

Appendix A. Ordinance Review Matrix

Little Neshaminy Creek Watershed - Municipal Natural & Cultural Resource Ordinance Review									
Municipality	Ordinance Reviewed and Date Enacted	Historic Resource Protection	Riparian Buffer Protection	Wetland Protection	Watercourse, Lake, Pond Protection	Floodplain Protection	% protected for development on 100-yr. floodplain	Restrict development on floodplain fringe	Stormwater Ordinance*
		Status of Ordinances	buffer width	% protected for open space	% protected for open space (ft)				Location and date of ordinance
Horsham	SALDO - 1999 Zoning -2004	Yes, Historic Preservation Overlay Ordinance in Zoning	Riparian Corridor Conservation District, 75 ft	100% and 50 ft. buffer	yes -100%	Floodplain Conservation District	100%	yes	SALDO
Lower Gwynedd	zoning, 1985, SLDO, 1976 with amendments	Currently drafting ordinance	yes, 25 ft zone with slope provisions	yes and 25 ft buffer zone	yes	Floodplain Conservation District	100%	yes	SLDO, CH. 1241
Montgomery	SALDO - 1964 w/amend to 2002 Zoning - 1981 w/amendments	Yes, Historic preservation cluster ordinance in Zoning.				Floodplain Conservation District	100%	yes, requires studies for alluvial soils	In SALDO - Adopted 2004
Upper Dublin	SALDO - 2004 Zoning -2004	Have drafted zoning ordinance amendment, but not adopted		yes	yes	Floodplain Conservation District	100%	yes	SALDO
Ivyland Borough	SALDO - 1995 zoning - 1996	None Found	Ordinance amend. 75 ft, 2 zone - 25 ft and 50ft	yes, 100%	100%	yes, Floodplain District	100%		In SALDO - Adopted 1995
Northampton	SALDO, 2001 zoning, 2002	None Found	80% within 100ft of lake, pond or watercourse.	yes, 100% and 80% margins in certain districts	100% +, 80% protection within 100 ft of lake, pond or watercourse margin	yes, floodplain and flood hazard districts	100%	yes, 50 ft. In CR, EP, R-1 and AR districts	Ch. 113, stormwater mgmt. & grading, 2005
Warminster	SALDO & Zoning 2002	None Found		yes, 100% and 80% for margins	ponds (bodies of water > 2acres) 80%, 150 ft	Floodplain Conservation District	100%	yes	ZO and SALDO
Warrington	SALDO - 1995 Stormwater - 1992	Zoning code authorizes 60 day demolition delay NR eligible or listed buildings		yes, 100%	100 Ft	Floodplain Overlay Restrictions	100%		Storm. Mgmt. Ord amended 1992
Warwick	SALDO - 1993 Zoning -1997 with amendments to 2004	Yes, has a hisotic district amendment in zoning covering three properties	Riparian Corridor Conservation District, 75 ft total 2 zones: 25 ft and 50 Ft.	yes, 100% in areas of cluster development	100%, 80ft stream buffer	Floodplain District	100%	yes	Storm. Mgmt. Ord SAIDO rev. 2004

Sources: Bucks County Planning Commission (2005) and Heritage Conservancy Analysis
 *All municipalities adopted Model Stormwater Ordinance from Little Neshaminy Creek Act 167 Plan except Lower Gwynedd

