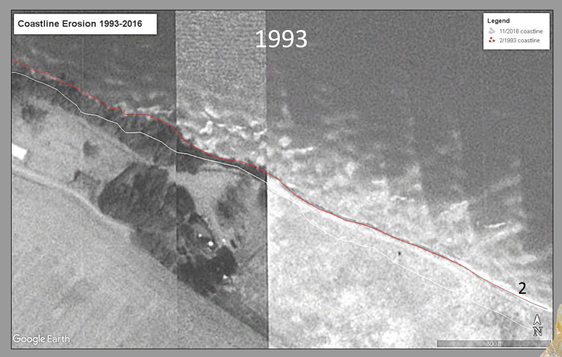
We're Losing It!

The West Site is a privately owned multi-component archaeological site located on the outer coastal plain of Eastern North Carolina. The site demonstrates an incredible time depth of human occupation. Shoreline erosion has placed this cultural resource rich site at constant risk of washing away. Many coastal sites like the West Site are just one storm away from disappearing.

Site loss occurs for many reasons but few can have the devastating impact that coastal storms, flooding, and sea level rise can have. Shoreline retreat is a global problem that has communities around the world struggling to adapt. So, what can we do? The first step is to increase awareness of the problem. Local involvement is critical and should include efforts to create public/private shoreline restoration partnerships. These projects can utilize local volunteers to help identify, record, and monitor at-risk sites. Also, Bioengineering techniques that include soft and hard landscaping structures can be used not only for erosion control, but can provide an environmentally sound way of returning to a once again resilient shore.

As demonstrated by the two georeferenced maps below, the West Site has lost more than 75ft of shoreline between 1993 and 2016.



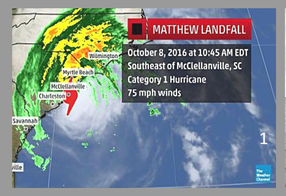
Virtually a complete chronology of regional projectile points spanning more than 10,000 years has been recovered from the West Site.

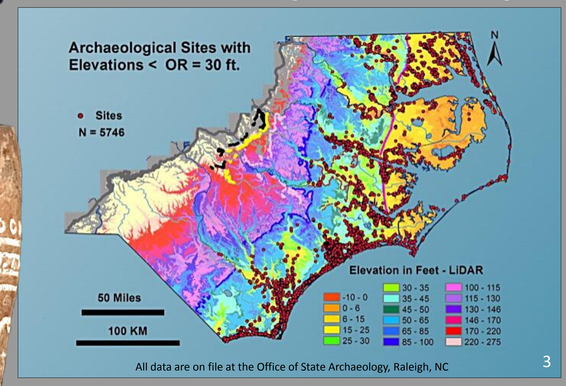
Shown above are Stallings series Native American pottery sherds recovered from the West Site. Stallings series is considered the region's earliest native pottery.

This sherd of shell tempered pottery protrudes from a Native American shell midden feature exposed by erosion. Thousands of years of cultural heritage can be lost in a day.

The two photos below show the shoreline loss routinely experienced at the West Site. Seasonal weather changes, overly wet or arid cycles, frosts and ground freeze, as well as many other factors contribute to the spalling of the embankment . The soil gathers until removed by high water.

In 2016, Hurricane Matthew devastated the Carolina coast. The West Site was inundated by the storm surge which caused significant damage. Pictured below is one section of the site that experienced a 50'x50' shoreline washout.





All data are on file at the Office of State Archaeology, Raleigh, NC

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Coastal impact analysis suggests more than 5000 coastal NC archaeological sites are at immediate risk from erosion, storm damage and coastal flooding.

Follow this QR code to access an online photo gallery of artifacts and images from the West Site

https://thewatersedge.tumblr.com

Citations and Acknowledgements

1) Hurricane Matthew infografic map courtesy of The Weather Channel

2) Coastline Erosion 1993-2016 georeferenced maps produced by and courtesy of Dr. David Cranford Assistant State Archaeologist with the North Carolina Office of State Archaeology.

3) Abbott, L. E., K. Farrell, and J. Krizmanich
2018 The Office of State Archaeology Sea Level Rise Project 2010-2012: A Study of the Potential Effects of Climate Change on Archaeological Sites in the Coastal Plain of North Carolina. Presentation to the Lunchtime Lecture Series, May 31, Department of Natural and Cultural Resources, Raleigh.

This poster was produced and presented by John Krizmanich