# MILLTOWN DAM PARK & OPEN SPACE MASTER PLAN

East Goshen, Chester County Pennsylvania

#### PUBLIC MEETING #3: Draft Plan Review

Wednesday 3.22.2017, 7-8:30 PM East Goshen Township Building 1580 Paoli Pike West Chester, PA



#### **Meeting Agenda**

Committee Business / Introductions

• Presentation (Please hold questions until end)

- Review Master Plan process to Date
- Concept Review & Public Feedback
- Draft Plan Presentation
- Discussion / Feedback
- Next Steps



#### **Project Team**

#### **Simone Collins Landscape Architecture**

Peter M. Simone, FASLA, RLA Project Principle Sarah Leeper, RLA Project Manager Melisa Barley, Landscape Architect Project LA

#### **Princeton Hydro**

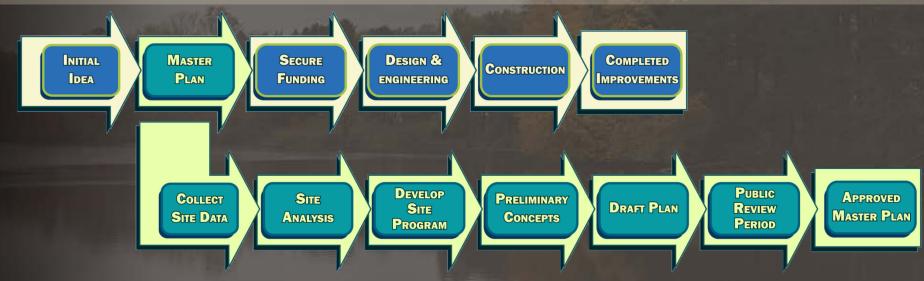
#### **Geoffrey M. Goll P.E.**

Civil Engineer – expertise in dam removal for dam safety compliance, fish migration, floodplain reconnection, and habitat restoration.

#### **Project Schedule**

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New York	Meeting	Date & Time	Meeting Subject				
	Milltown Committee Meeting #1	Nov 2, 7:00 pm	Project Introduction / Brainstorming				
	Milltown Public Meeting #1	Dec 14, 7:00 pm Dec 15, 7:00 pm	Project Introduction / Brainstorming				
	Milltown Committee Meeting #2	Jan 11, 7:00 pm	Site Concepts				
	Milltown Public Meeting #2	Jan25, 7:00 pm	Site Concepts				
	Milltown Committee Meeting #3	Feb 21, 7:00 pm	Draft Plan Review				
	Milltown Public Meeting #3	<u>Mar 22, 7:00 pm</u>	<u>Draft Plan</u> Presentation - 60 day review				
	Milltown Committee Meeting #4	May 23, 7:00 pm	Final Plan Review				
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#### **Master Plan Process**



#### **Transparent Public Process:**

- 4 public meetings
- 4 committee meetings
- 3 Web surveys

#### "All voices are heard and all ideas are honored"

#### **Project Background**

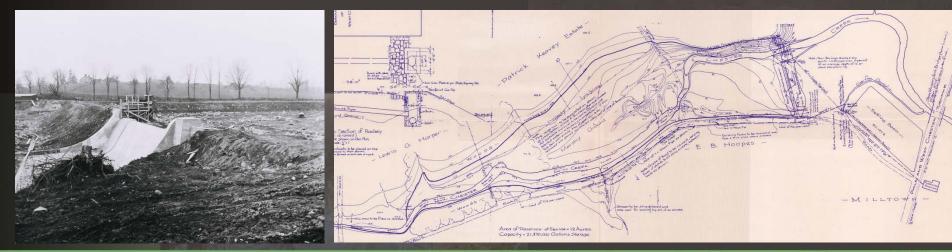
- The Milltown Reservoir is currently classified as a passive recreation area.
- The Committee has been asked to work with the consulting team to develop a park master plan and provide a park master plan recommendation to the Board of Supervisors.
- Board of Supervisors will make the final decision on the approval of the park master plan.
- The Milltown Dam site has tremendous opportunities.



#### **Site History**

- 1920 Dam is constructed.
- 1965 Waterview Farms Subdivision constructed
- 1981-1986 Dam classified as unsafe and was repaired.
- 2011 Dam classified as unsafe under new DEP standards
- Various options for dam considered included:
  - Improving the spillway;
  - A partial breach of the dam; and
  - A full breach of the dam.