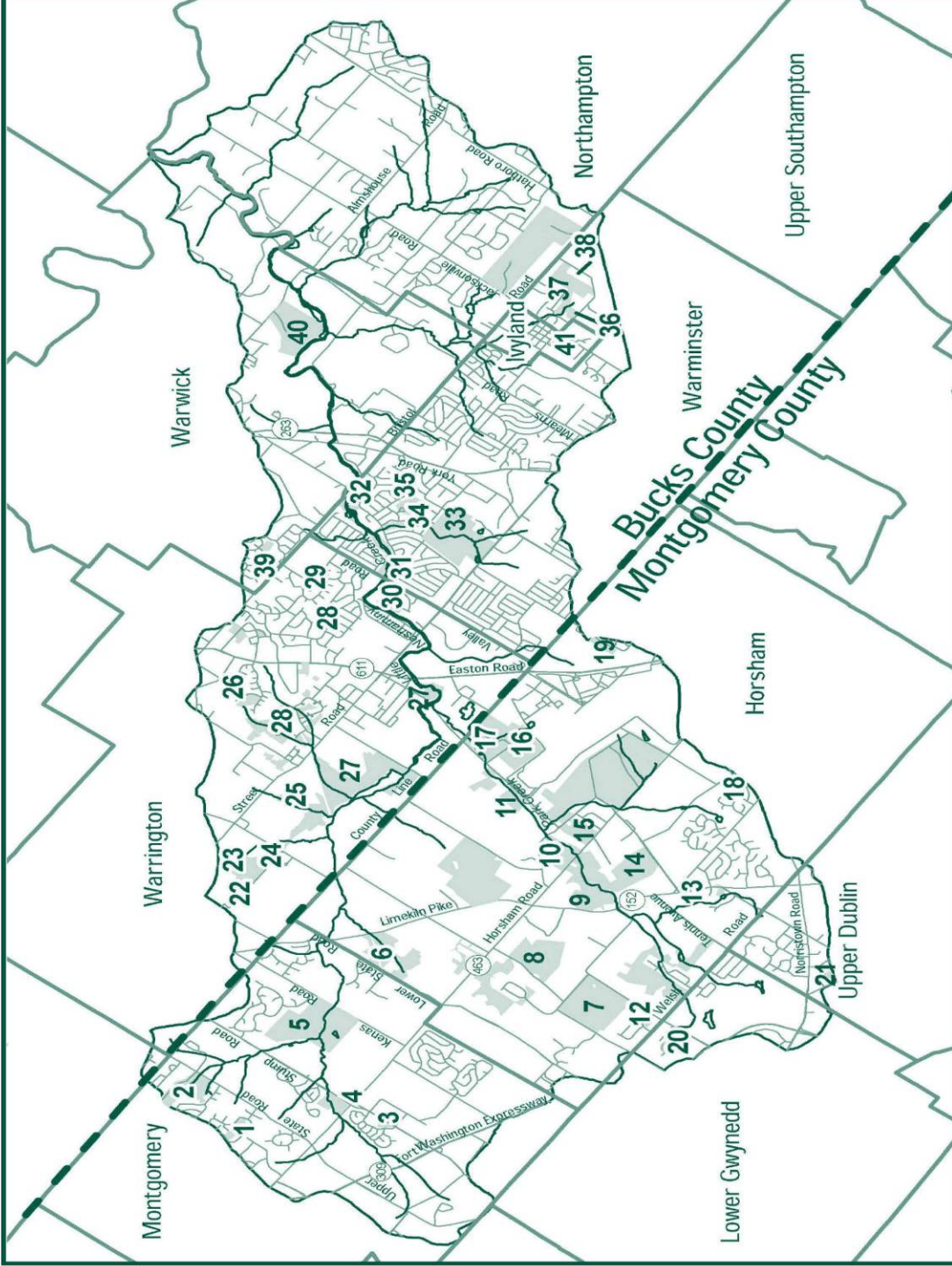
Little Neshaminy Creek Watershed - Municipal Natural & Cultural Resource Ordinance Review

