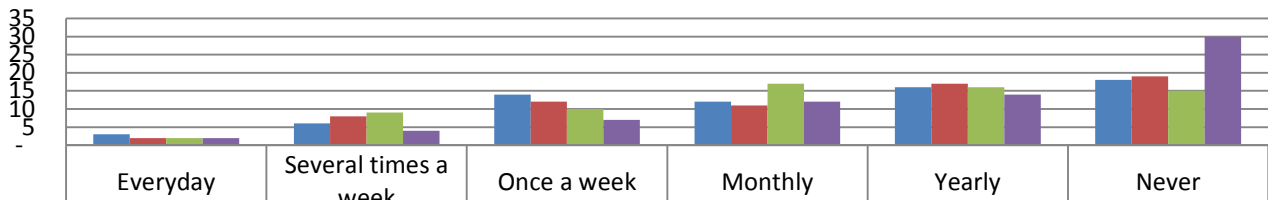
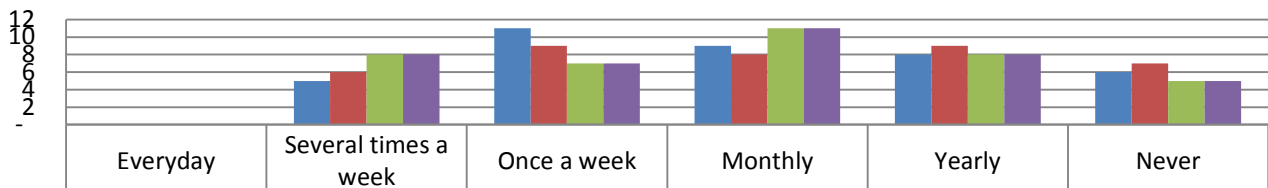


## About how often do you visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (All respondents)



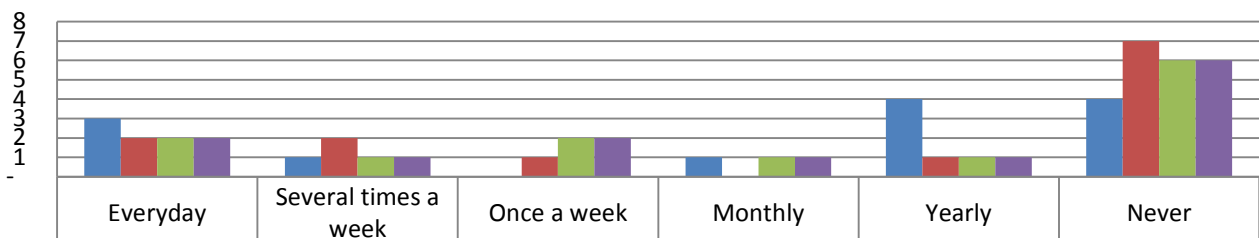
Spring	3	6	14	12	16	18
Summer	2	8	12	11	17	19
Fall	2	9	10	17	16	15
Winter	2	4	7	12	14	30

## About how often do you visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Web respondents)



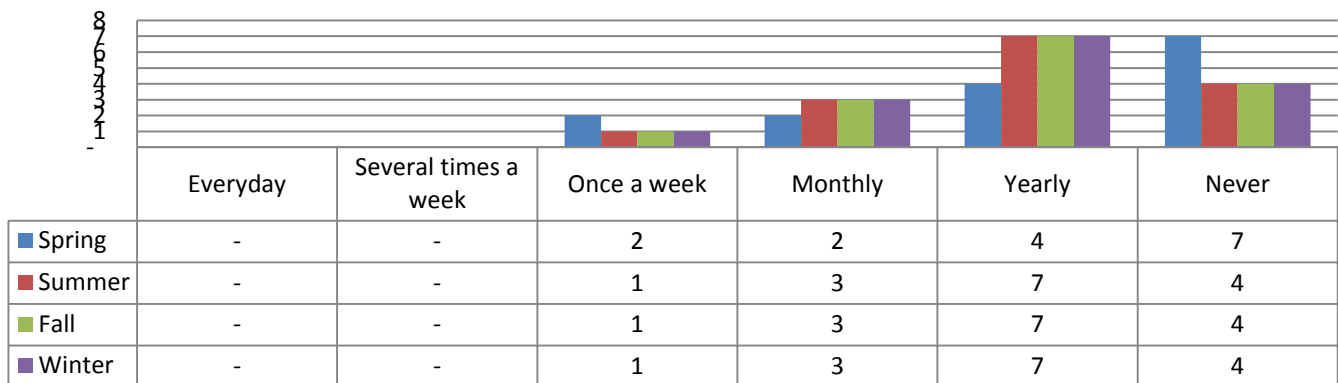
Spring	-	5	11	9	8	6
Summer	-	6	9	8	9	7
Fall	-	8	7	11	8	5
Winter	-	8	7	11	8	5