 2016 On June 28<sup>th</sup> the Board of Supervisors voted to partially breach the dam.

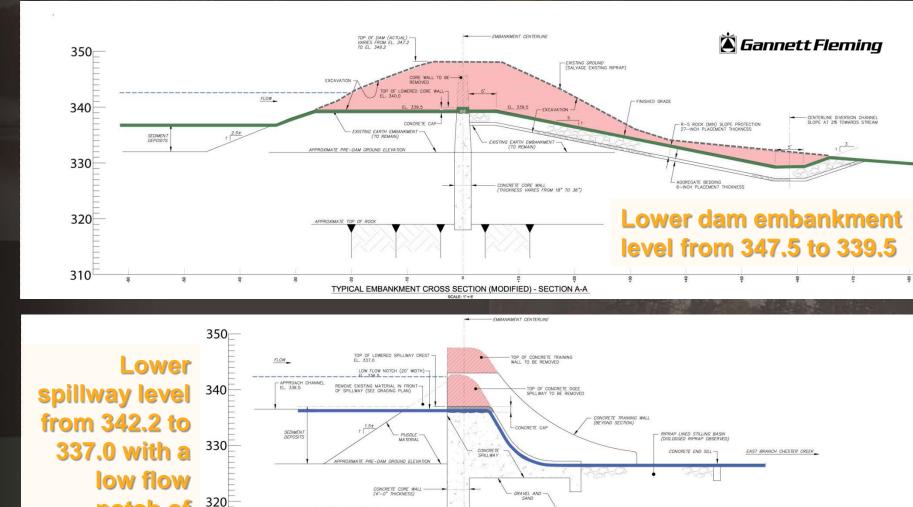


#### **Partial Dam Breach Concept**

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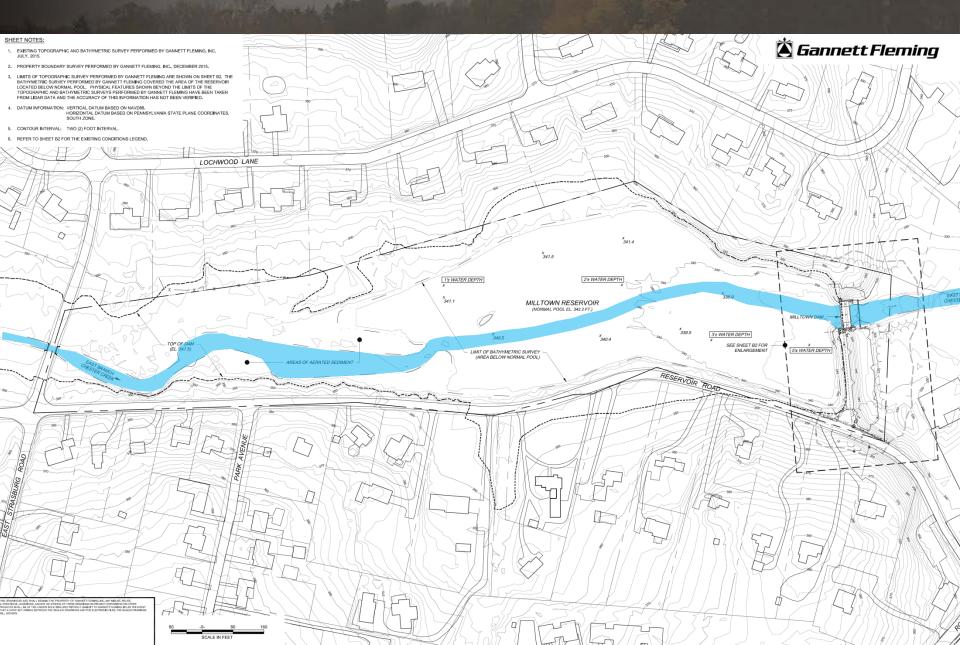
TYPICAL SPILLWAY CROSS SECTION (MODIFIED) - SECTION B-B

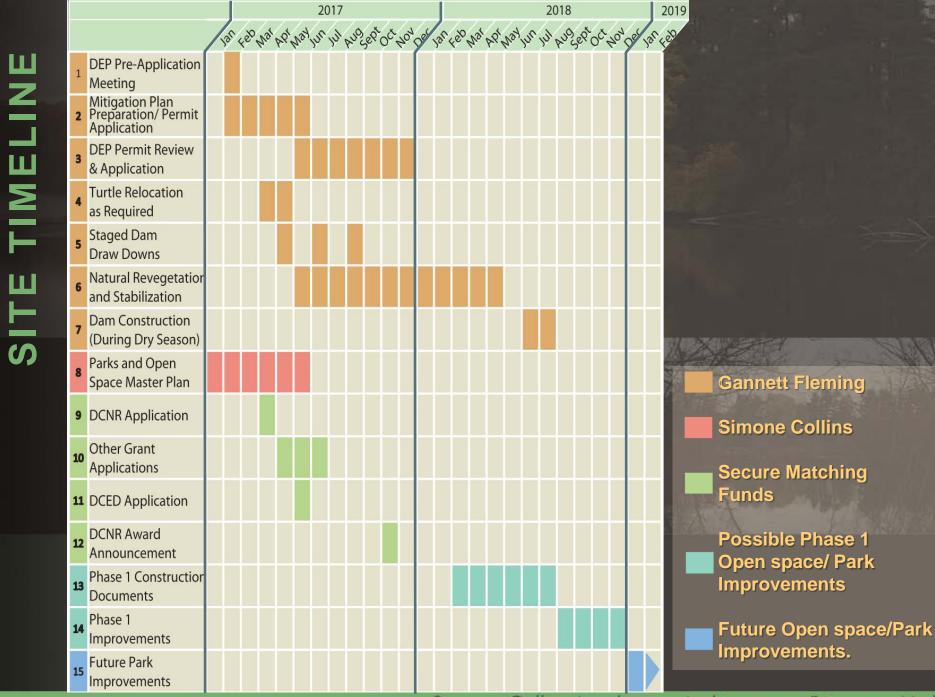
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#### **Partial Dam Breach Concept - Before**



#### **Partial Dam Breach Concept - After**

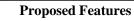




#### Open Space Plan & Central Chester Trail Plan



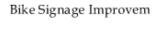
- Existing Trails
  - PA Bike Route L
  - Existing Trailhead
- P Existing Trail Parking
  - Growth Centers
- 📃 Intermodal Stop
  - East Goshen Open Space HOA / Private Recreation Schools



- Bike Lane
- Shared Roadway
- Multi-Use Trails
  - Restricted-Use Trails
  - Bicycle Boulevard
     Signed Bike Route