Municipality	Stormwater Quality	Erosion & Sedimentation Control	Control Development on Restrictive Soils	Steep Slope Protection	Woodland Protection	Tree Protection Zone	Active Environmental Advisory Commission or Board
		Location of Criteria	% protected	Natural cover protection	% protected for open space		Status
Horsham	Requires groundwater recharge	yes, SALDO	100% on alluvial soils	yes > 15%	50%	yes	yes
Lower Gwynedd	infiltration requirement & post construction stormwater BMPs	yes, SLDO	Studies required for development on Alluvial Soils			yes	yes
Montgomery	post construction stormwater bmps	yes, SALDO Chapter 205	100% on alluvial soils		8-23 in. 66%, 23-48. 66%, Over 48in 100%	yes	yes
Upper Dublin	Requires groundwater recharge	yes, SALDO	100% on alluvial soils	yes > 10%			yes
Ivyland Borough		yes, SALDO		yes > 15%	75%	yes	no
Northampton		yes in SALDO	yes, 100% OS on floodplain soils	yes > 15%	80%	yes	yes
Warminster		zo and SALDO	100% on alluvial soils	yes > 8%	70%	yes	no
Warrington				yes > 8%	80%	yes	yes
Warwick		storm mgmt ord. SALDO, rev. 2004	100% on floodplain soils	yes > 15%	70%	yes	no

Appendix B. Residents Survey

PARKS

1. Hourglass Park
2. Spring Valley Park
3. Whispering Pines Park
4. Municipal Building Park
5. Windlestrae Park
6. Chestnut Creek Park
7. Squires Golf Course
8. Cedar Hill Road Park
9. Kohler Park
10. Deep Meadow Park
11. Keith Valley Road Park
12. Hideaway Hills Park
13. Lakeview Park
14. Horsham Valley Golf Course
15. Samuel Carpenter Park
16. Strawbridge Park
17. Graeme State Park
18. Jarrett Road Park
19. Maple Park
20. Wooded Pond Trail
21. Three Tuns Park
22. Igoe Porter Wellings (Upper Nike) Park
23. Twin Oaks Day Camp
24. Lower Nike Park
25. Special Equestrian Center
26. Mary Barnes Tennis & Swim Club
27. Bradford Dam Park
28. Fairway Golf Course
29. Valley Glen Park
30. Alou Tot Lot
31. Kemper Park
32. Log College Park
33. Five Ponds Golf Course
34. Barnes Park
35. WREC
36. Werner Park
37. Munro Park
38. Warminster Community Park
39. Hidden Pond Park
40. Neshaminy Valley Golf Course
41. Old Fire Dam Park



Little Neshaminy Creek Watershed- Parks

Map Prepared By:
Heritage Conservancy
85 Old Dublin Pike
Doylestown, PA 18901
215-345-7020
March 2006

Little Neshaminy Watershed (ERR, 1991)
 Municipal Parks (See parks list)
 Streams (ERR, 1998)

Municipal Boundary (PerMDOT, 2004)
 Roads (PerMDOT, 2004)
 County Boundary

0 1 2 Miles

N
W E
S

Background Information:

Municipality in which you live: _____

Age range: 18-24 25-44 45-65 65+

Length of residency:

0-1 Yr. 1-5 yrs. 5-10 yrs over 10 yrs.

1. How close do you live to the Little Neshaminy Creek or one of its tributaries? Please check one.

- My residence is along the Little Neshaminy Creek or one of its tributaries.
- I live within one mile of the Little Neshaminy Creek or one of its tributaries.
- I live more than one mile from the Little Neshaminy Creek or one of its tributaries.
- I do not know how far I live from the Little Neshaminy Creek.

2. If you live along the Little Neshaminy Creek or a tributary, has your property ever been damaged by flooding?

Yes No

If yes, please describe: _____

3. Which local parks do you visit most often?

(See enclosed Parks Map)

4. How often do you visit the creek or a park where the creek is located?

- Less than one time per week
- More than one time per week
- One time per month
- Every three months
- Occasionally
- Never

5. What activities do you participate in at these parks?

- Nature programs
- Fishing
- Hiking/biking/walking
- Wildlife/bird-watching
- Sports/active recreation
- Other _____

In questions 6 through 9, please rank your level of concern by using 1 as the highest and 3 as the lowest.

6. In your opinion what are the three greatest threats to the Little Neshaminy Creek Watershed in Bucks and Montgomery Counties?