## About how often do you visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Paper respondents)

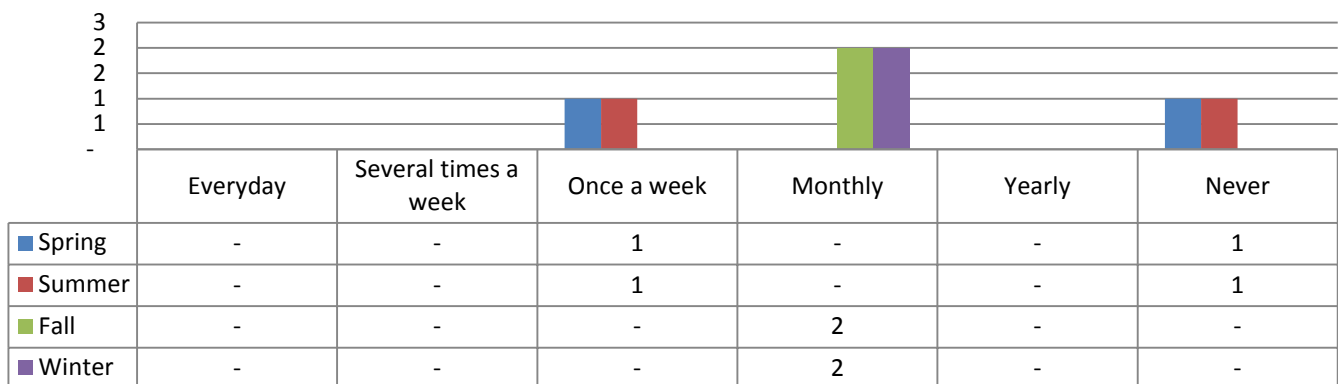


Spring	3	1	-	1	4	4
Summer	2	2	1	-	1	7
Fall	2	1	2	1	1	6
Winter	2	1	2	1	1	6

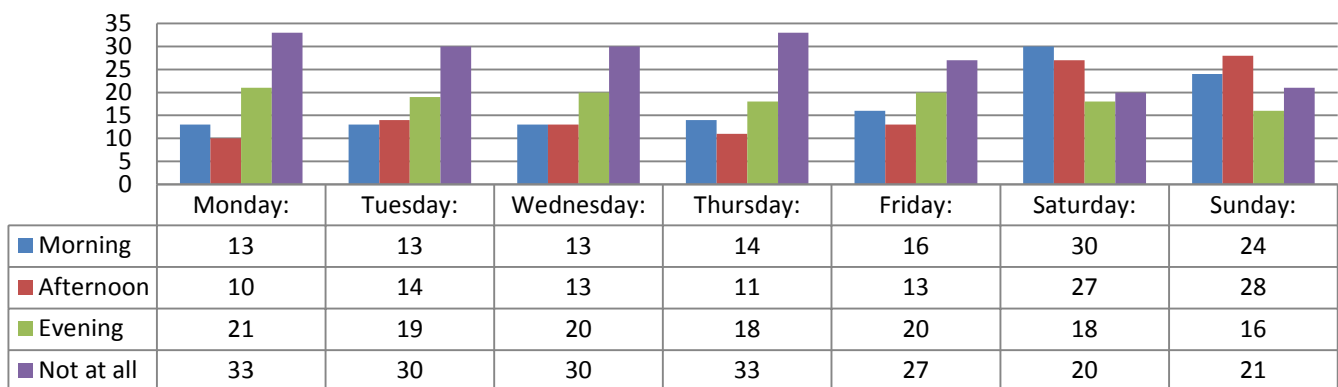
## About how often do you visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Staff respondents)



