

## BOROUGH of KUTZTOWN

North Park, 114.86 acres

### MANAGEMENT PLAN, December, 2015

#### I. Purpose:

To provide guidance and assistance to the Borough of Kutztown for making management decisions and undertaking management actions at North Park in the Maxatawny Township.

#### II. Overview

A Management Plan is an extremely useful tool for managing any preserve, park, trail corridor, open space, and school or business campus. This Management Plan for the Borough of Kutztown's North Park is an attempt to incorporate the following "green" aspects into the management of this community asset:

- Provide safe and naturally interesting recreational opportunities to residents and visitors, primarily, walking, running, fishing, wildlife observation.
- Provide educational opportunities to residents, the Kutztown School District, Kutztown University students, and visitors on water quality issues, natural history, and conservation (Note: Education efforts may serve to meet Pa DEP MS4 education requirements).
- Minimize maintenance costs and energy use by outlining and organizing tasks and maintenance schedules for upkeep of the Park.
- Provide wildlife and riparian buffer habitat, essential to creek water quality.
- Maintain and enhance biodiversity at the site with particular attention to species of special conservation concern and natural communities that are locally less common.
- Connect North Park to the Sacony Trail and other Borough parks and facilities.
- Participate in broader community initiatives by raising awareness of the Sacony Creek and the necessity for everyone to make positive contributions to the quantity and quality of surface and groundwater and associated drinking water supplies.
- Join the ranks - it should be noted: that Kutztown Borough has implemented a Management Plan on their wellhead properties; Kutztown Borough has developed and implemented a Management Plan for the Sacony Trail; Sacony Meadows has leased some of their property to the Borough and planted trees as a buffer thereon; at least 10 (and counting) farmers upstream in the watershed have completed and implemented

conservation plans and nutrient management plans; that the Kutztown Area School District Middle School has developed and is implementing a Management Plan for their green campus infrastructure.

- To preserve North Park's cultural and historical features

### III. Property Description

See the following maps in the Appendices:

- A. Size-approximately 115 acres
- B. Location- aerial map
- C. Topography- topo map
- D. Geology – geology map and soil map
- E. Context- watershed map and context map
- F. Floodplain and Wetlands- natural features map
- G. Historic Land use – The significant cultural history of North Park dates back to the 1900's. It was a popular recreational community swimming pool with picnic areas. A brick manmade swale was also created to manage stormwater runoff from entering the spring fed pool. A stone lined open-air reservoir for the community drinking water has been replaced by an enclosed metal tank. The parcel of land where the water tank resides is owned by the Borough of Kutztown but is not part of the North Park tract. A communications tower also resides on this same parcel with the water tank. There is a relatively inactive dump site with significant fill from municipal road and construction debris. There was a dam with a narrow reservoir along the now private Long Dam Road.
- H. Current Land Use- service roads for water, sewer, electric, stormwater, and communication infrastructure, The park's primary use is for open space, passive recreation, educational opportunity and scientific study while accommodating the utility infrastructure.
- I. Plant Communities – much of the Park is in a disturbed successional mode with significant alien and invasive species; plant communities are characterized by the Management Zone wherein they reside. See the Management Zones Map in appendices.
- J. Animal Communities –native plants and good water quality of Sacony Creek provide habitat for many invertebrates, fish, amphibians, reptiles, birds, and mammals, see appendices.
- K. Invasive Plant Species - ongoing Invasive Species List, see appendices.
- L. Species of concern – yes; endangered animal species utilizes stream corridor for metapopulation movement; nearby State Gamelands is home to cave species of concern. See Pennsylvania Natural Heritage Index in appendices
- M. Photo inventory and Photo Map Key - Yes, see appendices.

