

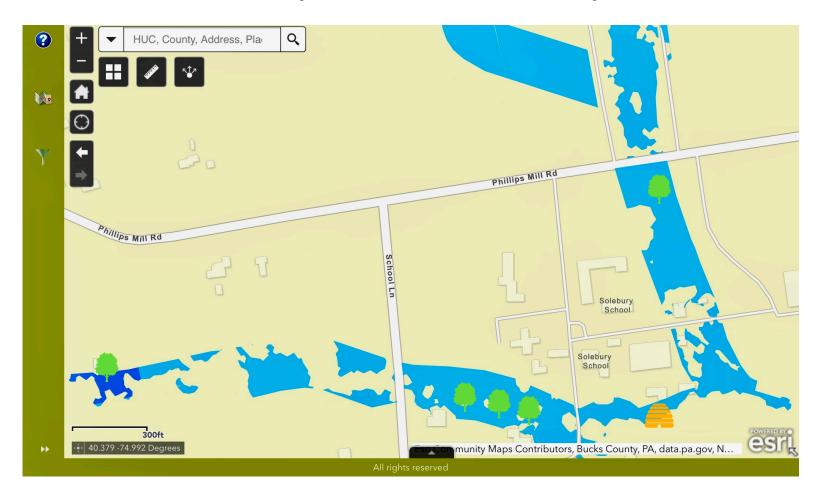






The Final 2023 Report to the Lower Delaware Wild and Scenic River Management Council c/o Delaware River Greenway Partnership

Part Two: Restoring Canopy and Understory Habitat in the Primrose Creek Riparian Priority Zones "New Hope for Delaware River WaterQuality from Trees and Bees in Solebury."



This PA Land Trust Alliance (PALTA) map displays the BLUE priority high value restoration areas of the Primrose Creek.

indicate the successfully completed 2022-2023 LDW&SR grant sections.



## LDW&SR Mini Grant Partnership Description & Work Accomplished

This 2023 Mini Grant is a \$4856 discrete implementation project managed by Primrose Creek Watershed Association (PCWA) within its overarching watershed implementation plan (WIP).

This LDW&SR grant initiates the restoration of a <u>second</u> prioritized .5-acre area. This integrated habitat of shrubs and trees buffer and stabilize eroding stream banks, cool water, increase dissolved oxygen and support pollinators along the Primrose Creek. The 2023 LDW&SR Mini Grant project installed a model half acre of mixed hydrophilic understory of serviceberry, buttonbush and red twig dogwood shrub varieties that transition to a tree canopy of bee loving celestial dogwood, linden, spicebush, Princeton elm, white swamp oak and hackberry (70) trees in deer exclusion zone planting sites along the Primrose Creek.



Cindy Kunnas, LDW&SR Projects Director & Francis Collins, PCWA President







Name	Total Hours	@ \$7.25	
Staci Freer	24:00	174:00	
Ed Leydon	30:00	218:00	
Francis Collins	60:00	435:00	
Larry Hampt	60:00	435:00	
John Francis	16:00	116:00	
Carol Cope	24:00	174:00	
Jeremy Pfancook	4:00	29:00	
Ari Leydon	8:00	58:00	
Charlie Flack	8:00	58:00	
Carl Flaxman	4:00	29:00	
Bob Magerr	4:00	29:00	
Tim Hayes	6:00	44:00	
Bill Birnes	2:00	15:00	
Johnny Winterbottom	30:00	218:00 29:00	
Hope Blaythorne	4:00		
Kevin Morrissey	4:00	29:00	
Peter Grover	2:00	15:00	
Gerry Miller	6:00	44:00	
Cindy Kunas	3:00	22:00	
Robert Mc Ewan	30:00	218:00	
Kim Rubenstein	2:00	15:00	
Olivia Feinstein	2:00	15:00	
Richard Coe	2:00	15:00	
Total - Labor	335:00 \$2429:00		
Robert Wood	Fence Donor	\$1500:00	

Name	Total Hours	<b>@ \$7.25</b>
Grand Total IN-KIND \$		\$3930:00

Matching Funds & In-Kind Volunteer Work Records

## **LDW&S Mini Grant Timeline**



Carol, John, Ed and Staci install deer exclusion fence



poles while Ed untangles



netting.





Hasan's Tree Authority plants arrive. Ed & Charlie prepare riparian buffer zone.

Solebury School students from environmental science teacher Kim Johnson's class on a visit to the LDW&S mini grant site.

The impact of the LDW&SR mini grant was apparent from the first day of planting. The creek's eroding banks were instantly transformed to a lush, integrated habitat of shrub and tree buffers that will begin to stabilize eroding stream banks, cool the water and support pollinators along and within the Primrose Creek's 2.7 square mile watershed's riparian corridor.



Primrose Creek

Watershed Association will continue to replicate this model project throughout the watershed until the goal of restoring high quality water to the Primrose Creek Watershed and Delaware River is complete in 2028.



PCWA's Larry Hampt cares for a newly planted canopy tree.

Francis Collins PCWA President 12/7/2023

Press Release: The Primrose Creek Watershed Association (PCWA) was awarded two Lower Delaware Wild & Scenic 2022 & 2023 Mini-Grants by the Delaware River Greenway Partnership.

Two \$5000 LDW&S Mini grants fund riparian arboretum demonstration model sites at Solebury School. These sites on Primrose Creek are defenders against future "Climate Change Super-Charged storms" like the 2021 tropical storm **Ida's** erosion of the Primrose Creek corridor, while also adding multiple "green infrastructure" benefits to a strategically targeted location of the Primrose Creek stream bank.

Under this project, PCWA and its educational partners, Solebury School and New Hope-Solebury S.D. will restore an impaired acre+ of stream bank with a hydrophilic native <u>understory</u> of black chokeberry, sassafras, serviceberry, spicebush and buttonbush shrub varieties transitioning to a <u>canopy</u> of bee loving willow, linden, dogwood, Princeton elm and hackberry trees. These native plantings will enhance water quality, nurture a new broad dense root system network to help mitigate the impact of future stream flooding by stabilizing erodible creek banks. The new canopy will also reduce water temperatures, enhance the habitat of endangered honeybees and reduce pollution entering the Delaware River.

Pink, white and red surveyor flags are already in place as the watershed and school prepare for the tree planting in April and December 2023. PCWA's goal is to plant a total of 36 hydrophilic understory shrubs, 54 mid canopy trees and shrubs with 36 larger canopy trees.

Three deer exclusion zones will be constructed in preparation for the delivery of the shrubs and trees. PCWA board member, arborist / apiarist Ed Leydon is donating a 100 seedlings and saplings to the effort.

The first of the two LDW&S mini grants funded the installation of 2 bee hives, as Solebury School teacher Staci Freer strives to enhance the environmental habitat of Primrose Creek as it meanders through Solebury School campus with the much-needed endangered pollinators.

The public is invited and encouraged to help; volunteers are needed April - December 2023-2028.

Email Francis Collins @ <u>primrosehotline@gmail.com</u> Visit <u>www.primrosewatershed.org</u> for more information.

Most importantly, PCWA is looking to transfer this model to other interested Delaware River watershed organizations.

## **Company Name**

Attention: John Winterbottom CFO

INVOICE

PO BOX 49 Solebury, PA 18963 Phone:267-679-5260

TO: LDWS PO Box 15 Stockton, NJ 08559 INVOICE # 100 DATE: DATE

## **COMMENTS OR SPECIAL INSTRUCTIONS:**

Second and last invoice

DESCRIPTION	TOTAL
Trees and beehives for Primrose Creek Watershed	\$2,428