafted a bill that all tidal creeks of Virginia will be designated as No-Discharge Zones. The bill passed the General Assembly in 2008 and is now law. The next step is to gather the necessary information to apply for NDZ designation from the Environmental Protection Agency for each and every Virginia tidal creek. The NNPDC is currently doing just that in the Northern Neck shellfish growing tidal creeks with a grant from DEQ and hope to have several NDZ applications submitted to EPA in 2010 and the remainder of the creeks in the Northern Neck region to be submitted in 2011. This is an example of NNPDC staff continuing to work towards implementing recommendations that came out of several years of meetings and helping to create new enforceable policies on the ground to protect near shore aquatic resources.

Additionally, a NNPDC staff person is a voting member of the Potomac Watershed Roundtable and frequently gives presentations to the roundtable on items of interest in the Northern Neck region. This year, NNPDC staff presented on Shellfish TMDL's in the region and on a strategic mapping project in collaboration with the Northern Neck Land Conservancy (NNLC). The shellfish TMDL issues presentation focused on the limitations of the TMDL model used, challenges to implementation and progress on the first shellfish TMDL implementation plan in the region, Greenvale Creek in Lancaster County. Citizen involvement in the TMDL implementation plan has been encouraging, however the citizens want the process to move more expeditiously. The citizens contend every creek that is condemned is condemned for the same reasons, just differing degrees of influence of each reason. The citizens detailed and grouped these common sources of fecal coliform and proposed that the state write an implementation plan for all creeks in the Northern Neck to get things cleaned up sooner rather than later. DCR responded that each creek is unique and that each combination of factors need to be examined separately for an effective implementation strategy.

The NNPDC-NNLC strategic mapping project to help the Northern Neck Land Conservancy further focus their efforts in protecting rural areas, working farmland, and historic farms was presented to the Potomac Watershed Roundtable. This project was detailed in last year's report. Comments from Roundtable members were positive and one

county member requested more information on the project, so they could consider doing a similar effort in their jurisdiction.

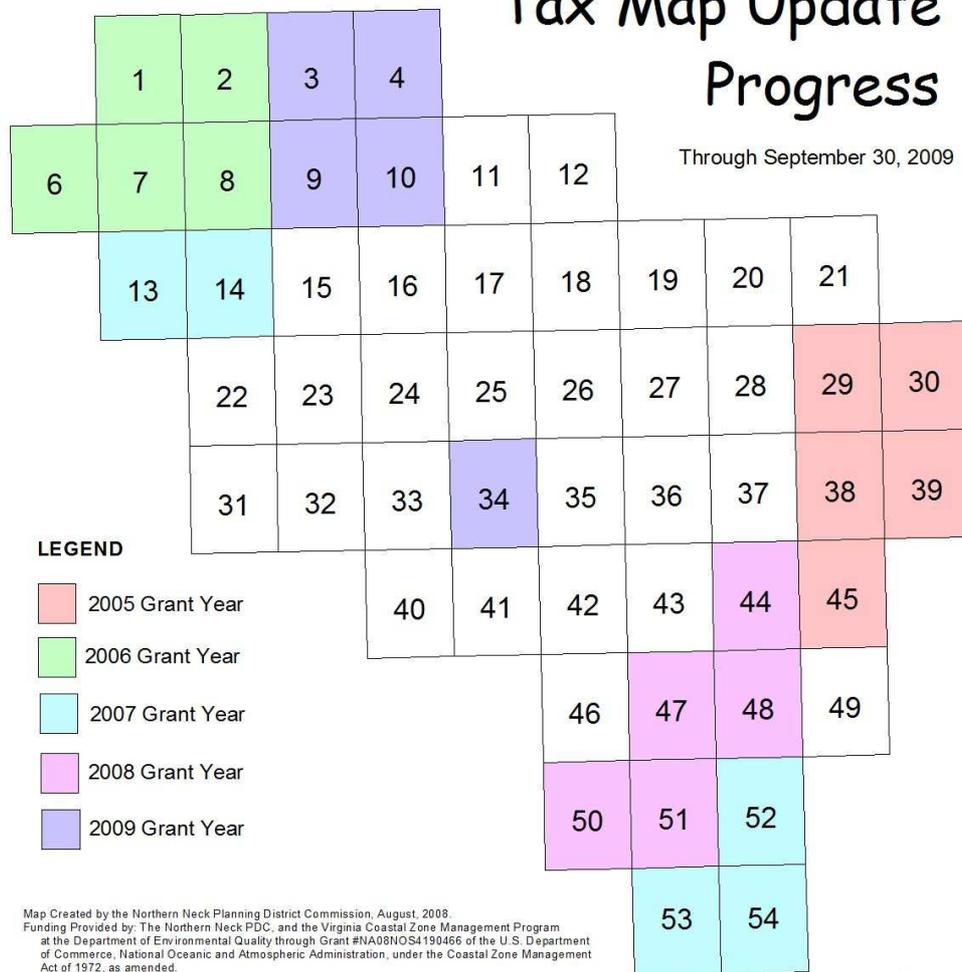
As one can surmise, the local planning coordination component of the Virginia Coastal Zone Management Zone's Northern Neck Technical Assistance Grant pays many dividends to local, regional, and state government organizations. The Northern Neck Land Use Administrator's meeting also provides an opportunity for each of the county's zoning and planning directors to exchange ideas, to discuss regional trends, and to solicit opinions amongst themselves. Being able to frankly discuss issues with neighboring counterparts also fosters regional cooperation, which is important when counties are faced with the same issues. Having a local point of contact at the Local Planning District Commission allows state agencies to help disseminate information to many localities in a cost effective, efficient, and timely manner. Coastal Program funding allows long term stability in PDC capabilities and growing networking potential amongst coastal program partners.