#### IV. Regional Planning Initiatives and Partners

- A. County of Berks Greenway, Park, and Recreation Plan, Hawk Mountain Region – North Park is part of Sacony Greenway
- B. Kutztown Borough's North Park Master Plan
- C. Kutztown Borough's Comprehensive Park and Recreation Plan
- D. Berks Conservancy - Maiden Creek and Saucony Creek have been priorities for more than 20 years with active best management projects through out the watershed
- E. Reading Area Water Authority- Sourcewater Protection Plan for Lake Ontelaunee, drinking water supply for the City of Reading includes Sacony Creek
  - \*\* RAWA maintains a stream water quality monitoring station downstream of the Kutztown Borough Sewage Treatment Plant in North Park
- F. Kutztown University – Research, educational, volunteer, and passive recreational experiences for faculty and students.
  - \*\* Kutztown University and Maiden Creek Watershed Association maintain a stream water quality monitoring station downstream of the Maxatawny Township Sewage Treatment Plant in North Park
- G. Kutztown School District- Educational, volunteer, and passive recreational experiences for faculty and students
- H. Maiden Creek Watershed Association- organizes and participates in educational and best management projects for Sacony/Maiden Creek water quality improvement
- I. Boy Scouts, Girl Scouts, local community groups- educational, volunteer, and passive recreational experiences
- J. Sacony Creek Watershed, Act 167 , Stormwater Mangement Plan

#### V. Management Goals and Objectives

##### Introduction

The Borough of Kutztown's North Park encompasses approximately 115 acres of publicly owned land in the Borough of Kutztown and Maxatawny Township. Much of the park is open to the public for passive recreational uses with the balance being restricted due to inaccessibility, neighbor interface, utility infrastructure proximity, and for research and educational purposes. The Park is located conveniently off of a major thoroughfare, Route 737 just north of the Borough boundary. The northwestern area of the park is characterized by wetlands, streams and sloped woodlands that

would not be suitable for recreational use, while the central portion of the park is composed of areas of active recreation, parking and stormwater management. The northeastern area of the park is on the opposite side of Route 737 with no public parking nor access and is not open to the public. The southern portion is characterized by successional woodlands of varying ages, degrees of disturbance, and species composition. The Park's trails provide both vehicular service access and pedestrian access on variety of trail surfaces with a range of pedestrian difficulty. Water, sewer, electric, and communications infrastructure is accessed through the park.

A. Real Estate Aspects

1. Easements - Utility right of ways for sewer, water, stormwater, communications, and electric;
2. Neighbor Relations - The Edge apartment complex owns property adjacent to North Park . There are adjacent private landowners along the stream corridor who are mowing Borough property along the stream. There are private property owners around the perimeter of the property with various, commercial, residential, and agricultural activities. Maxatawny Sewage Treatment Plant is an inholding .
3. Municipality (location) - Maxatawny Township with tiny portion in Greenwich Township.
4. Municipal ordinances –
  - a. Weed ordinance - yes, Maxatawny Township
  - b. Stormwater ordinance – yes, Maxatawny Township
5. Municipal Zoning – Park and riparian corridor are acceptable land uses.
6. County of Berks Planning - In sync with county planning , County of Berks Future Land Use 2030 Comprehensive Plan and County of Berks Greenway, Park, and Recreation Plan.

B. Resource Aspects, see appendices for Management Zones Map

All Zones:

- All Zones are managed with protection of water quality and wildlife habitat as the overarching goal. Maintenance and associated energy use costs are reduced by establishment of native plant communities with special attention to extensive riparian buffers and steep slope protection.
- Zones with existing stable vegetation and no planned public recreational access like Zones 5,6,7,8 are the lowest priorities for management actions related to public access and usage and should be left alone to mature with minimal disturbance except the removal of invasive species.

- Initial high priorities are Zones 4 A, B, C, and 8 for removal of invasive species and restoration of native plant communities and natural function. Of special concern is removal of the invasive tree of heaven which also serves as integral part of the life cycle of the spotted lantern fly, an emerging invasive insect pest. Other invasive plants of special concern for control are purple loosestrife and Japanese knotweed
- In all Zones, vegetation management and invasive species control should follow the IVM( Integrated Vegetation Management ) protocols by identifying the particular species to be managed and investigating the most effective control measures which do the least harm to the environment with special attention to chemical use.
- Other initial high priorities are the development and installation of Directional and Interpretative signage in Zones 1 and 2 to make users aware of the recreational amenities and trails and explain the management approach at North Park for water quality, environmental function, and wildlife habitat.
- Assign responsibilities within the Borough to manage and implement the following actions- [Responsible entity is bracketed]
- Designate lines of communication between those participating in the implementation of the following actions primarily Borough Public Works Department and Borough EAC (which includes volunteers operating in conjunction with the EAC) [Public Works and EAC].
- Create an annual Report Form which tracks management activities throughout the course of the year and which includes comments for improvement of the Plan and recommendations for the following year. The Report Form contains a checklist of maintenance items which are informed by monitoring the condition of the grey infrastructure items at least 2 times a year (before school ends in June and after school starts in late September) [EAC and Public Works] - Items to include trail surface, signs, footbridges, benches, picnic tables, and future items like bird boxes and additional signage