- _____ Pollution from stormwater runoff
- _____ Wastewater treatment plant discharges
- _____ Increased development
- _____ Runoff from agriculture & golf courses
- _____ Damage from flooding
- _____ Loss of wildlife habitat/ streamside vegetation
- _____ Other _____

7. In your opinion what are the three greatest recreational needs in the Little Neshaminy Creek Watershed?

- _____ More active recreation facilities, ball fields, basketball courts, skate parks
- _____ More passive recreational opportunities, hiking trails, bird/wildlife watching opportunities
- _____ Better access to the creek for canoeing, kayaking, boating
- _____ Improve fishing through stocking/habitat restoration
- _____ More opportunities for organized activities, teams, or recreation programs
- _____ Other _____

8. In your opinion what are the three most important resources of the Little Neshaminy Creek Watershed?

- _____ Historical resources (historically important buildings and districts)
- _____ Natural open spaces (undeveloped woodlots, wetlands and wild areas)
- _____ Water resources (water quality and groundwater)
- _____ Recreational opportunities (parks, playing fields, and trails)
- _____ Agricultural resources (farms, nurseries, and agricultural production)
- _____ Other _____

9. In your opinion what three resources need to be improved?

- _____ Historical resources (historically important buildings and districts)
- _____ Natural open spaces (undeveloped woodlots, wetlands and wild areas)
- _____ Water resources (water quality and groundwater)
- _____ Recreational resources (parks, playing fields, and trails)
- _____ Agricultural resources (farms, nurseries, and agricultural production)
- _____ Other _____

10. How do you feel the improvements that you indicated in the previous questions should be funded? You may select more than one.

- Municipalities should pursue grant opportunities
- Special fees for people/groups who utilize those resources
- Special referendum taxes (an example is an open space referendum)
- County Government should fund
- Special interest organizations or non-profits should fund

Opportunities for Involvement:

If you would like to participate in the River Conservation Plan process, or simply want to stay informed about the plan's progress, please provide the following information:

Name: _____

Address: _____

City/State/Zip: _____

Phone: _____

E-mail: _____

Thank you for participating in this survey.

The Little Neshaminy Creek River Conservation Plan is a collaborative effort between Heritage Conservancy, Bucks County Conservation District, Bucks County Planning Commission, Montgomery County Conservation District, Montgomery County Planning Commission, PA Department of Environmental Protection, Horsham, Montgomery, Upper Dublin, Northampton, Warrington, Warrington and Warwick townships, and Lyncast Borough.

The Little Neshaminy Creek River Conservation Plan is funded by a grant from the PA Department of Conservation and Natural Resources, with matching funds and services provided by the project partners, PA Department of Environmental Protection Coastal Zone Management Program and National Oceanic and Atmospheric Administration.