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# Northumberland County Five Revised Digital Tax Maps

NNPDC staff have been steadily updating Northumberland County's digital real property maps, using 2007 Virginia base mapping aerial photographs. Northumberland County has a small land use office, and the PDC provides this service as an economical alternative to hiring a consultant to revamp the digital tax maps. This subtask has been going on for four grant cycles, and below is a map of progress made. *Due to file size limitations, only two examples of the five revised digital tax maps are included.*

## Northumberland County Tax Map Update Progress

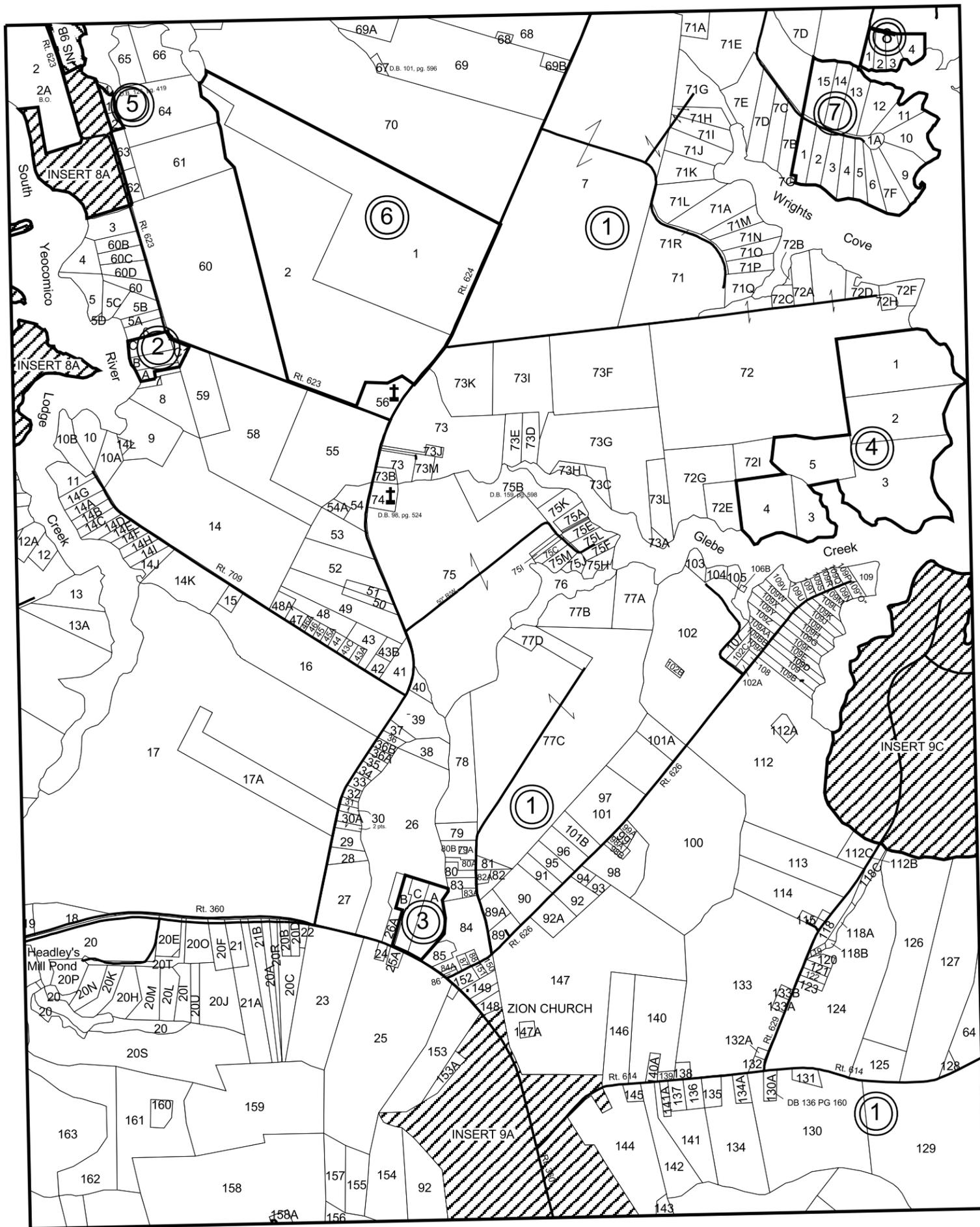


Map Created by the Northern Neck Planning District Commission, August, 2008.  
 Funding Provided by: The Northern Neck PDC, and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