#### Zone 1 – Parking, service roads and recreational trails including power lines

1. Resource Management objectives –
  - To provide adequate parking and safe trail opportunities to residents and visitors for primarily walking, running, fishing, and wildlife observation.
  - To regularly maintain installed grey infrastructure – parking area, trail surface, the access bridge over Sacony Creek, streambank stabilization, benches and picnic tables, waterways which convey stormwater, and footbridges.
  - To regularly maintain utility infrastructure - sewer lines, waterlines, stormwater culverts and outfalls, and overhead and underground electric lines.

- To create a more extensive trail corridor by connecting North Park to Sacony Creek Trail and other areas of interest in the Borough and downstream via Sacony greenway to State Gamelands, # 182
  - To work with Kutztown Area School District, Kutztown University, Boy Scouts, Girl Scouts, and other community groups to maintain and interpret trails
  - To maintain and manage vegetation for native species composition, invasive species control, and environmental and infrastructure function using IVM (Integrated Vegetation Management).
2. Resource Management considerations –
- Parking area, some service roads, some trails, and the access bridge are subject to stormwater impacts from the creek, the steep slopes, the service roads themselves, and general run-off which can result in surface erosion.
  - Significant Borough of Kutztown and grant funding/investment including donated time were utilized to construct and maintain the parking area, service roads, and trails
3. Resource Management actions –
- Lawn areas, trail borders, and open space areas with benches and picnic tables, need adequate regular maintenance to encourage usage. [ Public Works and EAC ]
  - Monitor and maintain stormwater infrastructure for proper function. [ Public Works and EAC ]
  - Minimize trail surface erosion, pay close attention to stormwater patterns. Monitor trail and locate problematic sections of trail [EAC]. Adaptive management for correction of problems in fall after summer rains is an opportune time [Public Works].
  - Develop and install Trail map signage showing locations of trails which are open to public use
  - Contact the Kutztown Area School District and Kutztown University Environmental Action Club ( EAC ) to discuss ways to partner on maintenance of trails and management actions which affect the water quality of the creek and wildlife habitats throughout the Park.
  - Pursue grant funding for development and installation of overall project signage with recreational amenities and trail location and visitor ethics.

## Zone 2 – Active recreation and infrastructure

### 1. Resource Management objectives –

- To provide safe passive recreational opportunities to residents and visitors for primarily walking, running, fishing, and wildlife observation.
- To reduce and minimize lawn mowing and the associated maintenance and fuel consumption.

- To regularly maintain the lawn, streambank stabilization, benches and picnic tables, footbridges, gazebo and restrooms.
- To maintain and manage vegetation for native species composition, invasive species control, and environmental and infrastructure function using IVM ( Integrated Vegetation Management).
- To regularly maintain utility infrastructure - sewer lines, waterlines, stormwater basins, outfalls, and electric lines.
- To work with the Kutztown Area School District, Kutztown University Environmental Action Club, and other community groups on educational and interpretative aspects of natural history and cultural history of the Park

## 2. Resource Management considerations –

- Active recreation area is located in the floodplain and is therefore subject to occasional flooding which can result in impacts.
- Significant Borough of Kutztown, grants, and private funding/investment were utilized to construct the active recreation area of North Park
- Lawn areas around benches, picnic tables, gazebo, and restrooms need regular maintenance to encourage usage.

