Final Report - LOWER DELAWARE WILD AND SCENIC RIVER

River Management Council Funding – total amount \$5,000.00

PROJECT: Habitat Restoration at Bull's Island, adjacent to the Inlet Trail

Grant accepted: February 8, 2022

Grantee: Delaware Township Environmental Commission Partners: Kingwood Township Environmental Commission

D&R Canal State Park

AmeriCorps NJ Watershed Ambassador Program

1. Project Summary

This Bull's Island native habitat restoration project will help protect the Delaware River and its environment, including rare and endangered plant and animal species, promote biodiversity by providing habitat, enhance passive recreational opportunities, and educate visitors. Two areas in the former campground of the Delaware and Raritan Canal State Park were targeted for restoration using LDWS grant funds. The sites were selected due to high visibility along the new Inlet Trail that was once an old campground roadway, and because former campsite buildings had been removed, leaving gaps in the existing floodplain forest. Grant funds were used to purchase 103 native trees, 39 native shrubs, and 234 native herbaceous plants, and fencing and fence posts to protect the trees and shrubs from deer herbivory. On April 28, 2022, volunteers, primarily from the AmeriCorps NJ Watershed Ambassador Program, prepared for the planting days by cutting lengths of fencing, digging approximately 36 Christmas ferns for transplanting from a path which gets mowed, and other tasks. On April 30 and May 1, 2022, over 50 volunteers from Delaware and Kingwood Environmental Commissions, Watershed Ambassadors, and the public planted the native plants, installed fences, and removed invasive plants.

The D&R Canal State Park, one of NJ's most visited NJ State Park, opened the Inlet Trail on June 3, 2022, located in the former campgrounds of Bulls Island Recreation Area. This multiuse trail will provide the public an opportunity to explore the beauty of the floodplain forest while appreciating the history of the D&R Canal. The D&R Canal State Park is listed on the National and State Historic Registry for rich transportation history. This new trail at Bulls Island allows people to view the beginning of the D&R Canal at the northern area of the island and the wing dam on the Delaware River. Most of the pavement roads and all of building infrastructures have been removed from this area and this project will help to restore the forest habitat in these areas.

2. Timeline

April 25-28, 2022 – picked up plants, fencing, and fence posts from vendors

April 28, 2022 – Prep Day - Work with twelve (12) Watershed Ambassadors to make cages for trees; dig up Christmas ferns for transplanting in the Planting Plots

April 30, 2022 – Planting Day, 9-11 a.m. and 1-3 p.m.

May 1, 2022 – Planting Day, 9-11 a.m. and 1-3 p.m.

Total number for both days -51 volunteers

(non-project related volunteers and employees)

May 19, 2022 – final purchase of materials for project, total spent: \$4,965.62 (see section 5).

3. Outreach Announcements

April 3, 2022 – Eventbrite invitation (see Figure 1)

April 20, 2022 – Announcement before Delaware Township Environmental Commission for Planting dates and times

March 28 & April 26, 2022 – Announcement at Kingwood Twp. Env. Commission meetings May 9, 2022 – Announcement before Delaware Township Committee Meeting for Opening Day of Inlet Trail

June 3, 2022 - NJDEP Press Release: "Ahead of National Trails Day, Murphy Administration Opens New Trail at Bulls Island Recreation Area"

Figure 1. Eventbrite and Facebook Announcement



4. Maintenance and Upkeep – Summer to Fall, 2022

Kathy Klink is a member of the Rutgers Environmental Stewards (RES) Class for 2022. She has written an internship plan that was accepted by Patricia Kessler of D&R Canal State Park and the RES mentors, Kathryn Homa and Rebecca Magron.

- Rain Log to monitor rain and water plots when there has been a period of ten days without rain, or less than one inch of rain per ten days
- Map two planting areas to map plants that were planted and monitor growth and survival
- Recruit volunteers to remove invasive species and help maintain plot growth

5. Funding Details for \$5,000.00 grant

Vendor	Description	Amount	Final price
Home Depot	fence and posts		\$928.24
	gas powered pump/hose	1	\$366.27
	deer spray		\$26.27
Feeney's	10-12' white dogwood	1	\$315
Pinelands	trees and shrubs	84	\$1,239.16
White Oak Trail	Christmas ferns	36	0
Wild Ridge	herbaceous plants	210	\$1239
Toadshade	trees, shrubs, plants	71	\$851.68
	Totals	402	\$4,965.62
	Remaining		\$34.38

6. Plant List

Latin name	Common name	Type of Plant	Number Planted	Source
Acer negunda	boxelder	tree	5	Toadshade
Acer saccharinum	silver maple	tree	20	Pinelands
Carpinus caroliniana	ironwood	tree	7	Pinelands
Cornus florida	flowering dogwood	tree	1	Feeney's
Liriodendron tulipifera	tulip poplar	tree	20	Pinelands
Nyssa sylvatica	black gum	tree	20	Pinelands
Prunus serotina	wild black cherry	tree	7	Toadshade
Quercus alba	white oak	tree	20	Pinelands
Quercus rubra	Northern red oak	tree	3	Toadshade
		Total Trees:	103	
Amelanchier canadensis	shadbush	shrub	20	Pinelands
Hamamelis virginiana	Americn witch hazel	shrub	2	Toadshade
Sambucus nigra Ssp.				
Canandensis	American black elderberry	shrub	8	Toadshade
Viburnum lentago	nannyberry viburnum	shrub	9	Pinelands
		Total Shrubs:	39	
Allium cernum	nodding onion	herbaceous	5	Wild Ridge
Aquilegia canadensis	wild columbine	herbaceous	10	Wild Ridge
Carex grayi	Gray's sedge	herbaceous	10	Wild Ridge
Carex squarrosa	squarrose sedge	herbaceous	20	Wild Ridge
Elymyus hystrix	bottlebush grass	herbaceous	20	Wild Ridge
Eupatorium perfoliatum	boneset	herbaceous	10	Wild Ridge
Eurybia divaricata	white wood aster	herbaceous	14	Toadshade
Eutrochium fistulosum	hollow stem Joe Pye	herbaceous	20	Wild Ridge
Gentiana clausa	bottle gentian	herbaceous	10	Wild Ridge
Polystichum acrostichoides.	Christmas fern	herbaceous	36	free
Pycnanthemum muticum	broadleaf mt. mint	herbaceous	20	Wild Ridge
Ranunculus caricetorum	swamp buttercup	herbaceous	20	Wild Ridge
Rudbeckia laciniata	tall coneflower	herbaceous	20	Wild Ridge
Sanguisorba canadensis	Canadian burnet	herbaceous	5	Wild Ridge
Solidago caesia	wreath goldenrod	herbaceous	10	Toadshade
Symphyotricum cordifolium	blue heart-leaved aster	herbaceous	20	Wild Ridge
Symphyotricum novae-anglia	New England aster	herbaceous	20	Wild Ridge
	Total Herbaceous Plants:		270	
	Total all types of plants:		412	