# NORTHUMBERLAND COUNTY

3



600 0 600 1200 1800 Feet

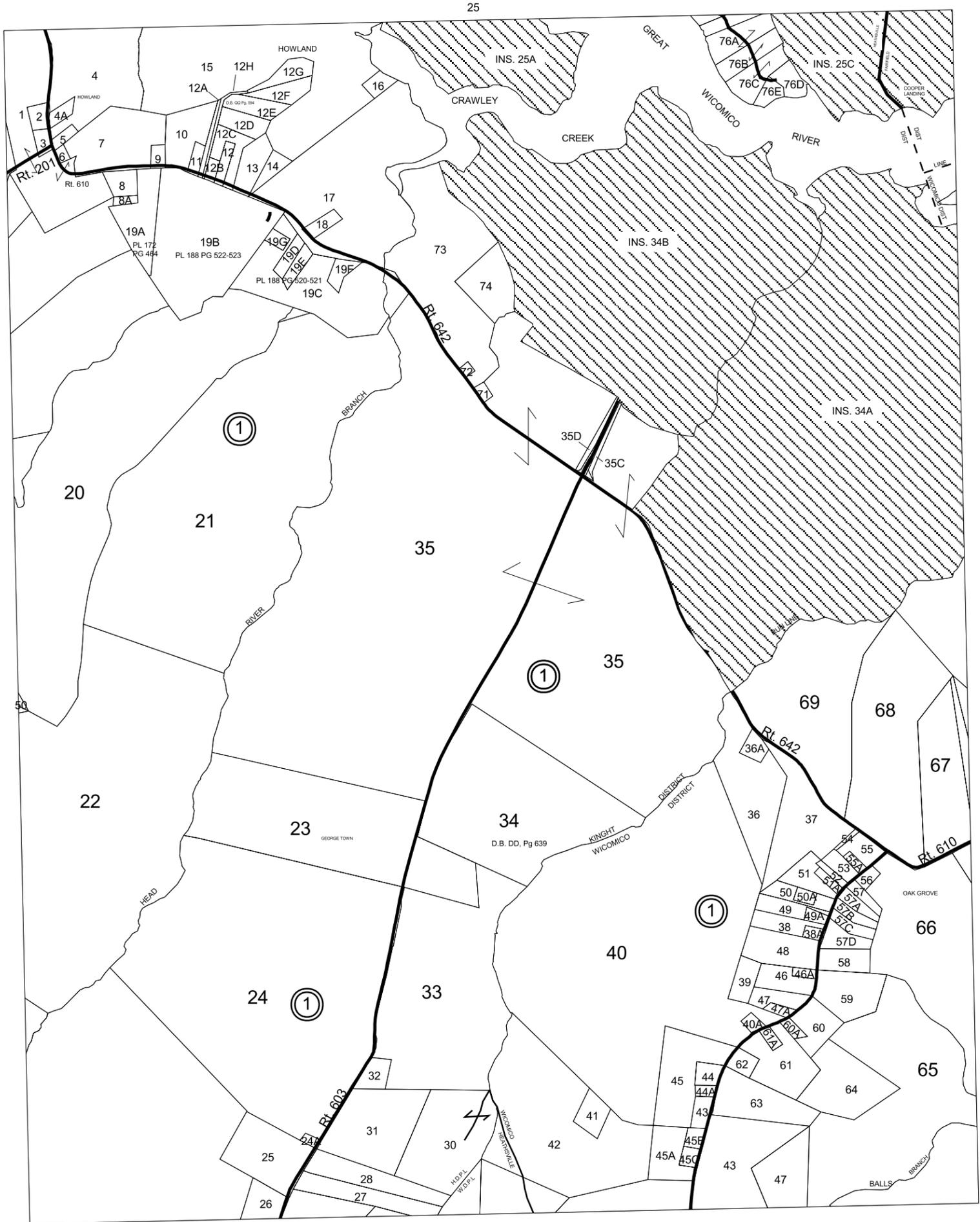
15  
LOTTSBURG DISTRICT

SECTION 9  
INSERT  
AUGUST 2009



Map Created by the Northern Neck Planning District Commission, August, 2009.  
 Funding Provided by: The Northern Neck PDC, and the Virginia Coastal Zone Management Program  
 at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department  
 of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management  
 Act of 1972, as amended.