## 3. Resource Management actions –

- Identify lawn areas not essential for active recreation and discontinue mowing and convert to meadows or successional areas for wildlife habitat by encouraging native plants and controlling invasive species. [ Public Works and EAC ]
- Regularly maintain lawn areas, the gazebo, benches, picnic tables, restrooms. [ Public Works and EAC ]
- Monitor the active recreation area after significant storm events and adaptively manage impacted areas [Public Works and EAC].
- Pursue grant funding for development and installation of overall project signage with recreational amenities and trail location and visitor ethics.
- Contact the Kutztown Area School District and Kutztown University Environmental Action Club ( EAC ) to discuss ways to partner on maintenance of trails and management actions which affect the water quality of the creek and wildlife habitats throughout the Park.
- Pursue grant funding for development and installation of interpretative signage to explain the management approach at North Park for water quality, environmental function, and wildlife habitat

Zone 3 – Borough Dump Area ( Note : the Maxatawny Sewage Treatment Plant is a private inholding in North Park and is adjacent to Zone 3 )

1. Resource Management objectives –

- To create a buffer between the dumping area and other management Zones
- To minimize the amount and type of materials dumped at the site with goal of reduction and elimination
- To maintain and manage vegetation for native species composition, invasive species control, and environmental function using IVM (Integrated Vegetation Management).

2. Resource Management considerations –

- Awareness of Pa DEP dumping guidelines
- Stormwater runoff from the site and groundwater infiltration at the site

3. Resource Management actions –

- Reduce/Minimize dumping
- Reduce/minimize stormwater runoff from the site
- Stabilize the area as much as possible with vegetation to minimize runoff, to stabilize the soil, and to absorb infiltrated stormwater

Zone 4- Riparian corridor ( Due to the substantial length of the riparian corridor, Zone 4 is subdivided into smaller more manageable units based on location and physical attributes )

Zone 4A – from Park entrance bridge downstream to site of former Long Dam Road bridge.

Zone 4B – from Park entrance bridge upstream to the Kutztown Sewer Treatment Plant property

Zone 4C- from former Long Dam Road bridge location downstream to property line

Zone 4D- isolated section of the Park upstream from the Kutztown Borough Sewer Treatment Plant

Zone 4E- Sacony tributary corridor to the east of Eagle Point Road

1. Resource Management objectives, All Zones –

- To reduce human impacts on site and from neighboring properties to benefit the water quality of the Sacony Creek

- To maintain riparian areas in a native plant regime that minimizes maintenance costs and energy use.
  - To implement best management practices to benefit water quality of Sacony Creek
  - To maintain and manage vegetation for native species composition, invasive species control, and environmental function using IVM (Integrated Vegetation Management).
2. Resource Management considerations, All Zones
- Participation in broader community initiatives raises awareness of the Sacony Creek and the necessity for everyone to make positive contributions to the quantity and quality of surface and groundwater and associated drinking water supplies.
  - Significant amounts of trash are accumulating along the streambanks
  - Significant amounts of erosion of streambanks and sedimentation of creek bed are occurring
  - Some adjacent property owners along the Sacony Creek have Sacony Creek frontage and some do not
  - A water quality monitoring location/station has been established in conjunction with Reading Area Water Authority and Kutztown University professors/researchers just downstream of the Manatawny Sewage Treatment Plant. Reading Area Water Authority also maintains a water quality monitoring location/station just downstream of the Kutztown Borough Water Treatment Plant testing for macroinvertebrates and water chemistry.
3. Resource Management actions –
- All zones: Manage the Park riparian corridor for native trees, native shrubs, and native herbaceous plants. Remove invasive species as needed and plant native trees and shrubs and sow native herbaceous seed. Particular attention to invasive species which are Pennsylvania Noxious Weeds, Purple loosestrife, Japanese knotweed, and Tree of Heaven. [ EAC and partners ]
  - Zones 4A and 4B: Develop list of neighboring streamside property owners and contact (a) landowners who are currently managing Borough streamside property to introduce them to the North Park Management Plan and to inform that the Borough will manage its own streamside property; (b) landowners adjacent to North Park who own stream side property to introduce them to North Park Management Plan[ Public Works, EAC, and partners]
  - Zones 4A and 4B and 4C : Develop and install interpretative educational signage for preferred behavior and ethics along the riparian corridor and install at vulnerable locations { Public Works, EAC, and partners]
  - Zone 4A- notify Kutztown University EAC, Kutztown University professors/researchers, the Kutztown School District , the Maiden Creek Watershed

- Association that a water quality monitoring location/station has been established just downstream of the Maxatawny Sewage Treatment Plant and encourage usage at this location/station for their own water quality monitoring endeavors
- Zone 4D- meet with Water/Wastewater Department for management responsibilities of this zone going to Water/Wastewater Department due to proximity to Kutztown Borough Sewage Treatment Plant
  - Zone 4D and 4E are outlying isolated portions of North Park with no potential for recreational use nor access and should remain off limits for visitation.

