

Updated January 2019

Progress Report on Stewardship Goals

Wilma Quinlan Nature Preserve



**Progress Report on 2011 PECO Green Region Grant Projects
Wilma Quinlan Nature Preserve**

Grant Goals	Completed	In Progress	Uncompleted	Notes
1. Remove existing shrubs around main entrance sign and replace sign with new double-sided carved sign.	X			
2. Construct and install new information sign at the main Preserve entrance on Matthews Ave.	X			<i>A permanent kiosk was constructed and installed at main entrance. New message board installed in 2017.</i>
3. Install map of Preserve at Preserve at the main Preserve entrance.			X	<i>Capital funds for Preserve map set aside for 2019.</i>
4. Install three new welcome signs with Preserve rules at main trail entrances.	X			
5. Install two benches around perimeter of Miriam's Meadow and four additional benches in main Preserve.	X			
6. Install 2' x 3' illustrated interpretive sign in front of Miriam's Meadow.	X			
7. Install small boundary signs around entire perimeter of the Preserve.	X			
8. Install illustrated interpretive sign about the Landis Mill along the Neshaminy Creek behind the Miller house.	X			
9. Purchase materials for birdhouses for local Boy Scout troop to construct.	X			<i>A total of 21 birdhouses were constructed and installed using PECO grant funds.</i>

Progress Report on Natural Lands Trust Recommendations Wilma Quinlan Nature Preserve

2007 Stewardship Plan Recommendations	Completed	In Progress	Uncompleted	<i>Notes</i>
1. Survey and remove hazard trees. Establish a monitoring program for future removal of hazardous trees.		X		<i>Hazard trees are removed as needed. Three ash trees in riparian area and one at Miller Point were removed in 2018.</i>
2. Remove old wire fence in Unit 1 and barbed wire fence from Unit 2.	X			
3. Install gates or chains at trail entrances to prevent motor vehicle use.				<i>Not under consideration. Has not been a problem.</i>
4. Divert stormwater at Aarons Avenue entrance to prevent further erosion.	X			<i>Large gravel stones at this entrance have resolved the problem.</i>
5. Relocate Aarons Avenue trail entrance to flat stretch of Landis Mill Road. Keep existing entrance to allow access for maintenance equipment.	X			<i>New entrance has been created along Landis Mill Road, but old Aaron's Avenue entrance is still in use.</i>
6. Take measures to address soil erosion caused by stormwater runoff in Unit 2 on trail leading from East Meadow down to the Neshaminy Creek or reroute trail to prevent further erosion.	X			<i>Completed in 2017 with help of local Boy Scouts.</i>
7. Survey property boundaries adjacent to private parcels to determine unwarranted use, including encroachment.	X			<i>Encroachments around Groner estate area and Miriam's Meadow have been addressed. Boundary signs have been erected.</i>

Recommendations	Completed	In Progress	Uncompleted	Notes
8. Monument corners and mark Preserve boundaries adjacent to roads and private property.	X			<i>Monument corners now in place and boundary signs have been erected around all parts of the Preserve.</i>
9. Contact property owner to south of Preserve to discuss protection options.	X			<i>Conversations occurred w/ Powers, Marsh, and Coleman over possible purchase of their properties. Powers and Marsh tracts were appraised. Property owners currently are not interested in selling. Issue had been deferred for now.</i>
10. Remove trash and materials from dumping in Units 1, 3, and 6.	X			
11. Establish a deer management program.			X	<i>Has not been considered to date.</i>
12. Cut vines to canopy trees in Units 2, 4.		X		<i>Ongoing project.</i>
13. Clear areas where heavy invasive shrub and vines have prevented tree regeneration and replant with native trees and shrubs, as resources permit.		X		<p><i>Ongoing project.</i></p> <p><i>Significant area of Unit I was cleared in 2015. 25 Eastern white pines planted in 2015. 11 Eastern Red Cedars planted in 2016. Additional trees and shrubs planted in 2017 and 2018</i></p> <p><i>Other sections of Unit I along Sunrise Trail cleared and replanted in 2017-2018.</i></p> <p><i>Sections of riparian area were cleared and replanted in 2017-2018</i></p>