# NORTHUMBERLAND COUNTY



33

35



HEATHSVILLE  
FAIRFIELD DISTRICT  
WICOMICO

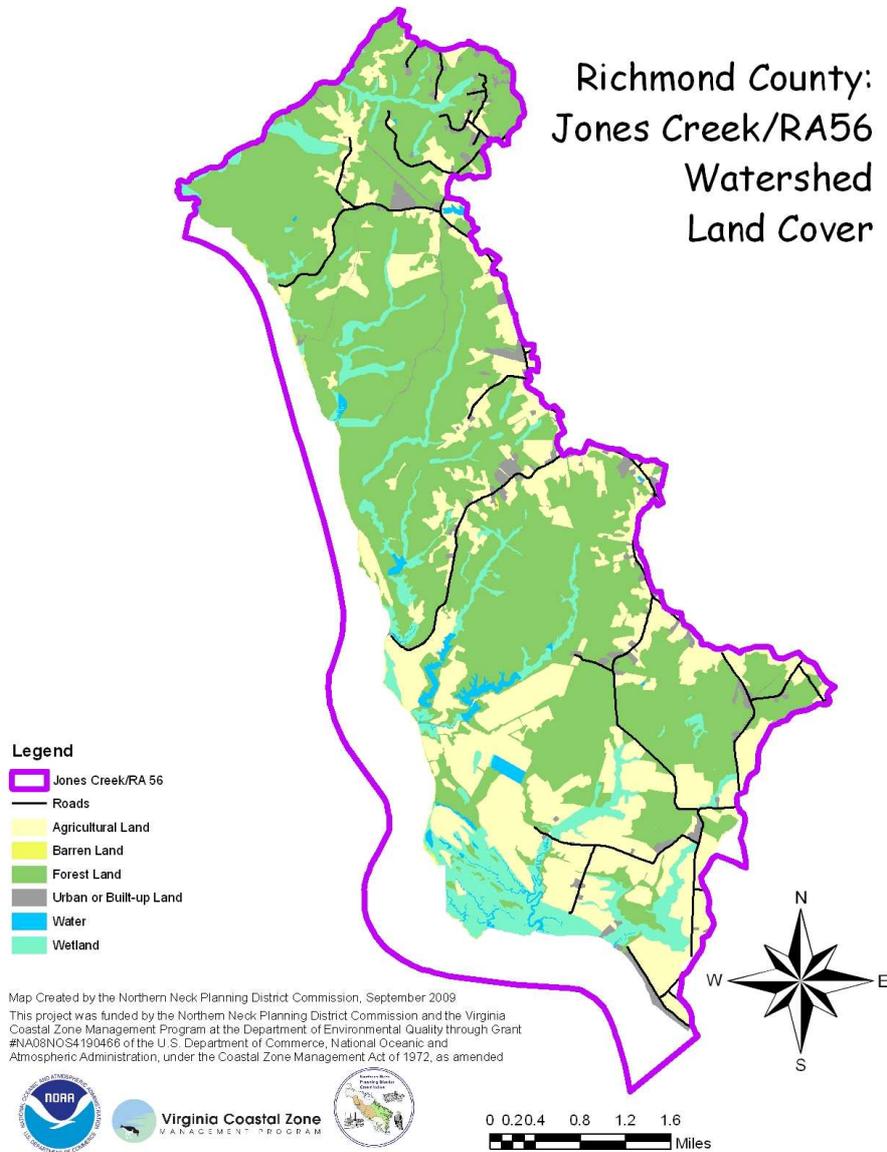
SECTION 34  
INSERT  
SEPTEMBER 2009



Map Created by the Northern Neck Planning District Commission, September 2009.  
Funding Provided by: The Northern Neck PDC, and the Virginia Coastal Zone Management Program  
at the Department of Environmental Quality through Grant #NA06NOS1490178 of the U.S. Department  
of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management  
Act of 1972, as amended.

## Richmond County Land Cover Data Creation

The NNPDC is attempting to model nutrient runoff from Richmond County so that it can plan on how to achieve tributary strategy nutrient reductions to meet the Chesapeake 2000 Agreement Goals. Existing land use data is satellite based data, and is too coarse, and has too many errors to use at a local scale. Therefore, the county recognized the need for detailed land use maps to assess current conditions, and to track land use changes in the future. In the first grant year, a digital land cover layer was created by NNPDC staff for Totuskey Creek. Last grant year, Cat Point Creek was chosen, as it was contiguous to Totuskey Creek watershed, and that it contained the only urbanized area in the county, the Town of Warsaw. This year, Jones Creek watershed was chosen. Below is the land use layer for Jones Creek. Land cover data creation is now completed for the entire land area of Richmond County.



## Lancaster County Alternative Septic System Mapping

NNPDC staff met with Virginia Department of Health (VDH) Staff to inquire about obtaining data for alternative septic systems in Lancaster County. VDH staff alerted NNPDC staff that there are two data sets with regards to alternative septic systems, 1) those parcels that already have an alternative septic system installed, and 2) the numerous parcels that have permits to install such systems, but have not installed them as of yet.