Priority Corridors

- Bike Rack
- P Trail Parking
  - 11an Farking
  - Traffic Calming Table
- 🚺 в

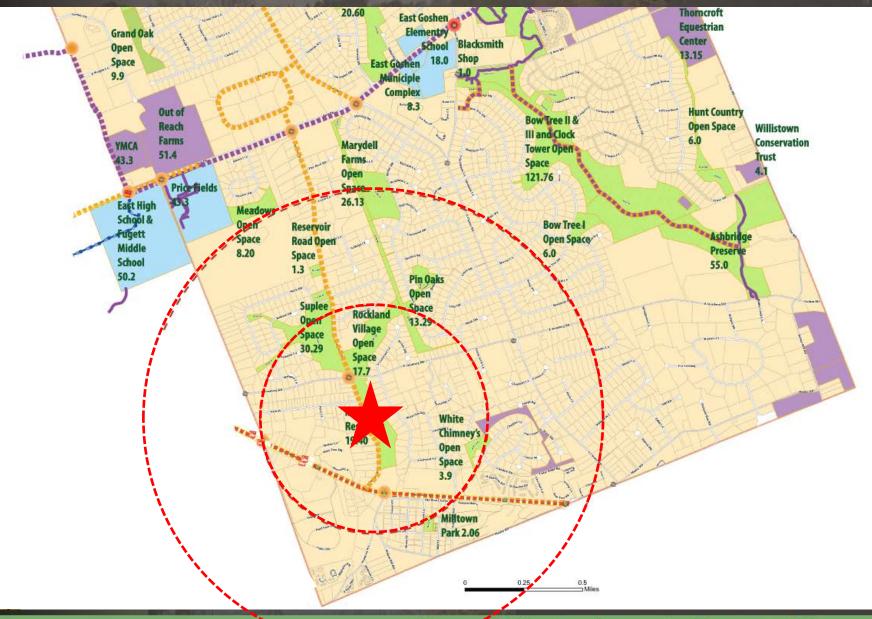




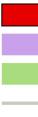
Signalized Crossing



#### **Open Space Plan & Central Chester Trail Plan**



#### Legend



Milltown Dam Site

Home Owner Association Lands
East Goshen Township
Open Space Lands
Roads

Reservoir RD

Paoli PK

Parcel Lines

Streams

# Milltown Dam Site

Line RD

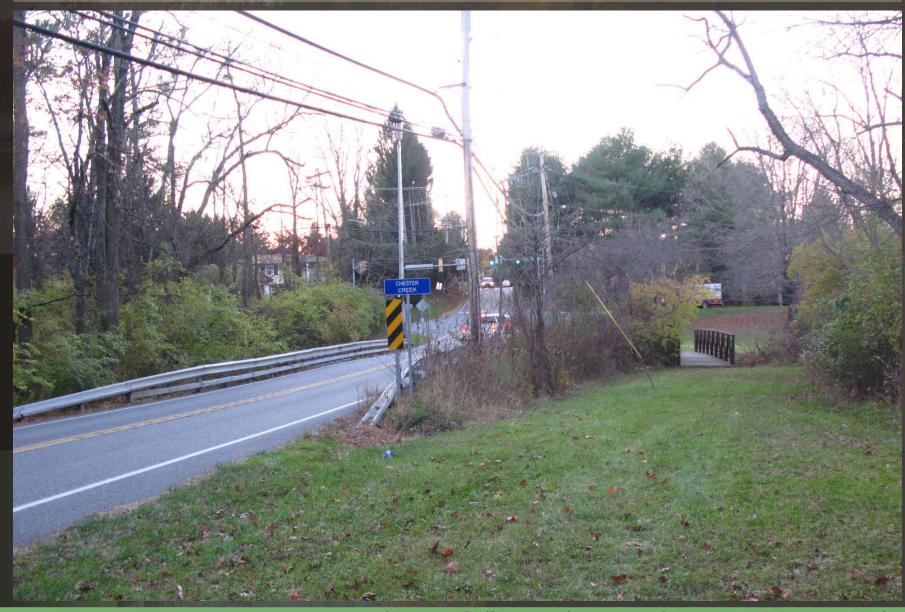
West Chester PK

3

#### Views from Strasburg Road



#### Views from Strasburg Road

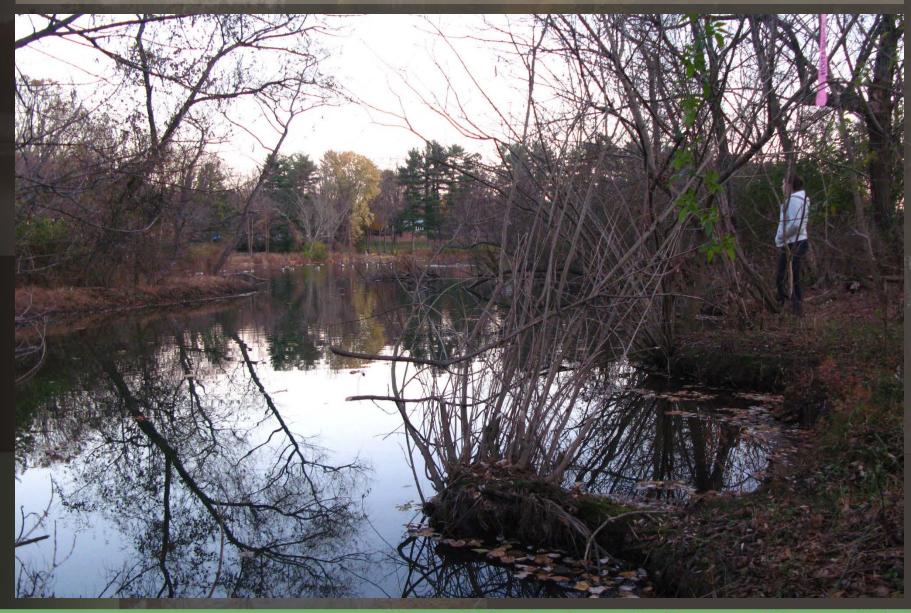


Simone Collins Landscape Architecture • Princeton Hydro

#### Views from Strasburg Road



#### Views from Creek Edge



Simone Collins Landscape Architecture • Princeton Hydro

# **Views from Reservoir Road**



Simone Collins Landscape Architecture • Princeton Hydro

#### Views from Dam Embankment



#### Views from Dam Embankment



Simone Collins Landscape Architecture • Princeton Hydro

# Views from Lochwood Lane



#### Views from below Dam





**Goals and Priorities for the Project:** Initially broad, then specific: "Develop a Park Master Plan" or "Bring People into the Park"

