

Lizard Hill Sand Mine Reclamation and Bishopville Pond Restoration

Ocean City, Maryland



from top: Bishopville Pond after restoration; Lizard Hill after reclamation

This unique ecosystem restoration project included two significant components. The first, reclamation of the abandoned Lizard Hill Sand Mine, created a 32-acre mosaic seepage wetlands consisting of shallow aquatic beds and Atlantic white cedar wetlands. This allowed processing of nutrient rich agricultural runoff from adjacent agricultural fields by routing flow through functional wetlands prior to discharge into Buntings Branch, a tributary to the Saint Martens River, one of the worst non-attainment areas in Maryland.

Integrated mine reclamation and dam removal projects are improving water quality, creating natural habitat, and restoring fish passage.

A 1,000 linear foot segment of Buntings Branch was also restored with grade control structures that raise the bottom of the incised channel and reconnect the stream to its floodplain. This restoration delivered multiple benefits: rehydration of the forested floodplain, improved nutrient processing in runoff waters, and restoration of natural storm flow peak damping from the approximately 13.5 square mile drainage area.

The second component, the restoration of Bishopville Pond, converted a five-acre, in-line pond formed by a sheet pile dam across Buntings Branch to an off-line pond by constructing a lateral sand seepage berm. This plan restored Buntings Branch to a free-flowing lotic system that provides aquatic passage while

preserving pond aesthetics valued by the community. A grade control/flow splitting weir with a series of parabolic weirs and step pools conveys the confined bypass channel along the lateral berm.

The Bishopville Pond restoration planting plan specified genetic stock from the Coastal Bays region, species once locally abundant but now rare in the landscape. Local schools, watershed associations, and State and County organized volunteers conducted the planting effort as a stewardship project.

SERVICES

- Inventory & Assessments
- Design
- Permitting
- Construction Support
- Project Management
- Funding Support
- Public Outreach

conservation planning
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regenerative design



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Physiographic Province

Coastal Plain

Bioregion

Chesapeake/Delaware Bays

Watershed

Saint Martens River