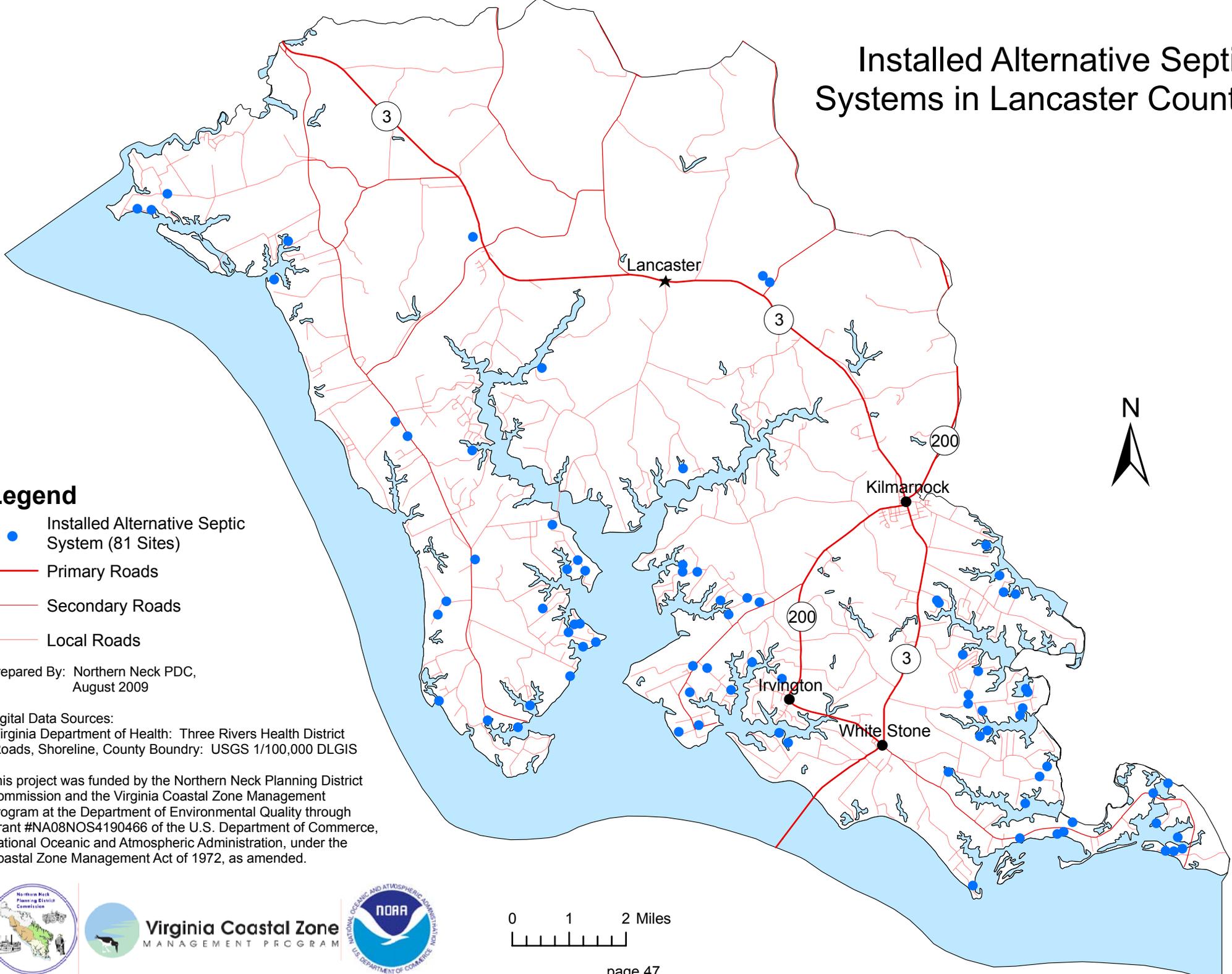
NNPDC staff determined, after getting the digital data from the Virginia Department of Health, that in order to properly depict the two data sets, it would be necessary to create two maps, one showing installed alternative septic systems and one showing permitted alternative septic systems. Information from the Virginia Department of Health database used to locate systems were the county tax map parcel number, and in the absence of that, the E-911 address, or, as a last resort, the landowner's name. Some records lacked sufficient information to accurately locate the systems, and were not depicted. Aerial photographs from 2007 were used to locate likely positions of septic systems on each tax parcel.

These maps will be used to inform Lancaster County land use staff as well as Planning Commission and Board of Supervisors Members of the widespread extent of alternative septic systems within their jurisdiction and the proximity of the majority of these systems to surface waters.

The two maps following show the distribution and location of alternative septic systems installed, as well as those permitted to be installed.

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# Installed Alternative Septic Systems in Lancaster County



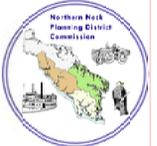
## Legend

- Installed Alternative Septic System (81 Sites)
- Primary Roads
- Secondary Roads
- Local Roads