**Facts:** Existing land use, site conditions, outstanding natural resources, adjacent properties, existing trails, nearby open space sites, partners.



#### **CONCEPTS**

Ideas for Attaining Project Goals: Can be basic needs "Provide Restrooms" or larger ideas "Link to key Nearby Sites", or "Provide Memorable Play Experiences" "Create Destinations within the Park"

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## Goals Were expanded, revise & add new goals throughout the public participation process.

- Engage in an open and transparent exchange of ideas where all ideas are considered and where everyone's voice can be heard throughout the design process.
- Foster ecological sustainability through plant and animal diversity and by employing best practices in landscape and park design.
- Protect and preserve the privacy of adjacent and nearby residences through proper setbacks, screening and other techniques.
- Create landscapes that are low maintenance and that will create new cultural landscape values in each surrounding neighborhood.
- **Develop** realistic completion time frames for project benchmarks
- <u>Maximize open water views.</u>
- Create a world class passive recreation amenity.

#### **Public Brainstorming**

#### **GOALS:**

- Open and transparent design process
- Protect and Preserve
   Privacy
- Foster ecological sustainability
- Create low maintenance landscape

#### FACTS:

- Property
- Privacy
- Turtles
- Unobstructed peaceful large water view
- Insect Issues with wetland?

#### What Are We Losing?

- Wildlife
- Bald eagle
- Long views
- Fishing
- Hockey
- Ice skating

• Open water

• Joy CONCEPTS:

- Scenic views from the road
- Water access
- Ice skating
- Fishing
- Buffer planting (Lochwood Lane)
- Open lawn
- World class facility
- Pond(s)
- Options for mowing
- Willow planting
- review DVRPC plan
- Wetland fore-bay
- Pond maintenance access
- Fencing
- 2 acre wetlands
- \*Maximize water\*
- Walking paths
- Natural stream banks

- Fish habitat
- Homeless
- Route 3 to Strasburg Road bike way
- Trash and litter concern
- Nuisance in park concern
- No trails
- No fencing
- Cross walks
- Mow near creek
- Please don't litter sign
  - Bike trails
- Sidewalk from Strasburg Road to Lochwood Lane
- Use spoils to form trail bench
- Review Comprehensive plan requirements
- Money/ budget
- Keep trail to west
- Walking bridge on south at Strasburg Road
- Use existing bridge

#### Public Survey #1

**55 Respondents** 

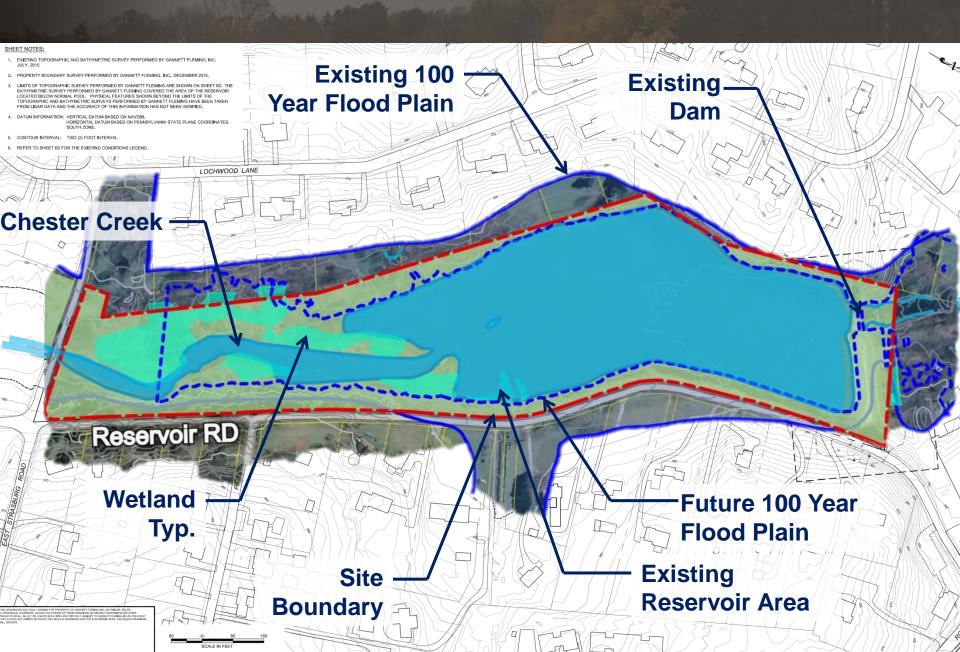
Question 9 – What do you value the most in the existing site: Unobstructed scenic water views; and Habitat for plants and animals ranked most important