www.heritageconservancy.org

Preserving our Natural and Historic Heritage





HERITAGE
CONSERVANCY

85 Old Dublin Pike
Doylestown, PA 18901

Little Neshaminy Creek River Conservation Plan Public Survey

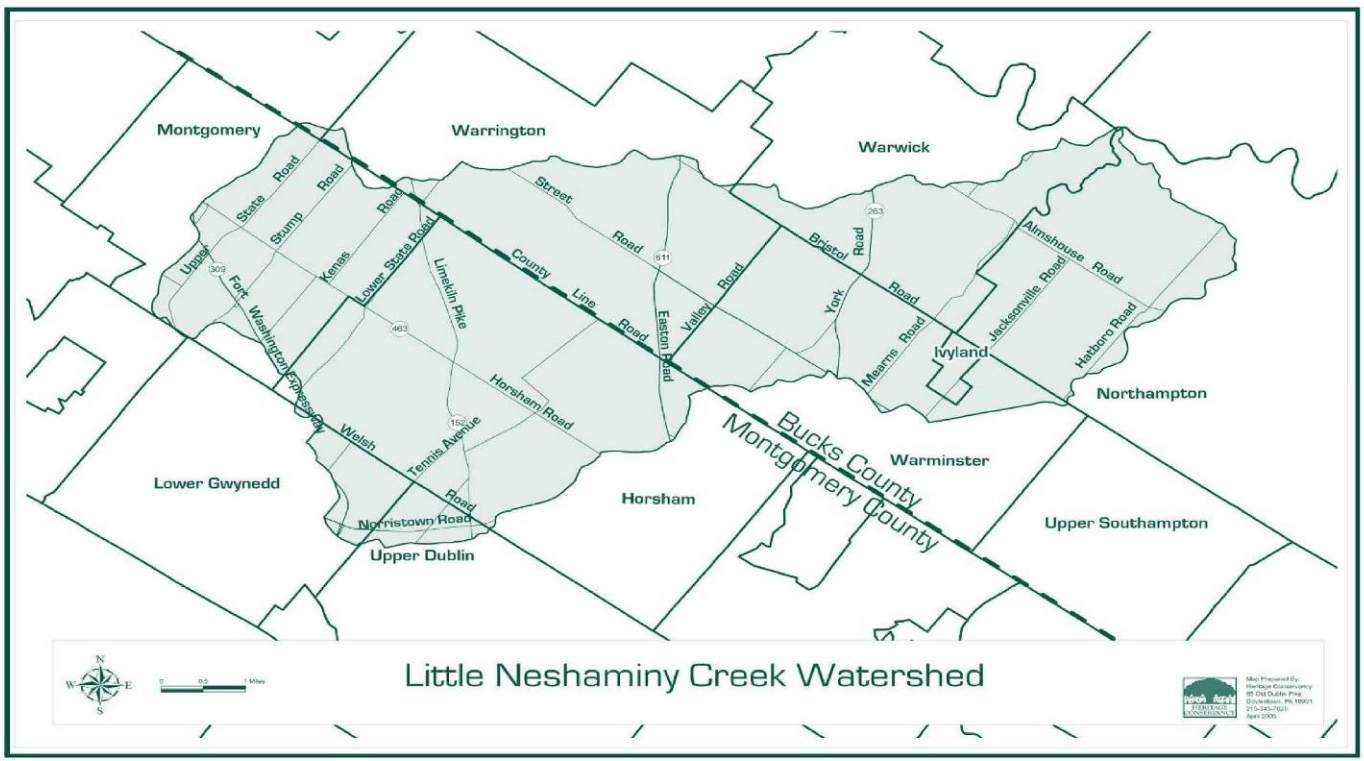
Municipalities within the Study Area

- Horsham Township
- Lower Gwynedd Township
- Montgomery Township
- Upper Dublin Township
- Ivyland Borough
- Northampton Township
- Warminster Township
- Warrington Township
- Warwick Township

Public input is critical to a successful plan. Your responses will help the project team better understand the environmental issues and concerns within the watershed communities.

If you live in or near the shaded area indicated on the map to the right, please take a few minutes to participate in our survey. You may complete and return this postage paid form or use the online form by visiting us at...

www.heritageconservancy.org/projects/l_neshaminy.php
Only one survey per person, please!



To take this survey online, visit us at: www.heritageconservancy.org/projects/l_neshaminy.php
Only one survey per person, please!

Appendix C. Comments on Draft Plan



Mr. Gerald Huestis
1570 York Rd.
Warminster, PA 18974

Memo written 2001

Submitted to THE WARWICK TOWNSHIP SUPERVISORS in 2001
W: ACT100

White Paper

Flood Mitigation Options for the Old York Road Bridge, over the Little Neshaminy Creek in Warwick Township.

Some History: The Old York Road was the original road between New York and Philadelphia. Although the history records are not exact, it probably was built in the late 1600's or early 1700's. Records show that it existed in the early 1700's and that George Washington used it in 1776 while headquartered at the Moland House. The Hart Mill (now a home at 1570 Old York Road) was built in the 1750s and was used by Washington to provision his troops and horses.