Recommendations	Completed	In Progress	Uncompleted	Notes
14. Protect new plantings from deer browse and rubbing.		X		<p><i>Newly planted shrubs and some naturally occurring tree seedlings have been protected with wire cages.</i></p> <p><i>All tree seedlings planted in protected by tree tubes</i></p> <p><i>Transplanted red cedars are sprayed with deer repellent during the winter months.</i></p>
15. Establish program to annually monitor and control invasive plants as needed.		X		<p><i>Ongoing project. Invasive shrubs / vines are continuously removed.</i></p>
16. Convert meadows to warm-season native grass and wildflower meadows to improve wildlife habitat.		X		<p><i>Miriam's Meadow seeded with native warm-season grasses and wildflowers. Additional plants installed as an on-going project.</i></p> <p><i>Began installing native grasses and wildflower plugs in East Meadow in 2017.</i></p>
17. Mow meadows once annually in late winter to prevent invasion by woody vegetation.	X			
18. Monitor meadows annually for invasive herbaceous vegetation and control as needed.		X		<p><i>Ongoing project.</i></p>
19. Install additional bluebird boxes in meadows.	X			<p><i>A total of 8 bluebird boxes have been installed – two in each of the three meadows and two in Unit I clearing.</i></p>

Recommendations	Completed	In Progress	Uncompleted	Notes
20. Establish and maintain a meandering trail within the three sections of the Miriam Groner property. Minimize the number of trails in this unit to prevent unnecessary disturbance of wildlife.	X			<i>Trails exist through and around perimeter of Miriam's Meadow.</i>
21. Restore collection of horticultural specimens in Groner estate area through the removal of competing vegetation, starting with vines that threaten canopy trees. Remove several species of shrubs that are now considered invasive and pose a threat to the adjacent natural areas.		X		<p><i>Numerous vines (Grape, Oriental Bittersweet, and English Ivy) have been cut.</i></p> <p><i>Numerous invasive shrubs—mostly Autumn Olive, Shrub honeysuckle, and Burning Bush have been removed.</i></p>
22. Determine the desirability of interpretative signs throughout the Preserve. Such signs should be placed close to the plant they are marking without damaging the roots.		X		<i>Some small ID plates now identify some native plants around perimeter of Miriam's Meadow. ID plates on new shrubs in these borders and on some of the more significant trees in the Preserve itself are planned.</i>
23. Monitor area around natural spring in Unit 4 to prevent human disturbance that could degrade its environmental and aesthetic values.		X		<i>Has not been an issue to date.</i>
24. Consider installation of a small diameter culvert pipe to transport water flow under the trail or a short boardwalk across area in Unit 4 where small stream flows from natural spring to the Neshaminy Creek.			X	<p><i>Underground pipe a possibility perhaps, but boardwalk unfeasible because of mower.</i></p> <p><i>Stepping stones have been placed across the stream.</i></p>

Recommendations	Completed	In Progress	Uncompleted	Notes
25. Consider installing a bench on the bank overlooking the spring in Unit 4 A short trail could connect bench with the main trail.			X	<i>Not under consideration, but eight other benches have been installed throughout the Preserve.</i>
26. Consider installation of a few nesting boxes to attract wood ducks. Placement along more isolated southern channel of the Creek would be particularly beneficial.	X			<i>Three Wood Duck boxes were constructed by Boy Scouts and have been installed – one along Cook’s Run Creek and two on the southern bank of the Neshaminy Creek.</i>
27. Install new entrance signs at all trailheads with the Preserve name and ownership that welcome visitors and include a consolidated list of rules. Update rules to address issues such as dog walking.	X			
28. If dogs are allowed in the Preserve, a strict leash rule should be imposed to protect wildlife and other visitors.	X			<i>“Dogs Must Be on Leash” signs have been installed along paths at each entrance of the Preserve.</i> <i>Additional signs were installed in 2016 that specify the borough ordinance and the penalty for violation of this ordinance.</i>
29. Consider producing a brochure showing trail layout and points of interest to guide use and improve appreciation of the property’s natural resources.			X	<i>Completion of brochure deferred until Preserve map is designed.</i>
30. Maintain lawn area at main entrance through regular mowing and maintain loop and parking area by regrading and adding gravel as needed.		X		