<u>Question 10 – What do you want to see</u>

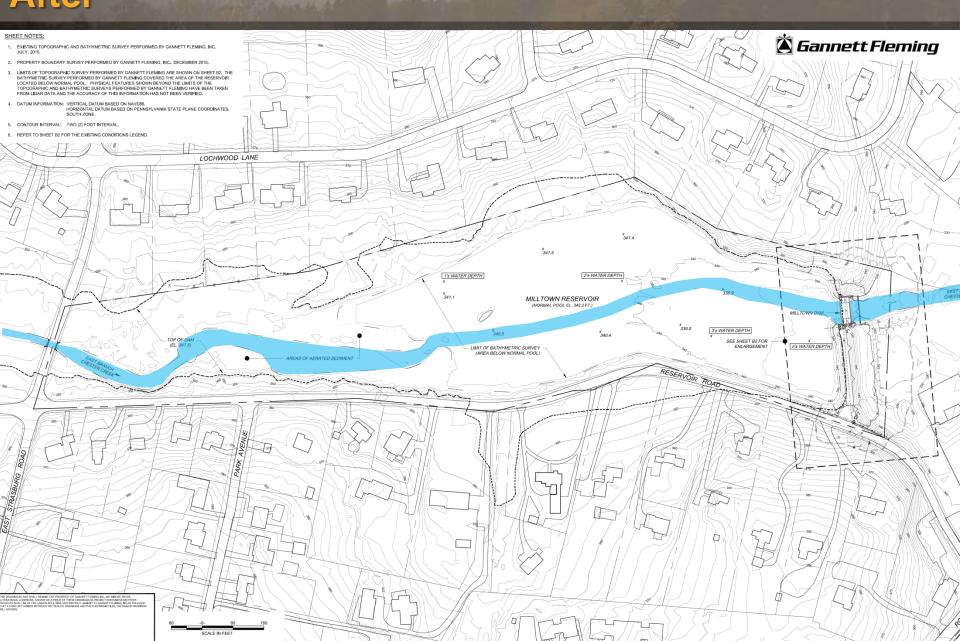
#1 - Water Features such as pond(s) for fishing / scenic value High Ranking:

- More trees in area
- Small parking area to access trails
- Walking trail(s)
- Bird houses and bat boxes
- Walking & Biking Trails

#### **Existing Conditions Plan**



#### Partial Dam Breach Concept – Stream Condition After



#### **Concept Bubble Plan**

	Existing Elevation	New Elevation	Change in Elevation
Dam Spillway	342.2	336.5	5.7 ft
Dam Embankment	347.5	340	7.5 ft
Stream at Dam	342.2	336.5	5.7 ft
Stream at Strasburg Road	342.2	342.2	0 ft
Existing Wetlands	342.2 to 344	342.2 to 344	0 ft
Elevation	New Po New Po 333 tream levation 40.2± Messor ARANTED RED ATT Stream tion Elevation	nd 5.5 5.1	ntrol ucture version spilles s

#### **Concept Elements:**

Various design elements are incorporated into each concept. The following elements will be reviewed to understand the unique quality and benefits of each element and identify the objectives for including them in the concept plans.

- Pond
- Streams
- Riparian Buffer
- Low Mow / No Mow Lawn
- Meadow
- Wetlands



#### **CONCEPTS** Plans

Concept 1 • Small Habitat Islands

• 3 Acre Pond

Concept 2

Large Island
Reforestation
2 Acre Pond

Concept 3

Multiple Ponds
1.5 Acre Ponds



#### **CONCEPTS** Plans

### Concept 1: Was the most popular plan from the survey and Public Meeting Vote



#### Public Survey #2

#### **79 Respondents**

#### **Question 5 - Trails:**

- Overall support for trails
- Majority of respondents focused on site trails and local neighborhood access to site.

#### **Question 6 – Current Walking / Biking trends:**

- Very little use.
- Reservoir Road used the most.

#### **Question 7 – Water Features:**

- Generally positive response to all features.
- Fishing access ranking the highest

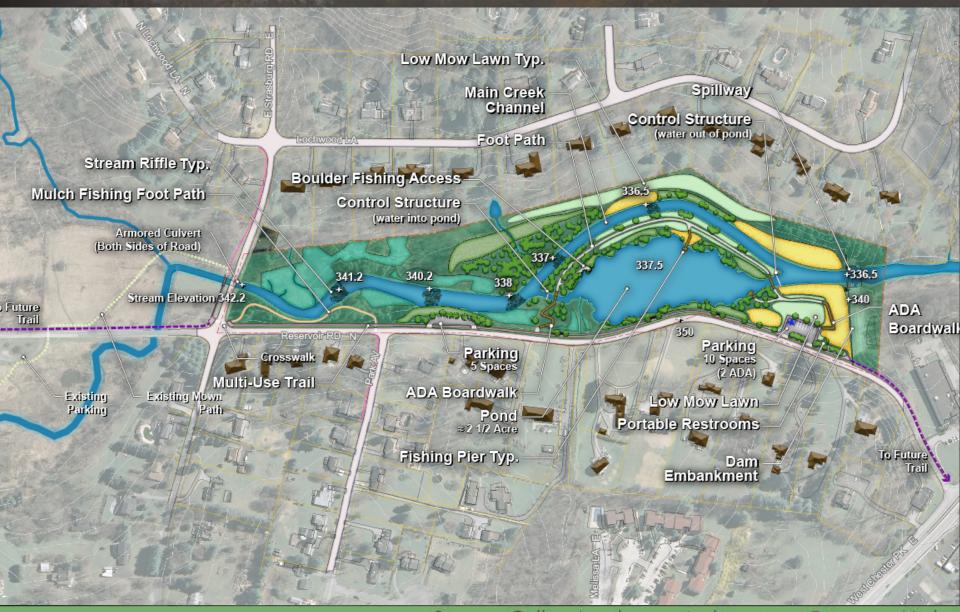
#### **Question 8 – Types of Restoration Plantings:**

• Generally positive response for all types.

