

Shoreline Restoration Project

Heart Lake, Montrose, PA 2023

Purpose of the Project

Background information:

- The purpose of the grant was to address and remediate erosion issues of the shoreline of the association property caused by time and wave action produced by motorized boats.
- General permits were obtained for the project through the Susquehanna County Conservation District.
- The Pennsylvania Lake Management Society (PALMS), with funding from the Pennsylvania Department of Environmental Protection, offered financial assistance for lake related issues that are degrading the quality of lakes in the Commonwealth.

Restoration Actions

- Stage 1: Planted 20 trees on the grass area of the beach. Trees were donated by Susquehanna County Conservation District.
 - The purpose of this was to slow the runoff from the road.
- Stage 2: Soft Armoring (The purpose is to stabilize the shoreline.)
 - Installed Coir Fiber Logs in the water along the shore (24 12x10).
 - The following native plants (Wetlands Plant Inc.) were planted into the Coir Fiber Logs:
 - Lizard tail plugs
 - Harlequin blue flag
 - Blue mistflower (both sides of boat launch)
 - These plants will help to restore the habitat in the water and on the land.
 - Rip Rap (6"-12" rock) 10 feet on each side of the boat ramp.



Future

- While the physical part of the project is complete, further efforts by the Heart Lake Association will be needed to maintain the bank and its surroundings.
 - The plants along the shore must remain in place and be maintained by the Association. These native plants will help decrease erosion and filter runoff into the lake.

What Can you do?

- Structural Stormwater Basic Mangement Procedures
 - Reduction of direct outlets
 - Concrete sidewalks, streets, and driveways are unable to absorb rainfall. Runoff carries motor oil, fertilizers, and soil into storm drains and creeks. Reduce runoff by diverting downspouts onto grassed areas and using materials such as wood, bricks, or interlocking stones for patios and walkways. Control soil erosion by reseeding and mulching bare spots.
 - Reduce fertilizer applications
 - Follow directions when using fertilizers -- more is not always better.
 - Plant Native deep rooting species
 - Landscaping with grasses, trees, and shrubs helps prevent water pollution. Plants control soil erosion and use nutrients that could otherwise enter streams.
 - [List of Native Plants](#)

Basic Management Procedures

- **Driveway BMPs**

 - Broad Based Dip

 - Conveyor Strips

- **Volume/Peak Rate Reduction by Infiltration**

 - [Infiltration Basin](#)

 - [Infiltration Trench](#)

 - [Rain Garden / Bioretention](#)

 - [Dry Well / Seepage Pit](#)

 - [Constructed Filter](#)

 - [Vegetated Swale / Filter Strip](#)

 - [Riparian Buffer Restoration](#)

For More Information Contact:

[Susquehanna County Conservation District](#)

Nathan Harpster Water Shed

570-782-2105

Thank you for taking the time to learn how you can help Heart Lake.