As a starting point for examining options, figure 1 is this writer's sketch of the Little Neshaminy Creek and flood way as it must have existed before any bridge or road. The creek shows signs of meandering so the exact channel location may have been different than the current channel. It will be noted there was no impediment to the flow of water at that time.

When the road was developed in the early 1700s, a covered bridge spanned the creek. The exact span of that bridge is unknown to the writer. Later in 1939 the bridge was replaced with a steel bridge and the bridge approaches were ramped up to the bridge level. In March 2001 the bridge was closed for repair and cosmetic changes, It remains closed as of this date. *(about May 2001)*

Figure 2 is a cross section sketch of the resultant road bed and estimated levels above the flood plain.

It should be noted that the bridge and road now act as a dam in conditions where runoff waters can no longer pass through the channel and under the bridge. For a number of years this was no problem, and the installation of a dam by the Corp of Engineers upstream at Bradford Lane was a great factor in reducing downstream flow. For a number of years no flooding occurred. However recent development upstream in Warrington Townships and Montgomery County have increased the rate of flow to the point where even a modest storm causes the creek to overflow its' bank, and water backs up behind the bridge/road dam and floods houses on Old Your Road and Graeme Way. It is obvious that the 100 year flood plain metes and bounds are no longer valid.

Incident to the restoration of the Moland house a township plan was developed to repair the bridge and make cosmetic changes. After the hurricane Floyd flood this writer appealed to the Township Supervisors to widen span to increase the flow capacity. This request was denied on the basis of funding limitation and time to get permits, et al. The bridge was closed in March 2001 for repairs. The bridge was scheduled to reopen on June 19 but remains closed due to damage to the bridge caused by the June 17 flood. The bridge has to be repaired before reopening.

It should be noted that nothing was done in the repair to mitigate flooding. In fact the addition of rip rap at

the bridge abutments to reduce scouring and the increase in size of the structural beams has ,in fact ,reduced the flow-through capacity.

Flood mitigation options:

Option 1: Close the bridge and road permantly, remove bridge and road, bed.

This is probably the least expensive option and would probably receive no objection from the residents North and South of the bridge. Alternate access routes exist and no emergency services would be seriously affected.

The route 263 bypass was specifically built to remove traffic from Old York Road and is now the main thoroughfare for North/South traffic.

In recent months the residents of new developments on Turkey Trot road have discovered that Old York Road is a convenient short cut to avoid the signal light on route 263 at Meyer Way and rush hour traffic at the signal light at the intersection of Bristol Road and route 263. This has increased the rush hour traffic on Old York Road and is a safety and noise pollution concern to the residents

In addition, closing would pave the way for extending the a walking trail from Kerringer Park to the planned Moland House trail. See attached Map.

Option 2: Increase the span of the bridge. This would require new abutments and dredging of the creek channel. This would entail an engineering study and this writer can only guess that funds required would

exceed the cost incurred in rebuilding the current bridge. However it is a valid option since the current bridge would again suffer damage in a subsequent flood.

Figure 3 is a sketch showing a new added span and new dredged channel.

Option 3: Install a number of culverts under Old York Road on each side of the bridge abutments. This would increase flow whenever the creek overflows its' banks . Figure 4 is a sketch showing the placement of these culverts.across the flood way .The number and diameter needed to accommodate the rate of flow is unknown but the information to calculate capacity can be obtained from the US Geological Survey. That agency had hydrological measurement crews at the site in both the 1999 and 2001 floods.