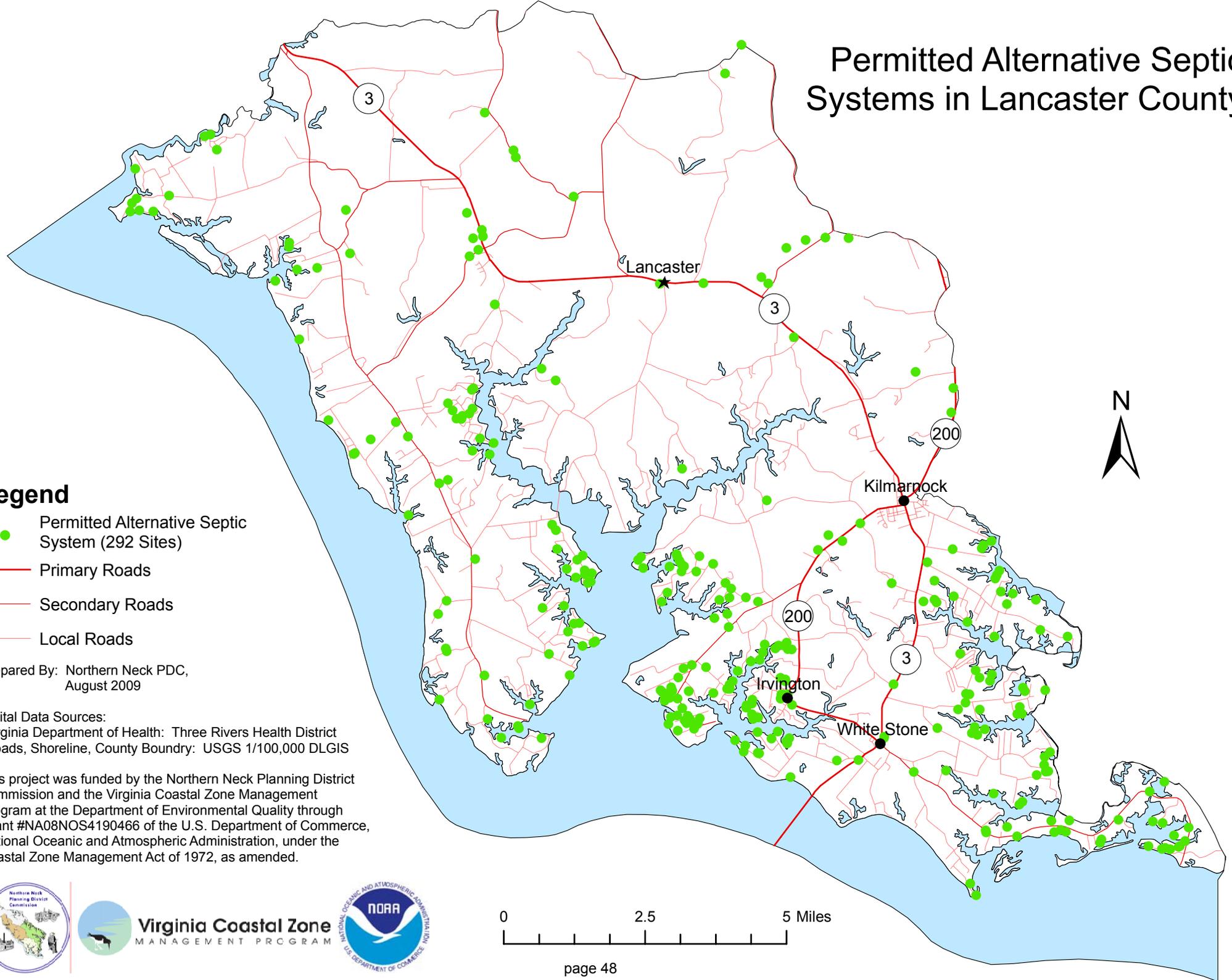
Prepared By: Northern Neck PDC,  
August 2009

Digital Data Sources:  
 -Virginia Department of Health: Three Rivers Health District  
 -Roads, Shoreline, County Boundry: USGS 1/100,000 DLGIS

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



# Permitted Alternative Septic Systems in Lancaster County



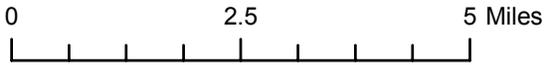
## Legend

- Permitted Alternative Septic System (292 Sites)
- Primary Roads
- Secondary Roads
- Local Roads

Prepared By: Northern Neck PDC,  
August 2009

Digital Data Sources:  
 -Virginia Department of Health: Three Rivers Health District  
 -Roads, Shoreline, County Boundry: USGS 1/100,000 DLGIS

