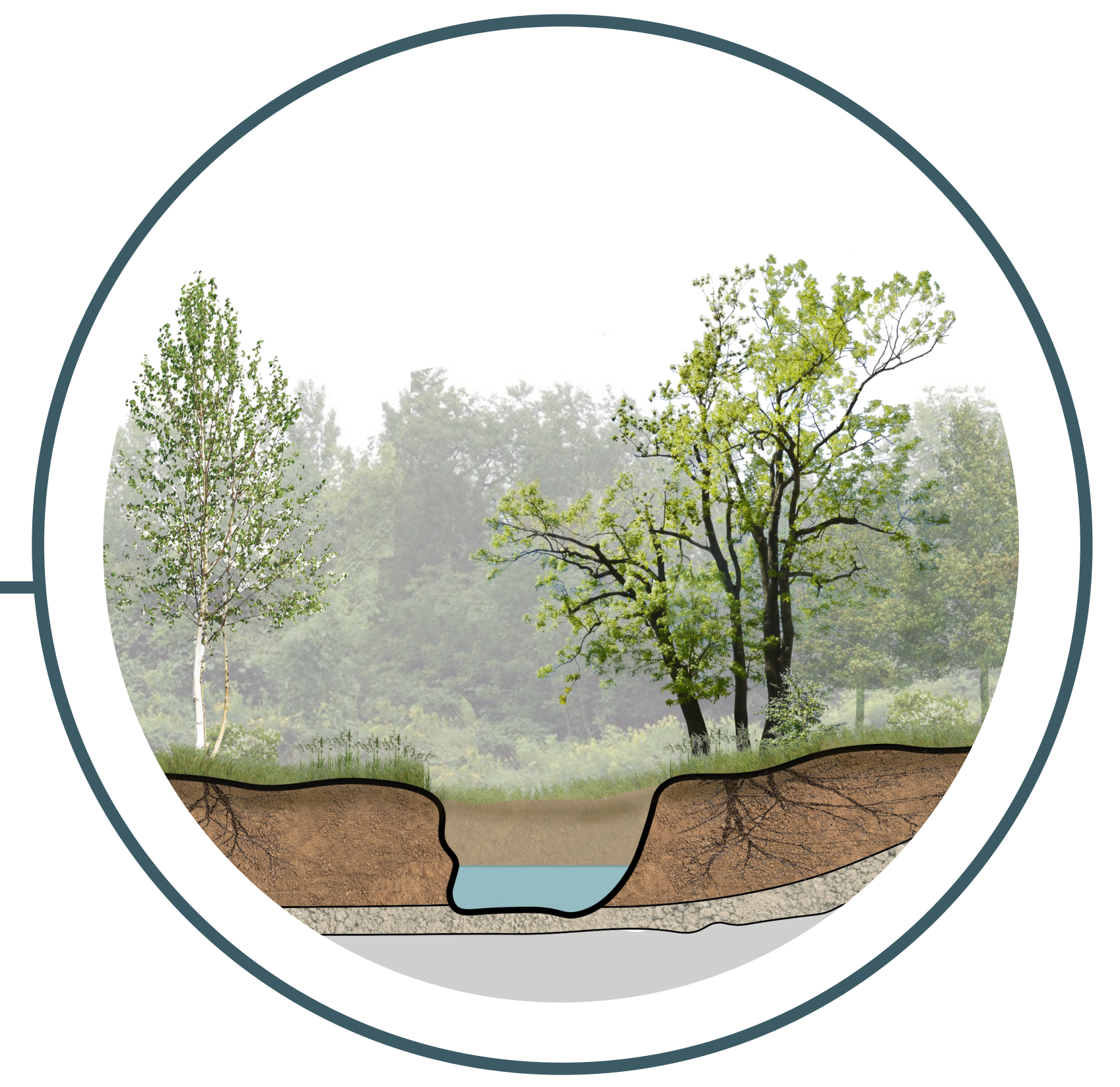


ft m
 0 ft 0.0 m
 0.1 m
 0.2 m
 1 ft 0.3 m
 0.4 m
 0.5 m
 2 ft 0.6 m
 0.7 m
 0.8 m
 0.9 m
 3 ft 1.0 m
 1.1 m
 1.2 m
 4 ft 1.3 m
 1.4 m
 1.5 m
 5 ft 1.6 m
 1.7 m
 1.8 m
 6 ft 1.9 m
 2.0 m
 2.1 m
 7 ft 2.2 m