#### **Question 10 – Tradition Park Amenities:**

• Generally positive response for all items.

#### **Draft Master Plan**



#### **Draft Master Plan**



### **Main Parking Area**



#### Improvements:

- Parking Area
  - 8 reg. spaces
  - 2 ADA spaces
  - Driveway sight lines +250'
- Park Kiosk
  - Rules
  - Trail Map
- Fenced in Portable Restroom Area
- ADA access trail into site
- ADA fishing Pier
- Low Grow Lawn Area
- Low Meadow along Dam

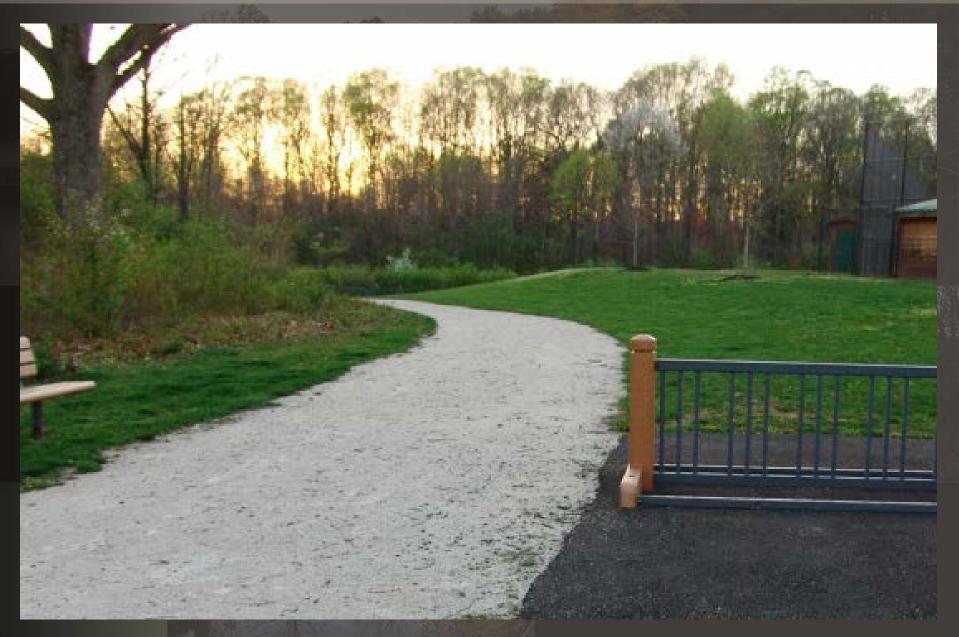
## **Example Low Meadow**



# Example Low Mow Lawn



# **Example ADA Trail Surfaces**



## **Example ADA Trail Surfaces**



## **ADA Fishing Pier**



#### **Pond Area**



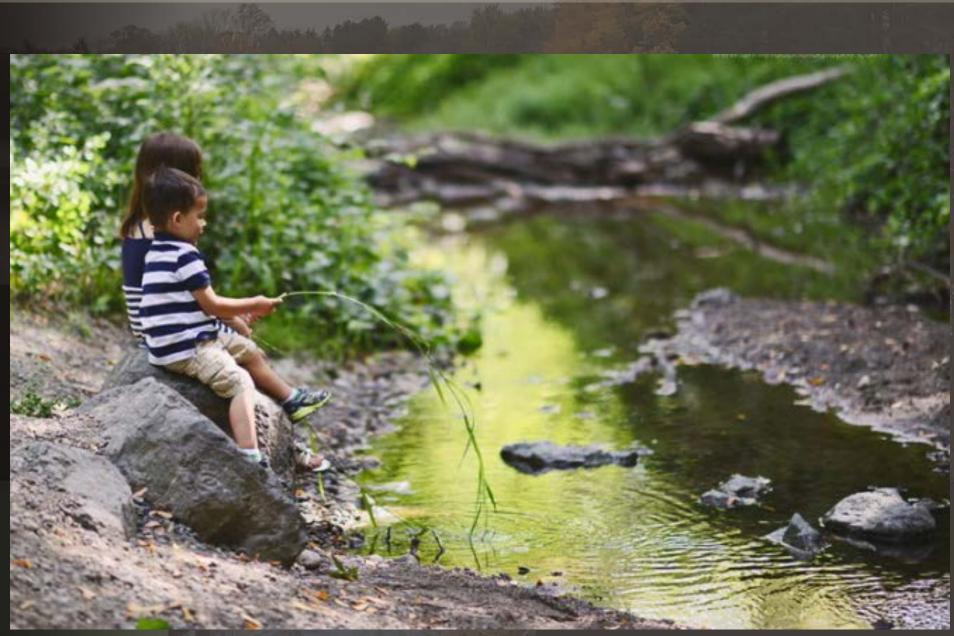
#### Improvements:

- 2 ½ Acre Pond
  Pond forebay
- ½ Mile loop trail system
- Fishing pier
- Water edge
   access
- Riparian planting
- Low grow lawn along neighboring properties