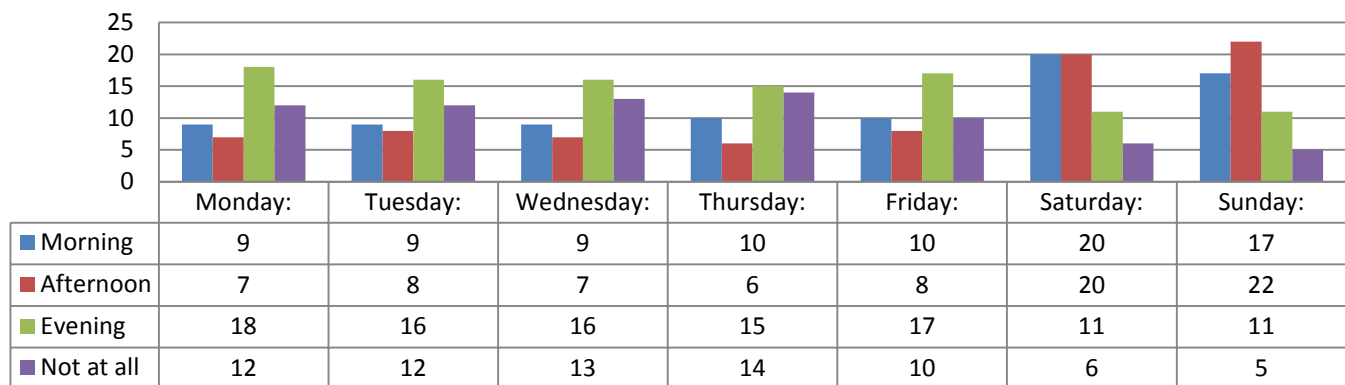
## About how often do you visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Intercept respondents)



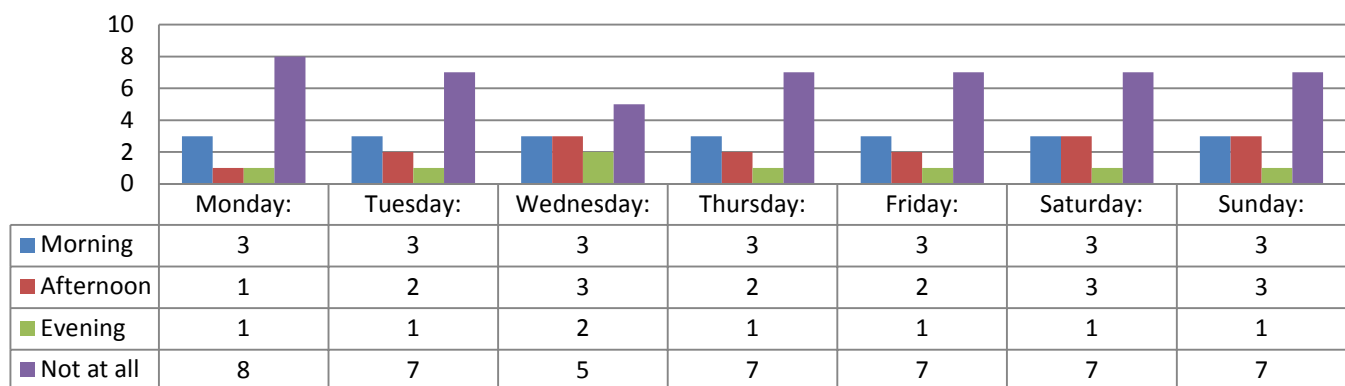
## When do you typically visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (All respondents)



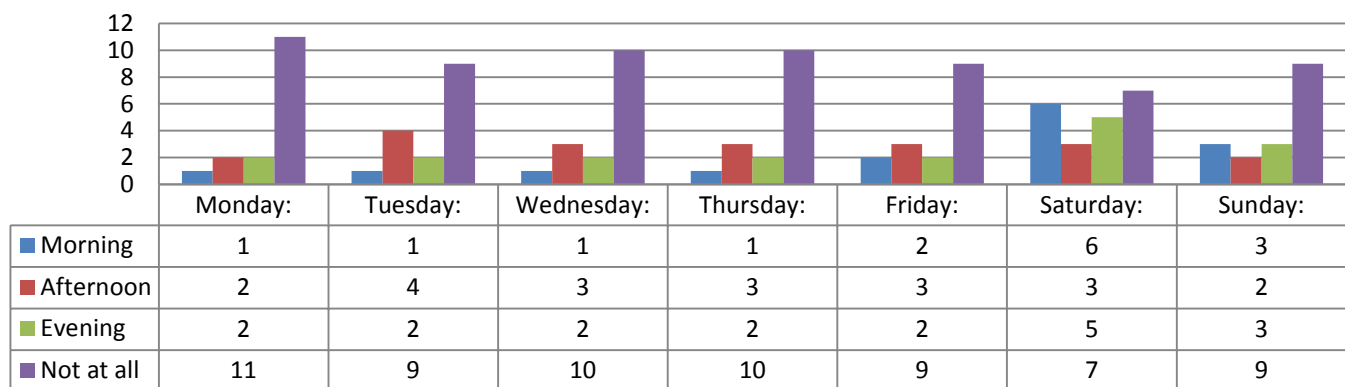
## When do you typically visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Web respondents)



