

Changing Communities: An interdisciplinary look at land use changes along the Maury River

Ryann Taylor

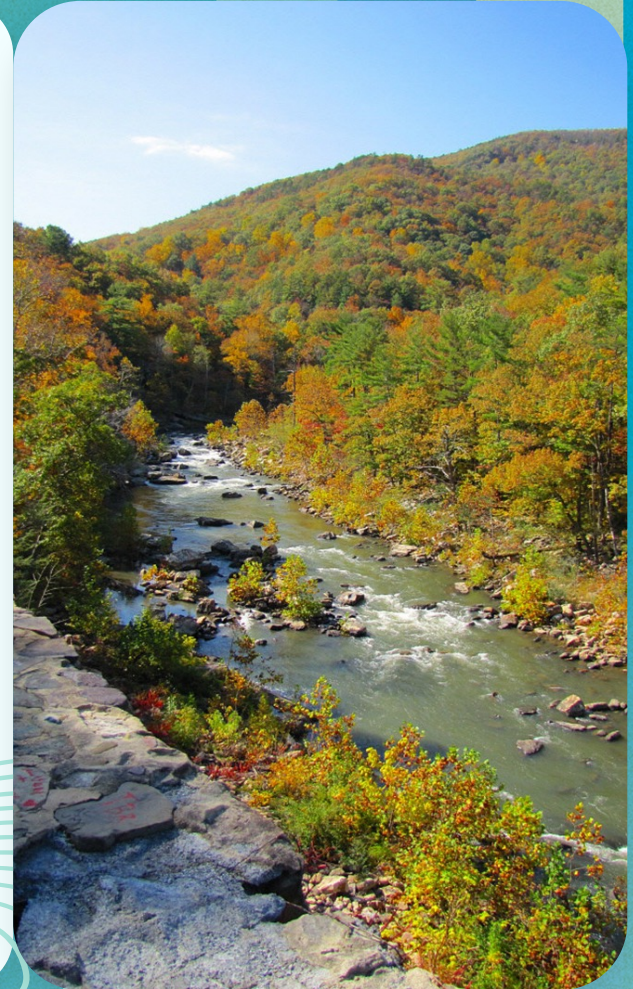


Photo by Flickr user tcpix

Background

Maury River

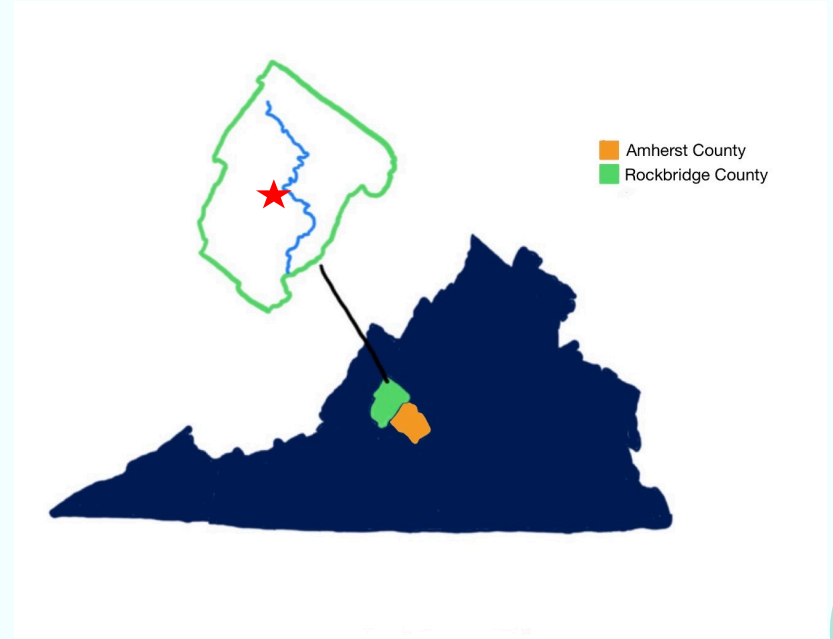
- Roughly 40 miles
- Tributary for James River
- Entirely in Rockbridge County, VA