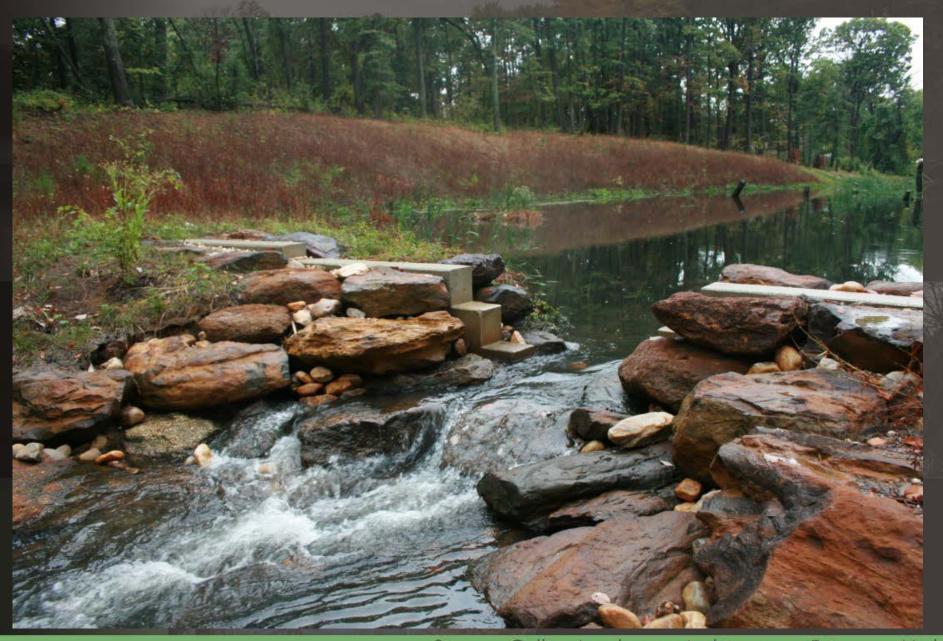
## **Example Multi-Use Trail & Seating Areas**



# Water Edge Access



## Example Pond Control Structure – Outfall Weir



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## **Example Riparian Buffer**



#### **Stream Area**



#### Improvements:

- Parking Area
  - One-way
  - 5 parallel spaces
- Fishing stream edge trail
- Stream Riffles
- Armor Culvert at Road

# **Example Stream Riffle**



## Earthen / Wood Chip Fishing Trail



## Future Access North & East



#### Improvements:

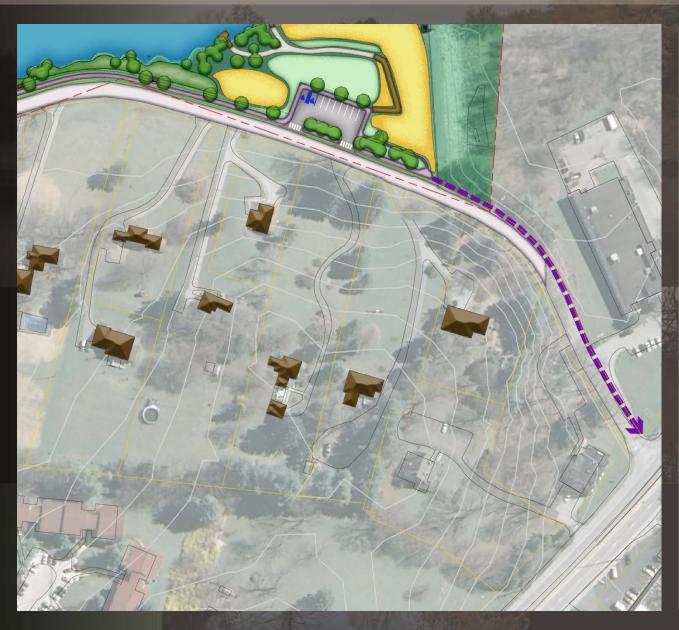
- Crosswalk Improvement
- Trail Improvement to existing Bridge
   Future Sidewalk improvement to Lochwood Lane
   Euture Extension
- Future Extension of Multi Use Trail to Suplee Open Space Area

### **Future Access West**



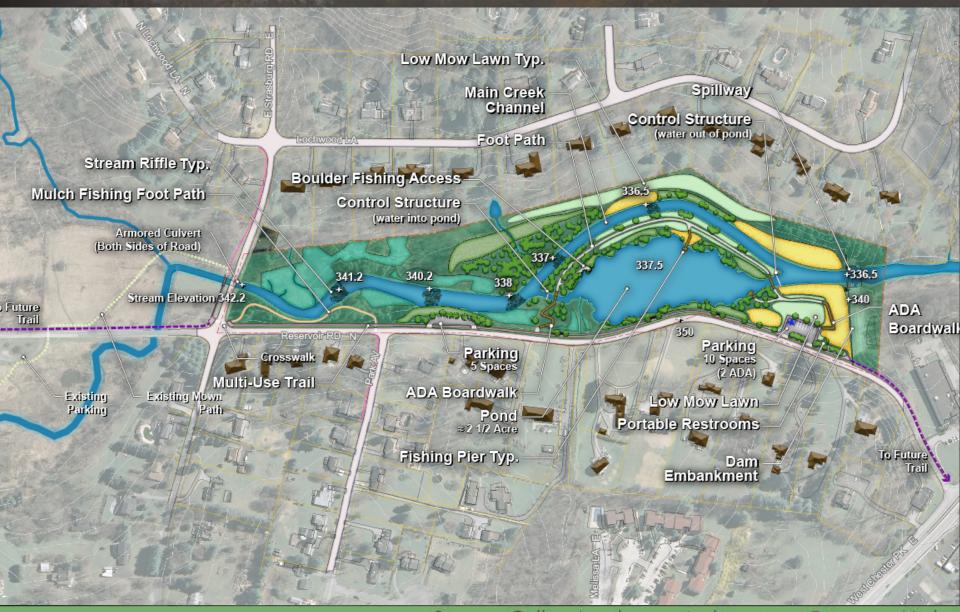
Improvements: • Future Sidewalk improvement along Park Ave