#### Zone 5 – Northeast isolated Woodland (located to the east of Route 737)

1. Resource Management objectives –
  - To protect the mature forest creates a superior riparian buffer for water quality , steep slope protection, and wildlife habitat
  - To identify the Borough of Kutztown property lines
  - To maintain and manage vegetation for native species composition, invasive species control, and environmental function using IVM ( Integrated Vegetation Management).
  - To inventory species prior to developing management actions
2. Resource Management considerations –
  - Current isolated condition already provides excellent wildlife habitat
  - Existing excellent forested riparian buffer minimizes stormwater effects on steep slopes for benefit of Sacony Creek water quality
  - Property boundary identification is necessary to prevent unwanted trespass
3. Resource Management actions –
  - Due to isolated and stable nature of this zone, there are no recommendations for on- ground management actions
  - Due to isolated and stable nature of this zone, it is identified as the lowest overall priority for any management actions
  - Do not disturb the forest
  - No recommendations for recreational use nor access
  - Identify neighboring property owners and contact to introduce them to North Park Management Plans and to discuss property boundaries. Proceed to boundary survey if there are any discrepancies or disagreements about the property lines. Post boundaries as needed [ Public Works, EAC, partners].
  - Inventory species before developing specific management actions [ EAC, partners ]

#### Zone 6- Woodlands along Long Dam Road

1. Resource Management objectives -

- To protect the maturing forest which creates a superior riparian buffer for water quality , steep slope protection, and wildlife habitat
- To minimize maintenance and energy costs associated with management
- To identify Borough of Kutztown property lines
- To maintain and manage vegetation for native species composition, invasive species control, and environmental function using IVM (Integrated Vegetation Management).
- To make no provision for public recreational access
- To inventory species prior to developing specific vegetation management actions

2. Resource Management considerations –

- Current isolated condition already provides excellent wildlife habitat
- Existing forested riparian buffer minimizes stormwater effects for benefit of Sacony Creek
- Property boundary identification is necessary to prevent unwanted trespass
- Long Dam Road heading north and west leads to private property
- Currently, the Borough property is inaccurately posted by multiple neighbors in this zone.

Resource Management actions –

- Due to isolated and stable nature of this zone, there are no recommendations for recreational use nor public access.
- Identify neighboring property owners and contact to introduce them to North Park Management Plan and to discuss property boundaries. Proceed to boundary survey if there are any discrepancies or disagreements about the property lines[ Public Works, EAC, partners ]
- Post North Park Boundary signs [ Public Works, EAC, partners]
- Inventory species before developing specific vegetation management actions [ EAC, partners ]

Zone 7 – Successional Disturbed Area adjacent to Dump

1. – Resource Management objectives -

- To minimize maintenance and energy costs associated with management

- To maintain and manage vegetation for native species composition, invasive species control, and environmental function using IVM (Integrated Vegetation Management).
  - To identify Borough of Kutztown property lines
  - To make no provision for public recreational access
  - To inventory species prior to developing management actions
2. Resource Management considerations –
- This successional area has high degree of invasive species
  - Property boundary identification is necessary to prevent unwanted trespass
  - An isolated home is immediately adjacent
  - The Maxatawny Sewer Plant property of 5 acres is immediately adjacent with similar vegetation and with unclear boundaries
  - Zone 3, the Borough Dump Area is adjacent to this zone
3. Resource Management actions –
- Due to proximity to the Maxatawny Sewage Treatment Plant and an isolated adjacent residence, there are no recommendations for recreational use and public access
  - Identify neighboring property owners and contact to introduce them to North Park Management Plans and to discuss property boundaries. Proceed to boundary survey if any discrepancies or disagreements about the property lines [ Public Works, EAC, partners ]
  - Post North Park Boundary signs [ Public Works, EAC, partners]
  - Develop and post property buffer zone signage to alert Park users that the property line buffer is off limits to Park users [ Public Works, EAC, partners ]
  - Investigate wetlands and inventory species before developing specific vegetation management actions [ EAC, partners ]