Monacan Indian Nation

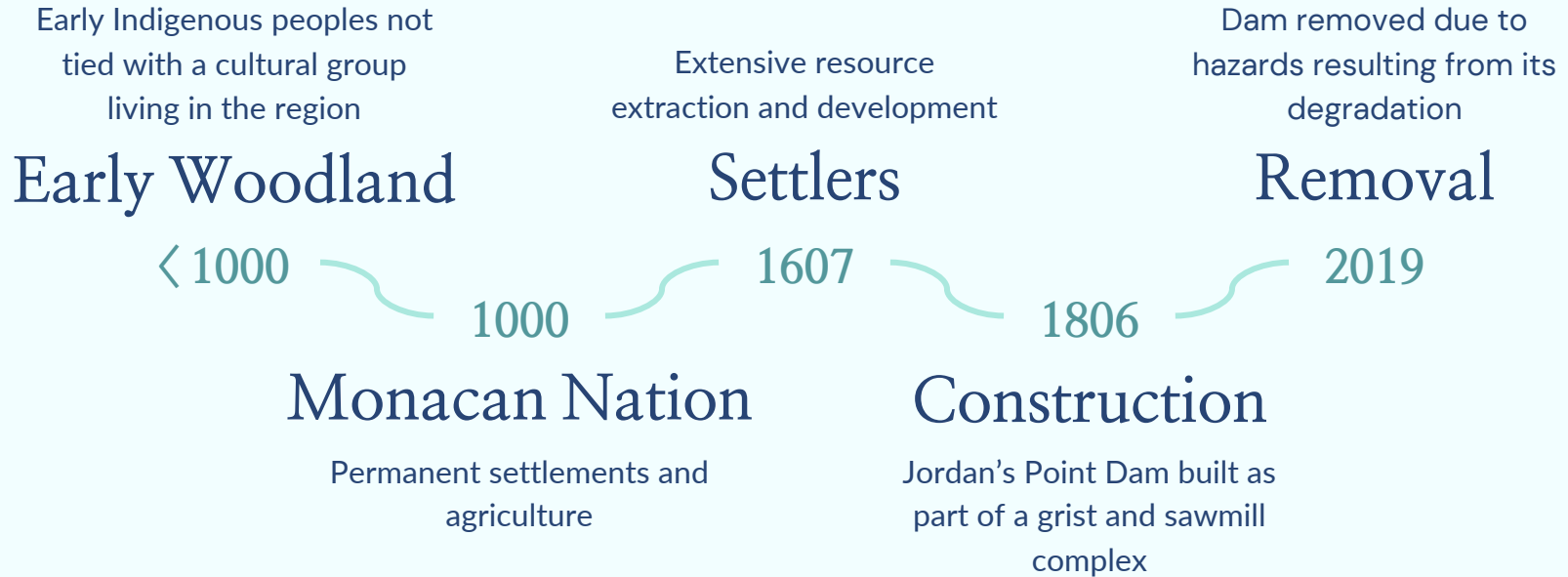
- Siouan language group
- Avoided European settlers during contact
- Federally recognized in 2018
- HQ in Amherst County