2014 Addendum to Stewardship Plan Recommendations	Completed	In Progress	Uncompleted	Notes
1. Continue to cut invasive vines on canopy trees in Units 1, 2, and 4.		X		<i>Ongoing project.</i>
2. Address new invasive species, Japanese knotweed, growing along south bank of Neshaminy Creek.			X	
3. Manage garlic mustard.			X	
4. Reforest woodland gaps in Unit 1 by mowing (in winter) to clear area and plant (in spring) with native evergreen and deciduous tree species.		X		<i>Project started, with planting of 25 eastern white pines in Sept. 2015 and 11 eastern red cedars in the spring of 2016. Numerous additional trees and shrubs planted in 2017 and 2018.</i>
5. In the event of a fallen canopy tree, replant native trees in the area to restore canopy (Units 1, 2, and 4)		X		
6. Mow to clear the invasive shrubs in Unit 1.		X		<i>Ongoing project. Numerous invasive shrubs have been removed.</i>
7. Remove invasive shrubs in woodland (Unit 2) and forest (Unit 4)		X		<i>Ongoing project. Numerous invasive shrubs have been removed.</i>
8. Continue to mow meadows annually (in February or March).		X		
9. Control walnut tree sprouts in meadows.		X		<i>Controlled through annual spring removal and through mowing.</i>

Addendum Recommendations	Completed	In Progress	Uncompleted	Notes
10. Continue to pull and cut thistle and other invasive plants in meadows. If large patch develops, treat with herbicide.		X		<i>Ongoing task. Has been extensively done in Miriam's Meadow and efforts to do this in the East Meadow began in 2017.</i>
11. In open meadow areas, seed or plant with native meadow species to create more diversity and support pollinator habitat.		X		<i>Ongoing task. Has been extensively done in Miriam's Meadow and efforts to do this in the East Meadow began in 2017.</i>
12. If trying to create more diversity in meadows, open up some patches by treating with herbicide or mowing and seed or plant native meadow species.		X		<i>Ongoing task. Has been extensively done in Miriam's Meadow and efforts to do this in the East Meadow began in 2017.</i>
13. Speak with sewer company about their maintenance plans along the sewer line to discuss possibility of assisting with the management and maintenance of the right of way.			X	
14. Soil erosion remains an issue on the main trail running from the South Landis Mill Road entrance to the Creek.	X			<i>Erosion at Aarons Avenue entrance and erosion at the bottom of the trail leading to the creek has been addressed with placement of stones in both areas.</i>
15. Consider expanding the Preserve through the purchase of land parcels adjacent to the Preserve.		X		<p><i>Chant donation has added three acres of woodland to the Preserve. Access to this area remains an issue.</i></p> <p><i>Currently awaiting Orphans Court approval for purchase of Miller properties.</i></p>

**Progress Report on Additional Projects Undertaken Before 2015 Strategic Plan
Wilma Quinlan Nature Preserve**

Projects	Completed	In Progress	Uncompleted	Notes
1. Installation of 2.7 acre wildflower meadow (to be called "Miriam's Meadow") on former Groner property.	X			<i>Installed by Larry Weiner Landscape Design Associates in 2010.</i>
2. Installation of memorial plaque for Miriam Groner on rock in front of Miriam's Meadow.	X			
3. Creation of landscaped garden of native perennials and shrubs around Miriam Groner memorial rock.	X			
4. Installation of several sections of split rail fence along borders of Miriam's Meadow and adjacent privately-owned properties.	X			
5. Installation of native shrubs and trees around the perimeter borders of Miriam's Meadow.		X		<i>Ongoing project.</i>
6. Installation of new plantings in bed around new entrance sign.	X			<i>Bed was redesigned and replanted in Fall, 2017</i>
7. Installation of memorial plaque for Larry Miller on rock in East Meadow.	X			
8. Installation of four "Dogs Must Be Leashed" signs at four main trail entrances.	X			