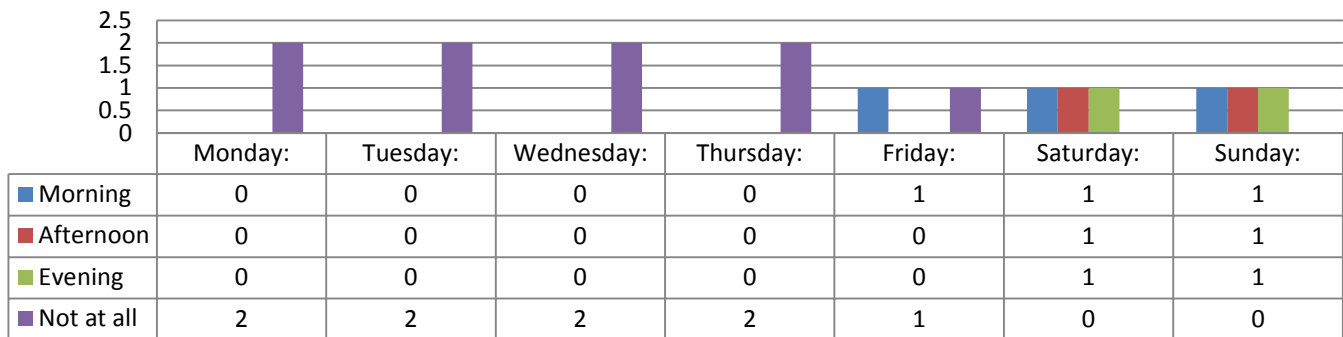
## When do you typically visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Paper respondents)



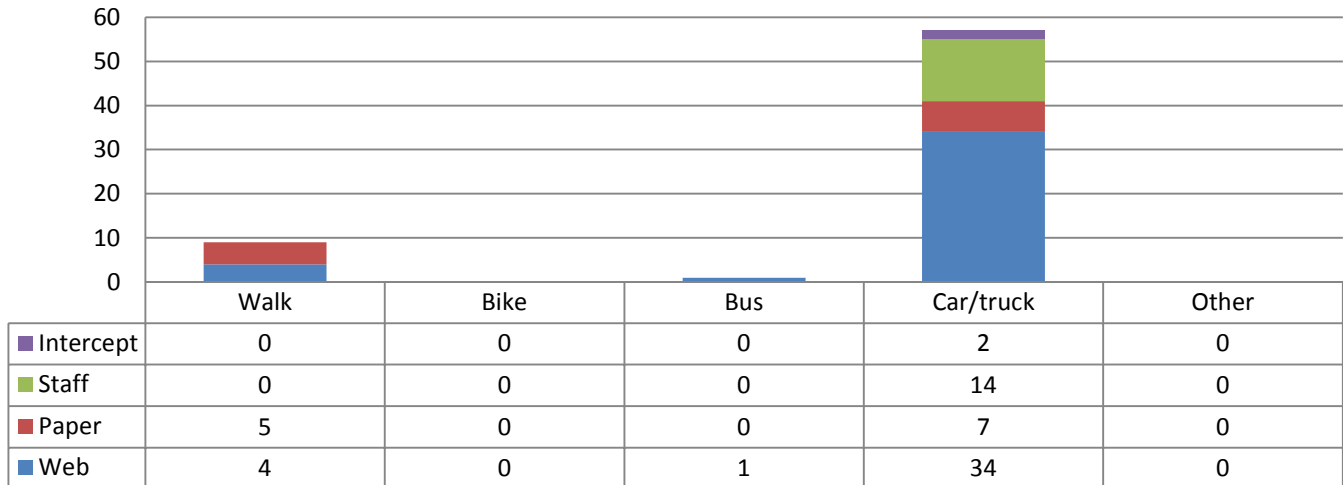
## When do you typically visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Staff respondents)