Jordan's Point Dam

- Constructed in 1806
- Removed in 2019
- Served many functions



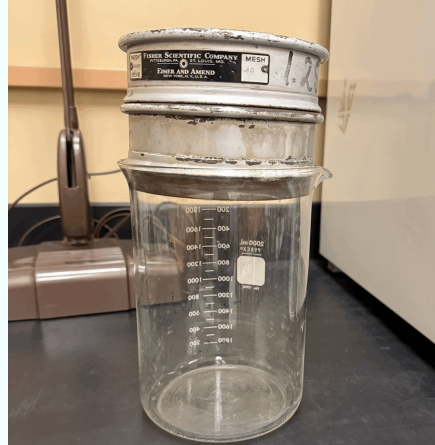
Maury River Occupation Timeline



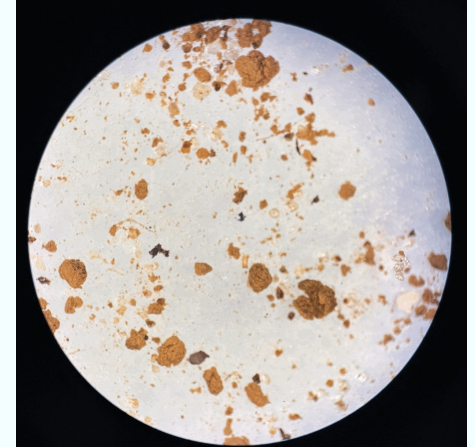
Data Collection



Collection site photo taken by
Keck student Mia Groff

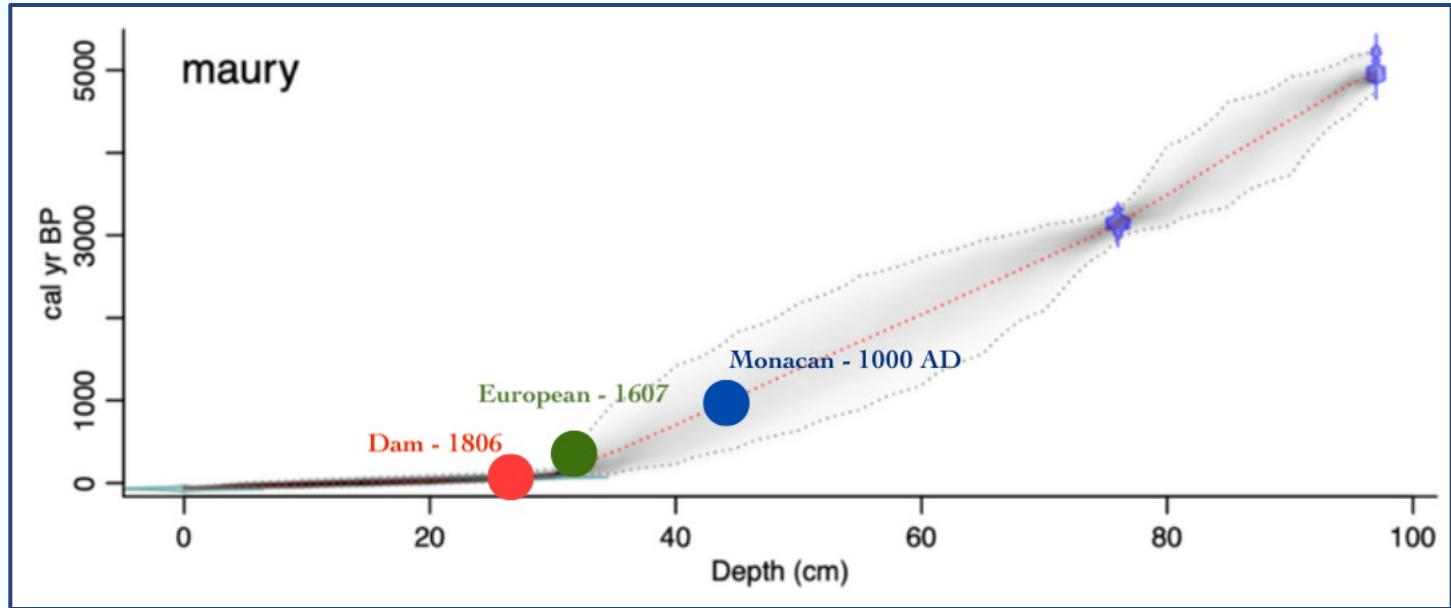


Sieving process



Example of sample under
microscope

Age Model

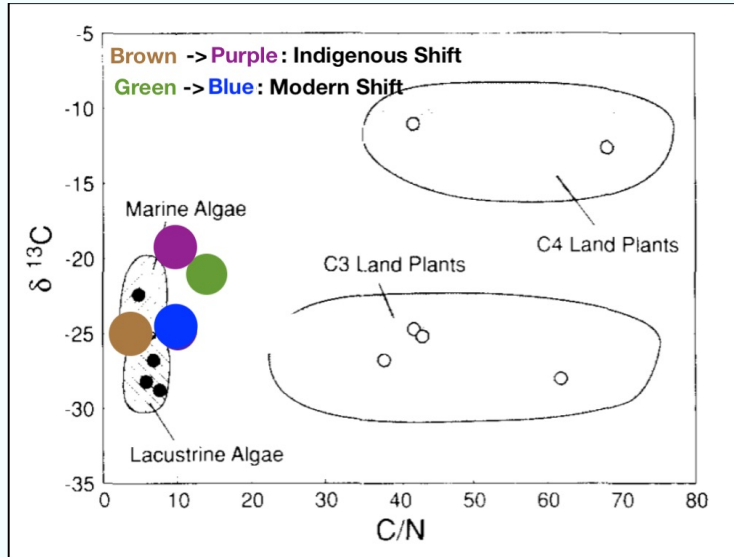


Ontology

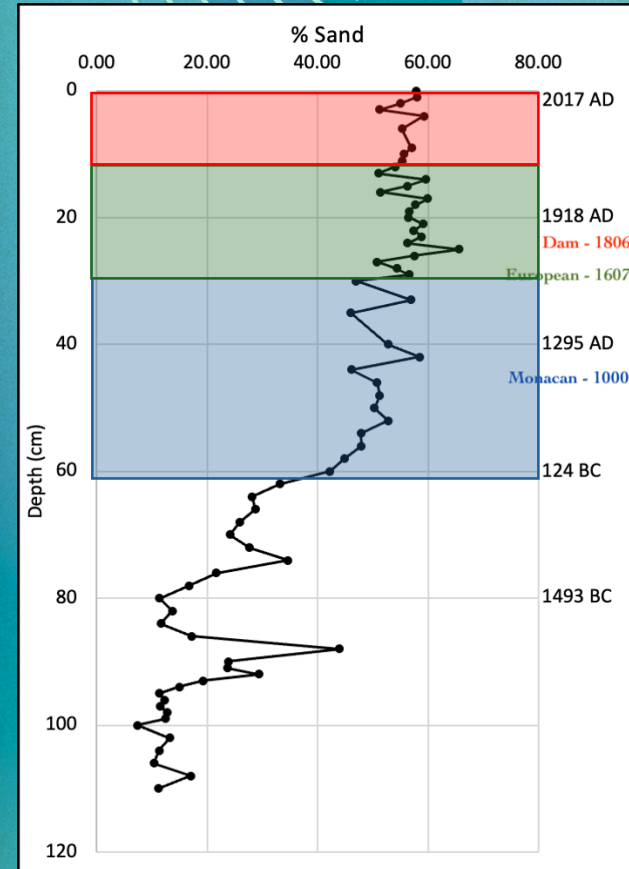
| | Agency | Power | Knowledge |
|-------------------------|---|---|---|
| Western Thinking | Only people (hierarchies within this as well) | Humans have a God-given right or evolutionary advantage | Written and scientific knowledge is prioritized |
| Monacan Ontology | All beings in and beyond this world | All beings have power (some more than humans) | Oral histories and learned knowledge from environment |

Monacan Nation (~1000 – 1600)

- Drastic increase in erosion
- Shift from C3 to C4
- Changing landscape



Source: Meyers 1994 (Fig.1 modified by author)