#### Zone 8- Dry Oak Woods

1. Resource Management objectives -
- To minimize maintenance and energy costs associated with management
  - To maintain and manage vegetation for native species composition, invasive species control, and environmental function using IVM (Integrated Vegetation Management).
  - To identify Borough of Kutztown property lines

- To recognize the Dry Oak woods as important natural community and to encourage native species regime
- To make no provision for public recreational access
- To encourage educational research

## 2. Resource Management considerations –

- Current isolated condition already provides excellent wildlife habitat
- Existing forested native species regime, a Dry Oak woods is the most relatively intact natural community/area in the Park
- Property boundary identification is necessary to prevent unwanted trespass
- Neighboring property has fenced grazing buffalo
- Trash and broken glass are in small pockets from a former dumping site
- Understory trees and shrubs are lacking

## 3. Resource Management actions –

- Due to steep, relatively isolated, stable, and native species composition of this zone, there are no recommendations for recreational use nor public access.
- Due to adjacent neighboring farming activities with grazing buffalo, albeit fenced in , there are no recommendations for recreational use nor public access to avoid unnecessary interaction
- Identify neighboring property owners and contact to introduce them to North Park Management Plans and to discuss property boundaries. Proceed to boundary survey if any discrepancies or disagreements about the property lines[ Public Works, EAC, partners ]
- Post North Park Boundary signs [ Public Works, EAC, partners]
- Inventory species before developing specific management actions including invasive species control [ EAC, partners ]
- Make this Zone available for educational research and notify Kutztown University professors/researchers and Kutztown University EAC of its availability for educational research ( one possible project- deer exclusion fencing for part of zone to determine effects of deer herbivory on this natural community ) [ EAC and partners]
- Organize clean ups for dumped area. { EAC and Public Works }
- encourage natural community and forest values with native species composition by removal of invasive species. This zone is an overall priority for invasive species removal. [ EAC ]

Zone 9 – Mixed Deciduous and Larch Woodland ( Note: the Kutztown water reservoir and the communications tower are not in North Park but are immediately adjacent and owned by the Borough of Kutztown )

1. Resource Management objectives –

- To provide safe trail and recreational opportunities to residents and visitors for primarily walking, running, fishing, and wildlife observation.
- To provide educational opportunities to residents and visitors on water quality issues, natural history, recreational impacts, and conservation.
- To provide wildlife habitat
- To balance management for native species regime with invasive species control while providing for vegetated steep slope protection using IVM ( Integrated Vegetation Management).

2. Resource Management considerations –

- This successional area has high degree of invasive species and vulnerable to erosion steep slopes
- Many of the recreational trails are in this zone
- Access to communication tower and Kutztown water reservoir is through this zone on service roads which double as recreational trails.

3. Resource Management actions –

- Minimize trail and service road surface erosion, pay close attention to stormwater runoff [Public Works and EAC ].
- Maintain service roads/trails for utility access for road/trail surface and overhanging vegetation[ Public Works ]
- Mark the trails to clearly define trails open for public use
- Inventory species before developing specific vegetation management actions including invasive species control [ EAC, partners ]
- Manage to maintain vegetative cover on steep slopes [ Public Works and EAC ]

Zone 10- Successional Highly Disturbed Area

1. Resource Management objectives -

- To minimize maintenance and energy costs associated with management

- To maintain and manage vegetation for native species composition, invasive species control, and environmental function using IVM (Integrated Vegetation Management).
- To identify Borough of Kutztown property lines
- To make no provision for public recreational access
- To inventory species prior to developing management actions

2. Resource Management considerations –

- This successional area has high degree of invasive species
- Property boundary identification is necessary to prevent unwanted trespass
- This Zone borders Short Lane
- There are currently no maintained trails/service roads in this Zone
- There is unauthorized ATV and snowmobile use
- There is a trash dumping site.