Little Neshaminy Creek River Conservation Plan
Public Meeting to Review Draft
Warminster Township Municipal Building
May 29, 2007

COMMENT SHEET

Please provide your written comments on the draft plan by June 29, 2007 and return to:
Heritage Conservancy, 85 Old Dublin Pike, Doylestown PA 18901, Attention: Susan
Myerov. You may also send your comments via e-mail to Susan at
smyerov@heritageconservancy.org

I HAVE WORKED ON A CMAQ/DCNR GRANT WHICH WAS RECEIVED BY WARRINGTON TOWNSHIP AS THE BIKE + HIKE TRAILS CHAIRMAN. THE GRANT WAS WRITTEN TO PLAN FOR INTERCONNECTING TRAILS TO MAKE THE TOWNSHIP MORE PEDESTRIAN FRIENDLY. (ABOUT 2002) WARRINGTONTOWNSHIP.ORG

THE NESHAMINY WATER GREENWAY + BRADFORD DAM + KEMPER PARK + PARK CREEK ARE MENTIONED AS VALUABLE INTEGRAL RESOURCES TO UTILIZE THE FLOOD PLAIN + GREENWAY TO TRANSVERSE/WALK/BIKE HIKE + POSSIBLY HORSEBACK RIDE UNDER RT 611 + RT 132 STREET RD. THERE CAN EASILY BE CONSTRUCTED PATHS THAT COULD INTERCONNECT FROM THE HEADWATERS THROUGH TO TYLER PARK + BEYOND. IT MAY BE POSSIBLE TO EVENTUALLY CONNECT TO THE DELAWARE RIVER VIA THE MAIN NESHAMINY CREEK OR CONNECTIONS ON STREETS UNTIL RIGHTS OF WAY CAN BE OBTAINED. MANY OF THE NEIGHBORS SUPPORT THIS.

I ALSO BELONG TO THE CENTRAL BUCKS BICYCLE CLUB CBBC.ORG THEY SUPPORT TRAILS + PATHS THAT CATER TO PEDESTRIANS + BICYCLISTS TO PROMOTE BICYCLING + ALTERNATIVES TO AUTOMOBILES.

IT IS VERY IMPORTANT TO PROTECT THE FLOODPLAIN + ENCOURAGE EDUCATION OF THE WATER + ENVIRONMENT FOR THE PEOPLE. IT IS ALSO EXTREMELY IMPORTANT TO ENCOURAGE EXERCISE OF WALKING DUE TO THE INCREASING EPIDEMIC OF HEALTH CONCERNS SUCH AS DIABETES + HEART DISEASE.

NOT IN MY BACKYARDS SHOULD BE SEVERELY REPRIMANDED OR FINANCIALLY APPROPRIATED.

I STRONGLY SUPPORT GOALS AS TRAILS AS WELL AS ALL THE OTHERS

THANK YOU!

Michael Thon
EAGLEEYE442@GMAIL.COM
WWW.SOLARPANEL-RENTAL.COM

Stan

Municipal web site address - www.upperdublin.net

Executive summary

page 3 – last paragraph- Park Creek headwaters is located in both Lower Gwynedd and Upper Dublin Twps.. All maps should detail Park Creek tributarys beginning in Upper Dublin Twp. then flowing under both Tennis Ave and Welsh Rd.(Twp. boundary lines).
Relocate flood plain boundary lines
Little Neshaminy Creek River Conservation Plan

Municipal Open Space. Park and Recreation Areas Draft -

Page 65,67 - Three Tuns Park located in Upper Dublin Twp. contains 5.2 acres of land not 3 as indicated.

Project listed by Municipality page 135

Add-

Promote and share Upper Dublin Twp.'s informative Stormwater Web page with other Municipalities located within the Little Neshaminty Creek watershed.

Negotiate riparian buffer easements on lands that contain the headwaters of the Park Creek.

Encourage cluster home sites in the so called Acme property located at the intersections of Welsh Rd, Limeklin Pike and Norristown Rd. Permitting this type of housing will preserve the greatest amount of open space. This 18 acre site is the head waters of the Park Creek and is already prone to flooding.

Work with Horsham Twp. to manage stormwater from Upper Dublin Twp. that enters Park Creek.

Pursue Growing Greener II grants for stream restoration.

Can you email Stan a sample resolution?