White Clay Creek Preserve

DIGITAL SOIL MONOLITH

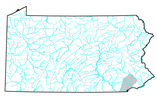
CENTER OF VALLEY DOWNSTREAM OF LONDON TRACT ROAD

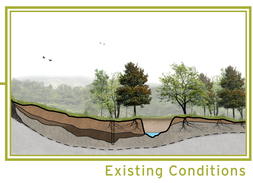
Chester County, Pennsylvania

Watershed Area: 22 square miles

Latitude: 39º 45' 16.9'' N
Longitude: 75º 46' 46.7'' W

June 4, 2025





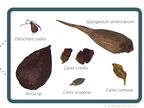
Existing Conditions

Legacy Sediment
~300 years before present to today
(AD 1650 to AD 2025)

175 BP

380 BP

514 BP



1544 BP

Historical Floodplain Wetlands
~390 - 4727 years before present
(2777 BC to AD 1570)

Historical Conditions

1728 BP

2446 BP

2334 - >4727 BP
minimum age

Basal Gravels
greater than 12,000 years before present

All radiocarbon dates are median calibrated ages expressed in years before present, (Cal BP) using Calib 8.2 software and the IntCal20 dataset. Please contact the authors for the range and confidence intervals on these measurements. Radiocarbon measurements were made at the Penn State Radiocarbon Laboratory at the Institute of Energy and the Environment (IEE). The co-authors would like to thank Dr. Brendan Culleton and his staff for their assistance in dating these samples. All results have been corrected for isotopic fractionation according to the conventions of Stuiver and Polach (1977), with δ13C values measured on prepared graphite using the AMS. These can differ from δ13C of the original material, if fractionation occurred during sample graphitization or the AMS measurement, and are not shown.

ID: White Clay T1a - Center of Valley