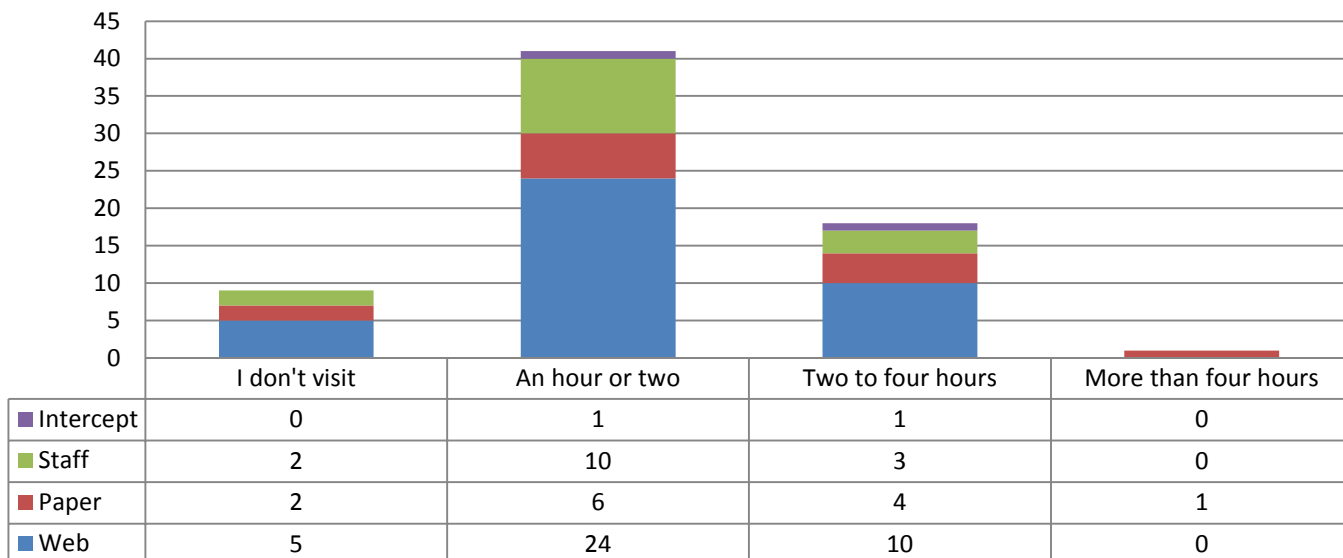
## When do you typically visit the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area? (Intercept respondents)