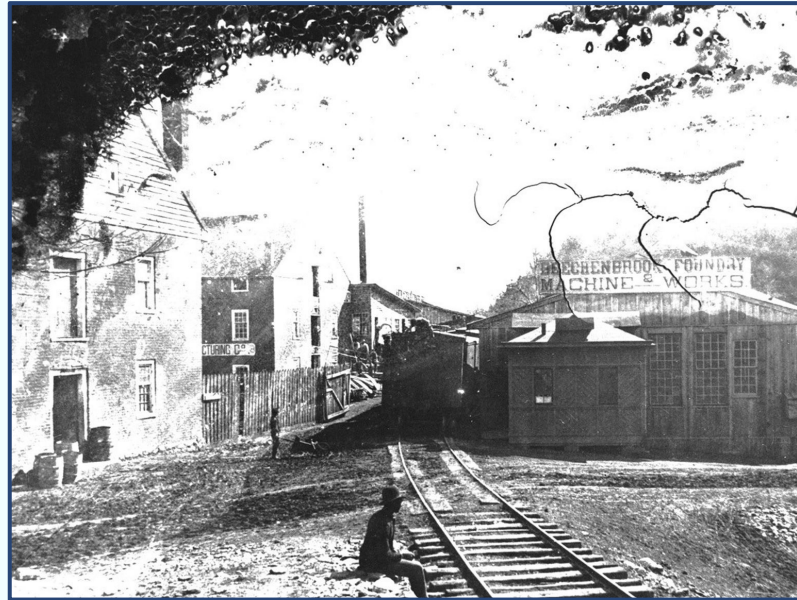
Sand percentage throughout the record



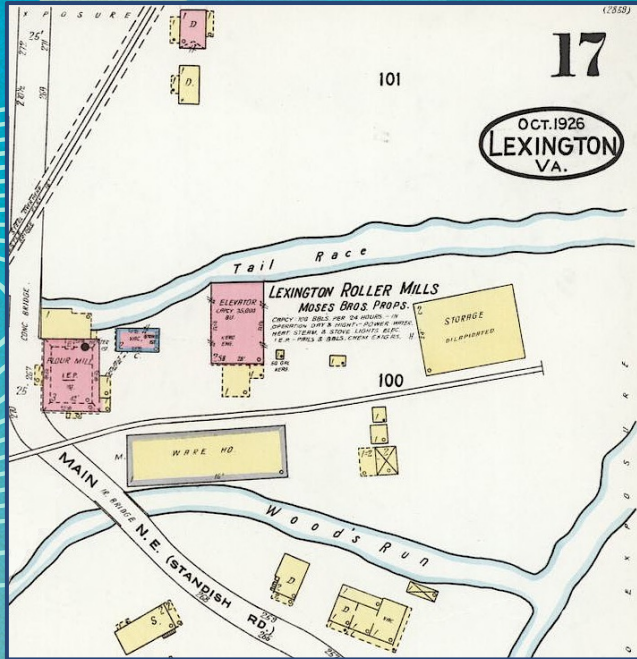
Source: Longleaf Alliance

Euro-Americans (1600s – 1950)

- Continued erosion rates
- Little to no change in C3 vs C4
- Fossil fuel burning



Source: <https://www.thenews-gazette.com/article/2030,exploring-lexington-s-transportation-history>



Source: Library of Congress, [Sanborn Fire Insurance Map from Lexington, Independent Cities, Virginia \(1926\)](#)

Modern (1950 – present)

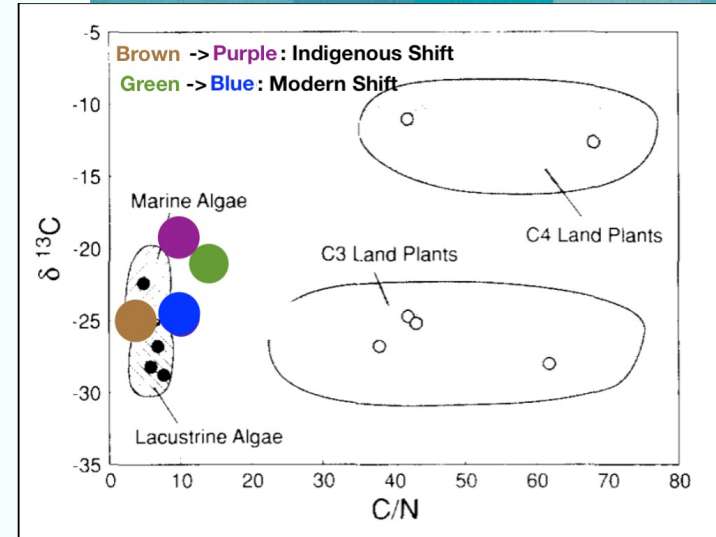
- Increased urbanization
- Continued fossil fuel use
- Possible decrease in grasses



April 2019 (Before Removal)



May 2019 (After Removal)



Source: Meyers 1994 (Fig.1 modified by author)

Source: Virginia Department of Game and Inland Fisheries, [Removal Report on Jordan's Point Concrete Dam and Timber Crib Dam: May 23-25, and May 28-30, 2019](#)

Real World Impacts

- Save Rassawek
 - Monacan Capitol along the James River
 - Water withdrawal and pipeline by JRWA
 - Stopped in 2022 by archaeologists, tribal members, and legal authorities
- Global precedents for similar legal protections
 - Ecuador (2008)
 - New Zealand (2017)



Source: Cultural Heritage Partners

Acknowledgments

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