This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



## Westmoreland County Digital Zoning Map Revision

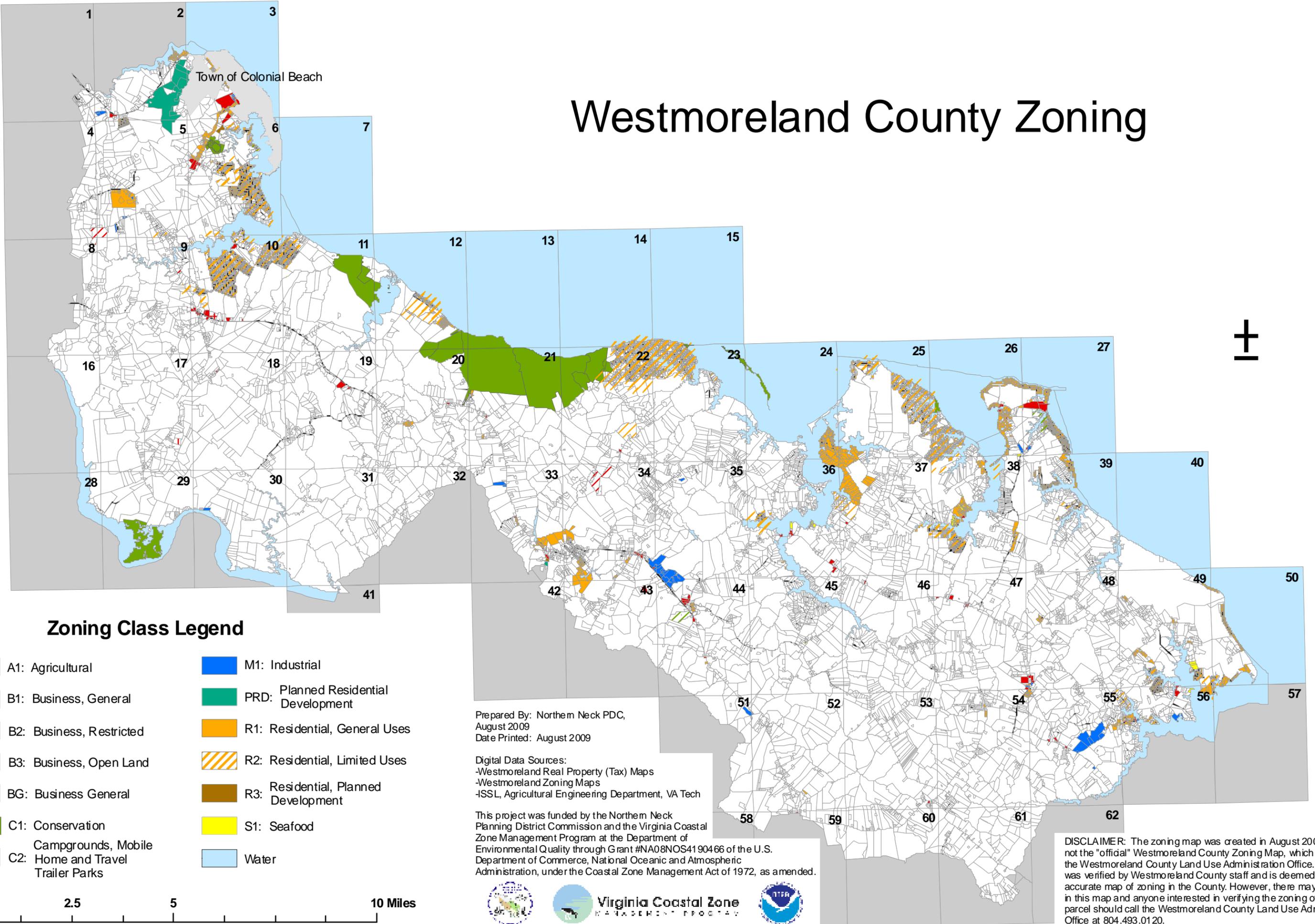
Westmoreland County's tax maps were updated several years ago by the Northern Neck Planning District Commission. At that time, only the parcel geometry, parcel ID and newly subdivided parcels were revised. The Zoning classification was not checked for accuracy, and newly subdivided parcels created in the revision process automatically had the zoning of the parent parcel copied to the newly created parcel. This has created errors where the new parcel created was in a different zoning class. Westmoreland County has added additional zoning classifications since the last revision of the zoning, and there are several parcels that have been added with the new zoning classifications. Also, there have been changes to parcels' zoning classification in both the old zoning classes as well as the new zoning classes due to re-zoning actions.

Since the hard copy Westmoreland County zoning maps are the only copies in existence, and the fact that they use them every day, County staff were reluctant to let NNPDC staff take the maps out of the office for use in the revision process. Therefore NNPDC staff digitally photographed each tax map and tax map insert for guidance in the checking and revision of the digital zoning maps. After making the preliminary corrections, NNPDC sent digital copies of each tax map via email to county land use staff for error correction. That did not work well, as county staff could never find the time to review the newly revised zoning maps. Therefore NNPDC staff set up a meeting where we could visit the county with the newly revised map, and go through each map with county staff present to verify the changes made and any errors present. After noting any discrepancies, then returning to the office to make the corrections to the maps, NNPDC staff delivered the digital data to Westmoreland County Land Use staff. The data delivered included a countywide zoning map in ArcView shapefile format, a PDF of said map for inclusion in their county web site (if they so choose), as well as 62 individual zoning maps in PDF format on 8.5" x11" page size for reference. County staff have been pleased with final products.

Following is the countywide revised digital zoning map, and an example of one of the individual digital zoning maps that were created.