Existing Conditions

Quittapahilla Creek

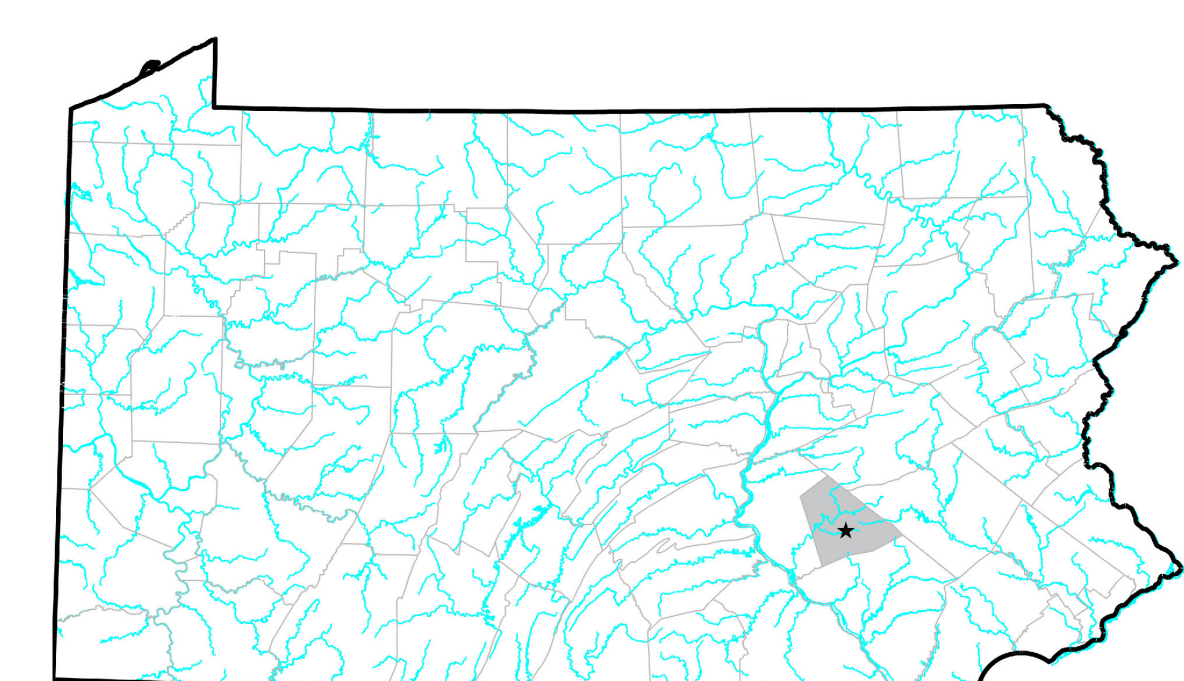
SOIL MONOLITH LEGACY SEDIMENT PROFILE

Lebanon County, Pennsylvania

Watershed Area: 18.1 square miles

Latitude: 40° 20' 13" N
 Longitude: 76° 26' 53" W

May 27, 2021



Legacy Sediment
AD 1700 to Present



Historical Conditions

AD 1495 - AD 1620

Basal Gravels
10,000 BC to 15,000 BC

Periglacial Colluvium
older than 15,000 BC

¹380 °C age BP (±15) PSUAMS #9606
 500-435 cal BP (AD 1450-1515) p 71.9%
 365-339 cal BP (AD 1590-1620) p 23.9%
 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. Conversion of the conventional ages to calendar years was done by calibrating with the IntCal20 northern hemisphere calibration curve in OxCal 4.4.4.