Progress Report on Goals Outlined in 2015 Strategic Plan Wilma Quinlan Nature Preserve

Highest Priority Environmental / Ecological Goals	Completed	In Progress	Uncompleted	Notes
1. Clear designated sections of the Upland Woodland / Forest (Unit 1) of invasive plant species and replant with native evergreen and deciduous tree species.		X		<p><i>Large section of this area cleared in 2015. 25 white pines, 11 red cedars planted in 2015-2016.</i></p> <p><i>Additional areas along Sunrise Trail cleared in 2017.</i></p> <p><i>Numerous trees and shrubs planted in these areas in 2017 - 2018</i></p>
2. Plant bird-friendly native trees and shrubs along the borders of the East Meadow.		X		<p><i>Three river birch, 14 eastern red cedars and numerous additional native shrubs planted along northern border of meadow starting in 2016.</i></p> <p><i>Arrowood viburnum, Winterberry, American Holly planted along eastern edge of meadow in 2017.</i></p>
3. Protect new tree and shrub plantings from deer browse and rubbing.	X			<p><i>Newly planted shrubs protected with cages. Cedars are not protected and will be monitored for deer browsing.</i></p> <p><i>Tree seedlings planted in 2017 protected by tree tubes.</i></p>

Goals	Completed	In Progress	Uncompleted	Notes
4. Mow open areas in Riparian Zone (Unit 4) and keep these areas cleared for future tree/shrub plantings.		X		<i>Large areas of riparian area cleared and replanted in 2017. Tree seedlings planted include Red Maple, White Swamp Oak, Pin Oak, Black Gum, and River Birch.</i>
5. Remove bamboo incursion into the Preserve from adjacent private property.		X		<i>Bamboo was cut and treated with herbicide by Weeds, Inc. in 2015. There are still several spots where bamboo is encroaching across the boundary line.</i>
6. Continue to maintain Miriam's Meadow by controlling weeds, replanting, and mulching.		X		<i>Ongoing maintenance task.</i>
7. Seed or plant native meadow species (i.e. milkweed) in East and West Meadows to create diversity and pollinator habitat.		X		<i>Numerous native grass and wildflower (including swamp milkweed) plugs planted in 2017 – 2018.</i>
8. Continue to remove or control invasive shrubs, vines, and other plant species throughout the Preserve on the north side of the Neshaminy Creek.		X		<i>Numerous invasive shrubs and trees have been removed. Numerous trees of value have been freed from vines that were strangling them.</i>
9. Address the soil erosion caused by stormwater runoff from the Landis Mill Rd. entrance down to the creek.	X			<i>Erosion at both at Aarons Avenue entrance and at bottom of trail leading to creek have been addressed with placement of stones in these areas.</i>
10. Make trail improvements to address the soil erosion issue on the short connecting trail between the West Meadow with the Riparian Zone (Unit 4).	X			<i>Trail was redesigned and reconstructed. Problem resolved.</i>

Mid- Priority Environmental / Ecological Goals	Completed	In Progress	Uncompleted	Notes
1. Continue efforts to restore the forest canopy in Units 1, 2, and 4 by filling gaps in the canopy with native trees.		X		<i>A total of 196 native trees were planted in these areas in 2017 – including 125 tree seedlings purchased from Octoraro Native Plant Nursery.</i> <i>Additional trees and shrubs planted in 2018.</i>
2. Fill gaps in understory layer in Units 1, 2, and 4 by planting native shrubs and understory trees.		X		