### **Future Access South**



Improvements: • Future Extension of Multi Use Trail to West Chester Pike

### **Draft Master Plan**



#### **ADA Access**

Lochwood LA

Reservoir RD N

#### ADA Boardwalk

ADA Accessible Boulder Fishing Access ADA Access to Existing Bridge

ADA Accessible Foot Path

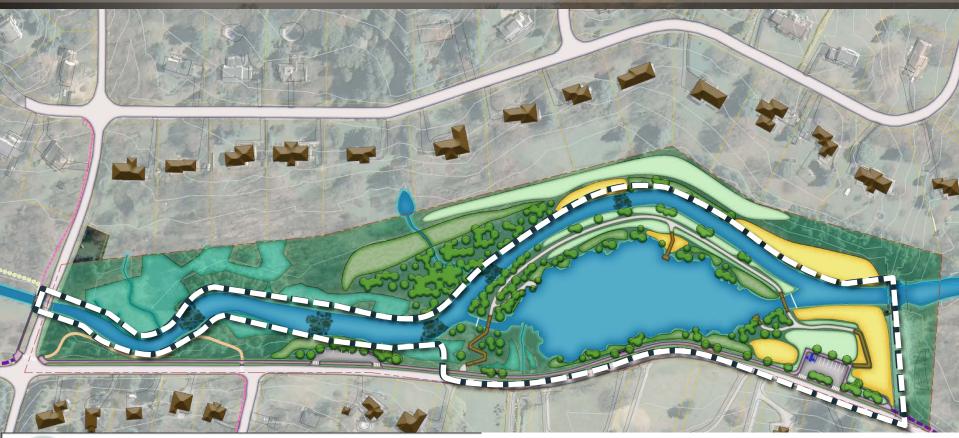
Parking (2 ADA Spaces) 1 ADA Accessible Portable Restroom

ADA Accessible Fishing Piers

ADA Accessible Multi-Use Trail

ADA Boardwalk

## **Project Phasing**



#### Site Preparation:

Dam work;

Phase

1

- · Stream riffle construction;
- Armor culvert at E Strasburg Rd;
- Site grading to create the pond, island, embankment for parking; and
- Construction of the pond.

#### Site Improvements:

- · Construct main parking area; and
- Develop 2 boardwalks, island foot path, and a portion of the multi-use trail.

## **Project Phasing**



Phase 2 Planting Improvements:

- Meadow establishment;
- · Shrub plantings; and
- Forest restoration.

## **Project Phasing**



#### Site Improvements:

Phase

3

- · Construct secondary parking area;
- Extend multi-use trail to E Strasburg Rd;
- Crosswalk improvements at Reservoir Rd and E Strasburg Rd intersection;
- · Construct 5 ft wide trail to existing pedestrian bridge; and
- Develop fishing access path along Chester Creek.

## **Project Cost**

Estimated Costs of Development			
Phase 1 Project Costs	\$	963,771	
Phase 2 Project Costs	\$	350,546	
Phase 3 Project Costs	\$	76,964	
Total Costs of Development	\$	1,391,280	

Phase 1 Estimated Costs of Development		
Work Item	Tota	I Cost
Demolition and Site Preparation	\$	496,649
Reservoir Road Mixed-Use Trail (South)	\$	49,890
Reservoir Road Parking Area, 10 Spaces (South)	\$	26,170
ADA Asphalt Walkway	\$	2,461
Stone Dust Foot Paths, 4"Depth	\$	12,863
Structures- Bridges & Boardwalks	\$	131,200
Phase 1	\$	719,232
General Project Cost (Mobilization, E&S, Construction Surveying)	\$	50,346
Construction Contingency (15%)	\$	107,885
Design and Engineering (12%)	\$	86,308
Phase 1 Project Costs	\$	963,771



# **Project Cost**

Phase 2 Estimated Costs of Development			
Work Item	Total Cost		
Structures- Fishing Piers	\$	78,400	
Planting	\$	183,201	
Phase 2	\$	261,601	
General Project Cost (Mobilization, E&S, Construction Surveying)	\$	18,312	
Construction Contingency (15%)	\$	39,240	
Design and Engineering (12%)	\$	31,392	
Phase 2 Project Costs	\$	350,546	

Phase 3 Estimated Costs of Development		
Work Item	Тс	otal Cost
Reservoir Road Parking Area, 5 Spaces (North)	\$	17,472
Reservoir Road Mixed-Use Trail (North)	\$	38,436
Wood Chip Foot Paths, 5' Wide	\$	1,528
Phase 3	\$	57,436
General Project Cost (Mobilization, E&S, Construction Surveying)	\$	4,020
Construction Contingency (15%)	\$	8,615
Design and Engineering (12%)	\$	6,892
Phase 3 Project Costs	\$	76,964

60 day Review Period - Please submit written comment to: Rick Smith, Manager E-Mail: rsmith@eastgoshen.org

Township Project Website: https://eastgoshen.org/about-us/milltown-dam

**Tonight's Plans and Presentation:** 

https://eastgoshen.org/boards/milltown-dam-committee

Web Survey https://www.surveymonkey.com/r/MTDraftPlan



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#### **Contact Info:** Please Copy All Parties

Sarah Leeper, Project Manger Simone Collins Landscape Architecture (610) 239-7601 E-Mail: sleeper@simonecollins.com

Peter Simone, Project Principle Simone Collins Landscape Architecture (610) 239-7601 <u>E-Mail: psimone@simonecollins.com</u>

Rick Smith, Manager East Goshen Township (610) 692-7171 E-Mail: rsmith@eastgoshen.org



### **Draft Master Plan**

