



DISCOVERY CREEK PROJECT

**Presentation by Shannon
Henderson**

ABSTRACT

Research shows exposure to nature improves children's health and capacity for learning, including early exposure to STEAM concepts. This project addresses erosion problems at a local farm, while creating novel learning opportunities for at-risk children ages 3-6. We conducted interviews with education and landscape professionals, performed land measurements, and designed and built a 100ft long dry creek bed and extensive mud kitchen. We created STEAM learning activities through child exploration in the creek and through play in the mud kitchen.

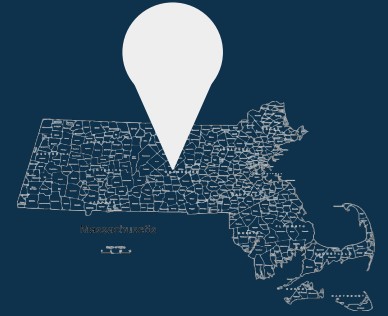
A Local IQP

15-minute drive from WPI's campus

Staying local is more sustainable and just as, if not more, fulfilling than an off-campus IQP

SDG 11: Sustainable Cities and Communities

Paxton, MA



Project Scope

**Erosion
Mitigation**

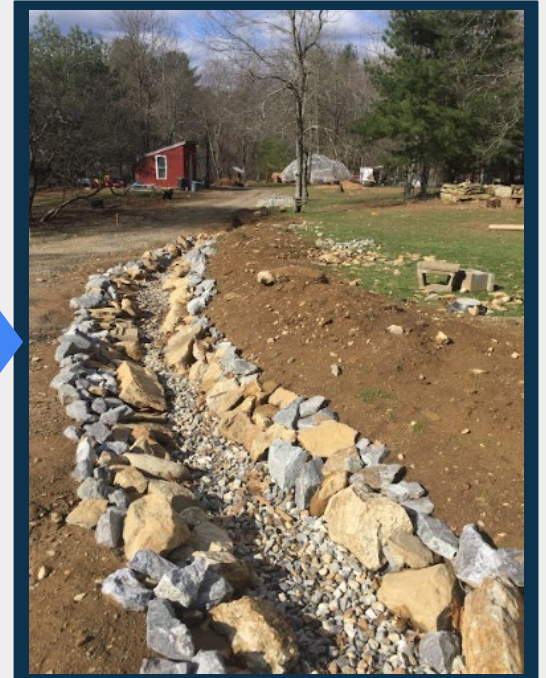
Dry Creek Bed

&

**Play-based
Learning**

Discovery Tiles and
Mud Kitchen

Erosion Control - Building a Dry Creek Bed



Play-based Learning - Discovery Creek Tiles

developing **grip strength**

balance skills

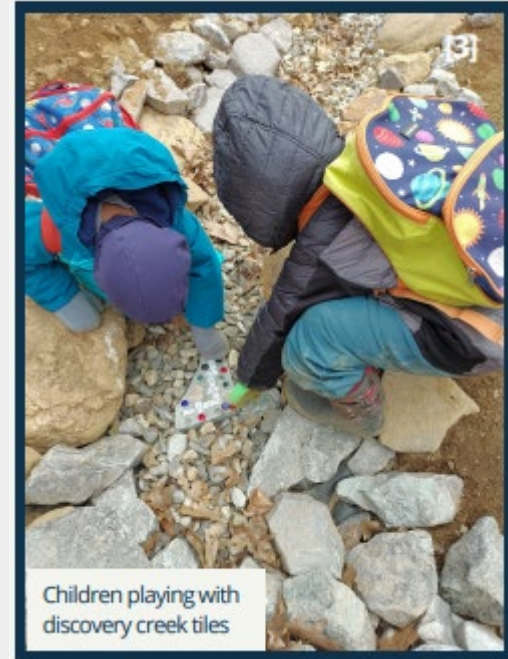
making predictions

hand-eye coordination

explore different **materials**

which **direction** is up on a hill

introduction to **STEM**



Children playing with discovery creek tiles

Play-based Learning - Mud Kitchen

Aerial View of Creek Bed

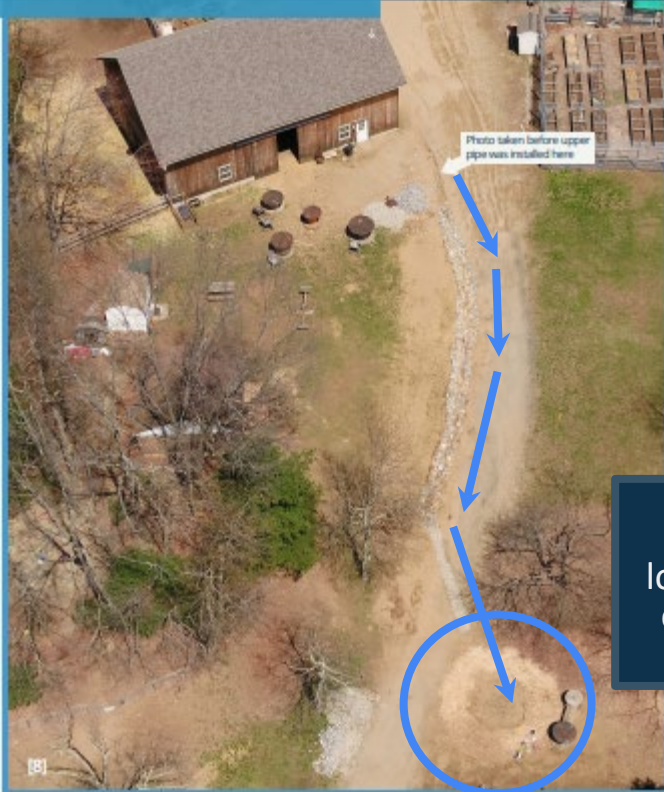


Photo taken before upper pipe was installed here

Mud pit located at end of creek bed

Large electrical wire wooden spools



Children playing in the mud kitchen.



**Thank you for
viewing!**

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