Progress Report on Additional Goals Established Since 2015 Strategic Plan

Goals	Completed	In Progress	Uncompleted	Notes
1. Construct and install trail signs.	X			<i>All trails, the East and West Meadows, and Miller Point are now identified with signs.</i>
2. Install additional benches.	X			<i>Two additional benches have been installed -- one at Miller Point and the other on the Beech Tree Trail.</i>
3. Construct and install new message board at Landis Mill Rd. entrance.	X			
4. Create off-road parking spaces at Landis Mill Rd. entrance.	X			<i>Gravel parking area for two vehicles has been created.</i>

Goals	Completed	In Progress	Uncompleted	Notes
5. Build footbridge across gully on Miller easement path and construct steps from this path down to Cooks Run Creek.	X			<i>Constructed with help from local boy scout troop.</i>
6. Plant additional bird-friendly native shrubs and small trees around perimeter of Miriam's Meadow.		X		<i>Ongoing project. Over 40 trees and shrubs added to date.</i>
7. Install additional screech owl / kestrel boxes.	X			<i>Seven such nest boxes have been installed to date</i>
8. Cage naturally-growing tree seedlings to protect from deer.		X		<i>Numerous pin oaks, a willow oak, and several red cedars protected.</i>
9. Spread wood chips on Beech Tree Trail.	X			<i>Done annually.</i>
10. Trim back tree branches extending out into East Meadow.	X			<i>One walnut tree leaning out over the meadow was also removed.</i>
11. Inventory plant species (both naturally occurring and introduced) in Preserve.		X		<p><i>Extensive list first compiled by Ann Rhoads is periodically updated.</i></p> <p><i>Numerous tree and shrub species that we did not know were growing in the Preserve have been identified.</i></p> <p><i>List of specimens planted in and around Miriam's Meadow has been completed.</i></p> <p><i>List of trees and shrubs planted in Preserve is continuously updated. along with their health status.</i></p>

Goals	Completed	In Progress	Uncompleted	Notes
12. Install identification plates on newly planted shrubs in Miriam's Meadow borders and on specimen trees throughout Preserve.			X	
13. Construct and install message board for kiosk at main entrance.	X			<i>Built and installed in 2017.</i>
14. Have Preserve map designed for kiosk at main entrance.			X	<i>Capital funds set aside to do this once final footprint of Preserve is known.</i>
15. Install directional signage for Preserve on Butler Ave.	X			<i>Butler Ave. signs installed in 2017.</i>
16. Formally make donated Chant tract a part of the Nature Preserve and install dedication stone.		X		<p><i>"Chant's Woods" designated as part of Nature Preserve by Borough Council in 2017. Access remains an issue.</i></p> <p><i>Installation of dedication plaque and stone planned awaiting settlement of access issue.</i></p> <p><i>Orphans Court ruling on contiguity of Chant's Woods expected in early 2019.</i></p>
17. Redesign and replant bed around main entrance sign.	X			<i>Completed in 2017.</i>
18. Install additional dog waste station – at Landis Mill Rd. entrance.	X			<i>Installed in 2017.</i>

Goals	Completed	In Progress	Uncompleted	Notes
19. Move pergola into center of Miriam's Meadow to create focal point that will draw people into the meadow.	X			<i>Completed in 2017. Two benches installed at base of pergola.</i>
20. Register Preserve in PA Audubon's Bird Habitat Network and install accompanying signage.	X			<i>Signs installed at the main entrance and at Miriam's Meadow.</i>
21. Register Preserve as pollinator habitat and install signage indicating it as such.	X			<i>Preserve registered with both the Xerxes Society and with the Penn State Cooperative Extension. Signs placed in Miriam's Meadow.</i>
22. Construct some brush piles for wildlife	X			<i>Five brush piles constructed on work days in 2018.</i>
23. Repair and relocate bat box in Miriam's Meadow.	X			
24. Transplant Eastern Red Cedars from retention basin at Chant Engineering to Preserve.	X			<i>A total of 122 trees were transplanted.</i>
25. Create new trail through woods from Miller Point to Aarons Ave through former Miller properties once they become part of the Preserve.			X	