3. Resource Management actions –

- There are no current recommendations for recreational use nor public access
- Identify neighboring property owners and contact to introduce them to North Park Management Plans and to discuss property boundaries. Proceed to boundary survey if there are any discrepancies or disagreements about the property lines[ Public Works, EAC, partners ]
- Post North Park Boundary signs [ Public Works, EAC, partners]
- Determine if public access is desired from Short Lane into North Park [ Public Works, EAC ]
- Inventory species before developing specific vegetation management actions [ EAC, partners ]
- Manage to maintain vegetative cover on steep slopes. [ Public Works and EAC ]
- Clean up the trash dumping site. [ Public Works and EAC ]
- Work on plan for discouraging unauthorized ATV and snowmobile use. [ Public Works and EAC ]

IV Operations and Maintenance - the following sections to be filled in when Management Plan is approved and points of contact are established

Work Plan, 3-5 year – 2015-2017

Zone 1 – plant replacement trees at parking área and trail to créate shade to lessen thermal pollution of stormwater run-off and to capture stormwater run-off to improve quality and reduce quantity of the run-off ; pursue grants for development and installation of overall directional and visitation signage for North Park

Zone 2 – eliminate unnecessary mowing maintenance and fuel consumption and convert áreas to wildlife hábitat by removing invasive species and planting native trees and shrubs and/or sowing of native herbaceous species . Pursue grant funding to develop and install environmental interpretative educational signage

Zone 3 – investigate and survey the wetland in Zones 3 and 7 to determine future management actions

Zone 4 – contact and meet with neighbors in 4A and 4B to discuss property boundaries, this mangement plan, and management actions on Borough property and potentially on their property; remove invasive species and plant native trees and shrubs to improve the riparian buffer, wildlife hábitat, and wáter quality of Sacony Creek ; clean up debris and trash . In Zone 4 C , investigate and conduct survey to determine future management actions

Zone 5 – No actions recommended nor undertaken

Zone 6 – contact and meet neighbors to discuss property boundaries, this managemnent plan, and placement of North Park boundary signs ; conduct survey to determine future management actions .

Zone 7 – contact and meet neighbors to discuss property boundaries, this managemnent plan, and placement of North Park boundary signs ; conduct wetland survey as noted in Zone 3 to determine future management actions

Zone 8 – clean up trash and debris; conduct surveys to determine future management actions; initiate invasive species control; consider deer exclosure fencing on trial plot

Zone 9 – maintain service roads and trails for útility Access and recreational trail use; conduct survey to determine future management actions ; mark and color code trails to guide recreational users

Zone 10 – clean up trash; conduct survey to determine future management actions

N.B. see the Operations and Maintenance Map, 2015 which notes the location of the above management actions

Entire Area – EAC and volunteers from Kutztown University update the plant and animal species inventories to document species present in the area. Knowledge of biodiversity will help direct management recommendations and actions.

Stewardship or Management Fund with annual stipend or Budget Line Item with annual allocation - \$

Work Plan Project budgets, 2015 – currently developing for 2017

Zone 1

Zone 2

Zone 3

Zone 4

Zone 5

Zone 6

Zone 7

Zone 8

Zone 9

Zone 10

Staff responsibilities – currently developing for 2016

Zone 1

Zone 2

Zone 3

Zone 4

Zone 5

Zone 6

Zone 7

Zone 8

Zone 9

Zone 10

## V. Reporting

Annual report Form and Checklist

VI. Management Plan Review and Update - As with any living document, the North Park Management Plan should be reviewed and updated every 5 years after its initial approval.

VII. Acknowledgements – list of people involved with development of the plan

Todd Underwood, Borough of Kutztown Environmental Advisory Committee

Borough of Kutztown Environmental Advisory Committee

Borough of Kutztown Public Works Committee

Brian Bailey, Borough of Kutztown Public Works

Larry Lloyd, Berks Conservancy

Rebecca Kovalik, Conservancy Intern, Kutztown University

Brooke Leister, Conservancy intern, Kutztown University

## VIII. Appendices/References

Maps- aerial; topographic; soils; geology; watershed; regional context; management zones

Informational pamphlet, “Caring for your Streamside property”

Stormwater Education brochure

Green Guide for Property Management, booklet

Creating Sustainable Community Parks, booklet

Animal Species Inventory, Appendix 1

Photo Inventory

Pamphlets/Guides: Wildlife and Your Land ; Invasive Species Management; Native Plant Materials; Deer Management Options; Trail Design and Maintenance; Hazard Tree Monitoring