*(This space intentionally left blank.)*

# Westmoreland County Zoning



## Zoning Class Legend

- |   |                                      |
|---|--------------------------------------|
| A1: Agricultural                                      | M1: Industrial                       |
| B1: Business, General                                 | PRD: Planned Residential Development |
| B2: Business, Restricted                              | R1: Residential, General Uses        |
| B3: Business, Open Land                               | R2: Residential, Limited Uses        |
| BG: Business General                                  | R3: Residential, Planned Development |
| C1: Conservation                                      | S1: Seafood                          |
| C2: Campgrounds, Mobile Home and Travel Trailer Parks | Water                                |

Prepared By: Northern Neck PDC,  
August 2009  
Date Printed: August 2009

Digital Data Sources:  
-Westmoreland Real Property (Tax) Maps  
-Westmoreland Zoning Maps  
-SSL, Agricultural Engineering Department, VA Tech

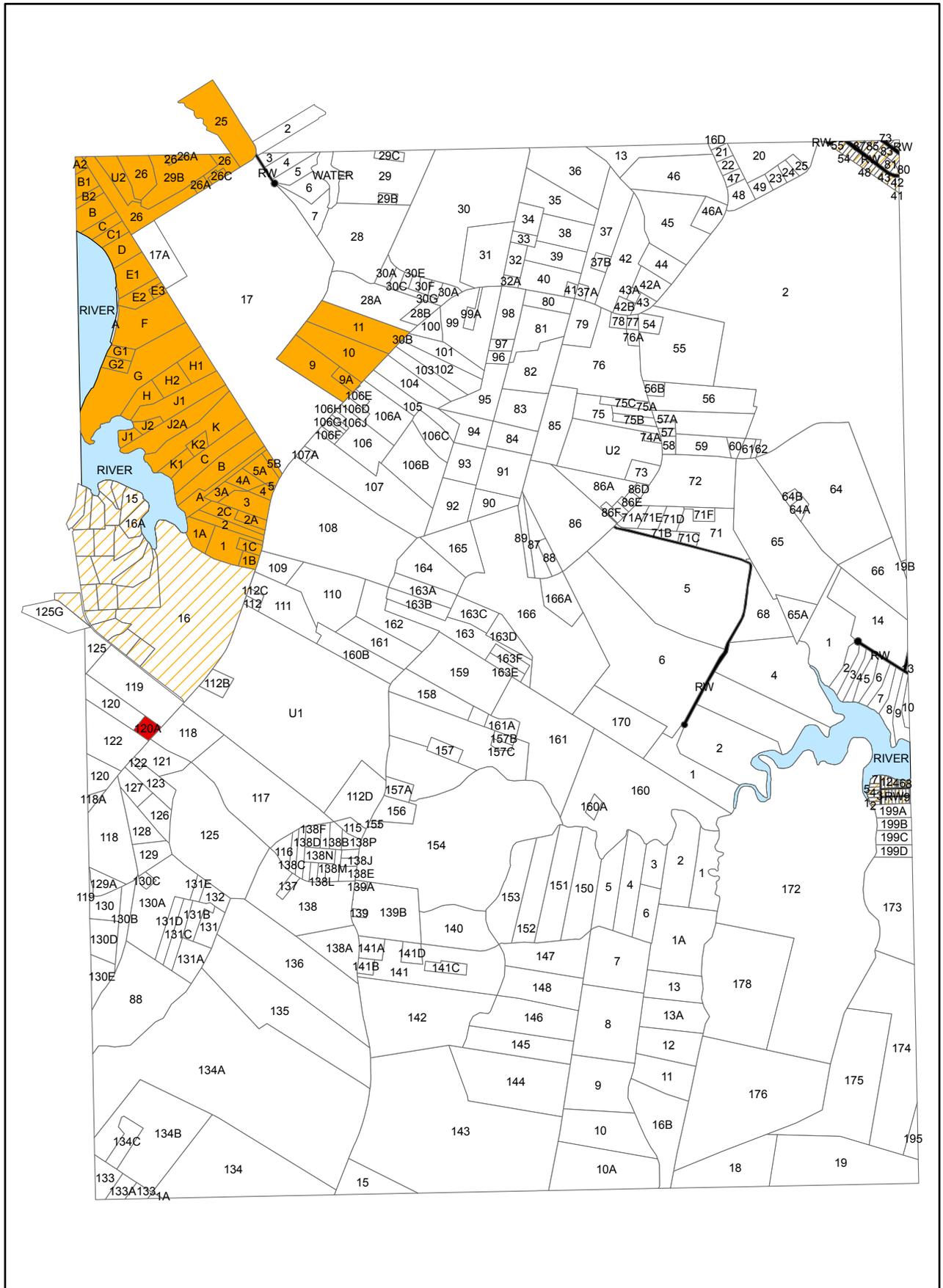
This project was funded by the Northern Neck Planning District Commission and the Virginia Coastal Zone Management Program at the Department of Environmental Quality through Grant #NA08NOS4190466 of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972, as amended.



**DISCLAIMER:** The zoning map was created in August 2009, and is not the "official" Westmoreland County Zoning Map, which is housed in the Westmoreland County Land Use Administration Office. This map was verified by Westmoreland County staff and is deemed to be an accurate map of zoning in the County. However, there may be errors in this map and anyone interested in verifying the zoning of a particular parcel should call the Westmoreland County Land Use Administration Office at 804.493.0120.



# TAXMAP 37



Legend		Zone		Zone		Zone		Zone	
	A1		C1		M1		R3		SPLIT
	B1		C2		OUT		RIVER		WATER
	B2		COBE		R1		ROAD		
	B3		LAKE		R2		S1		