## How do you/would you typically get to this location?

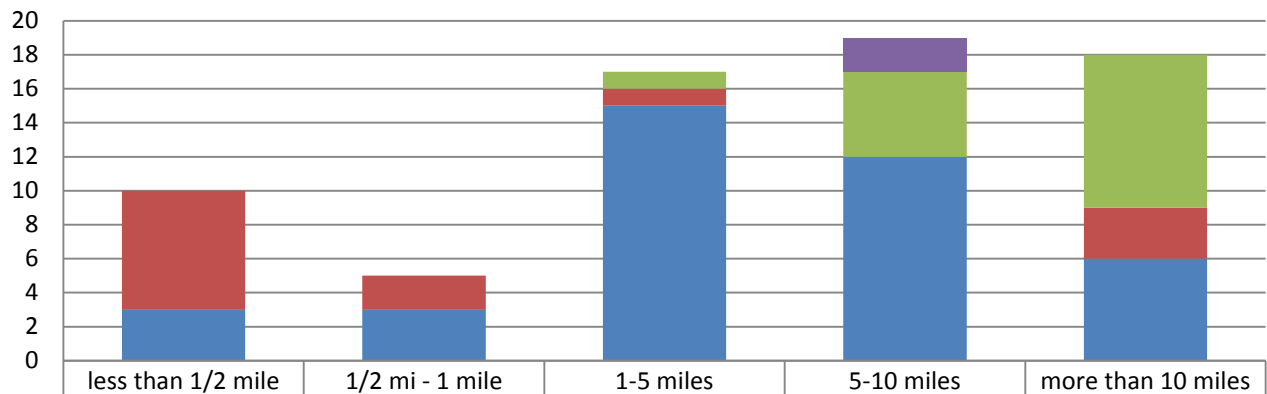


## How long do you/would you typically stay on each visit?



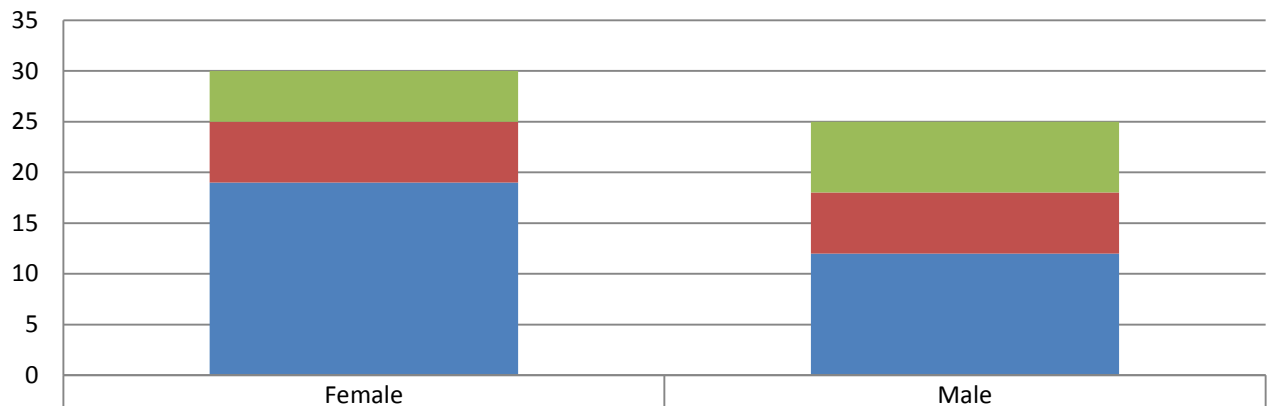


## How far do you live from the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area?



	less than 1/2 mile	1/2 mi - 1 mile	1-5 miles	5-10 miles	more than 10 miles
Intercept	0	0	0	2	0
Staff	0	0	1	5	9
Paper	7	2	1	0	3
Web	3	3	15	12	6

## Gender of Respondents



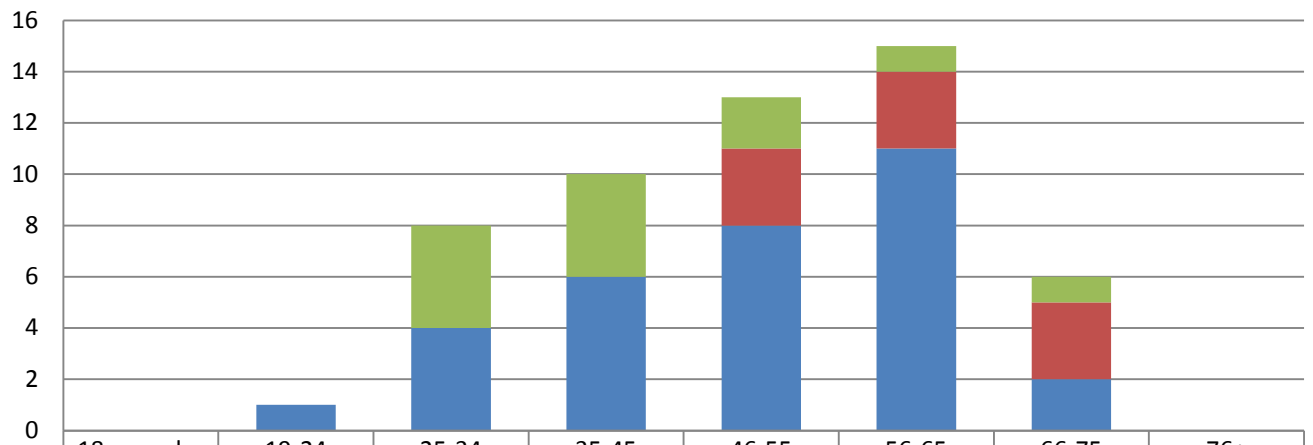
	Female	Male
Intercept	0	0
Staff	5	7
Paper	6	6
Web	19	12

## Race of Respondents



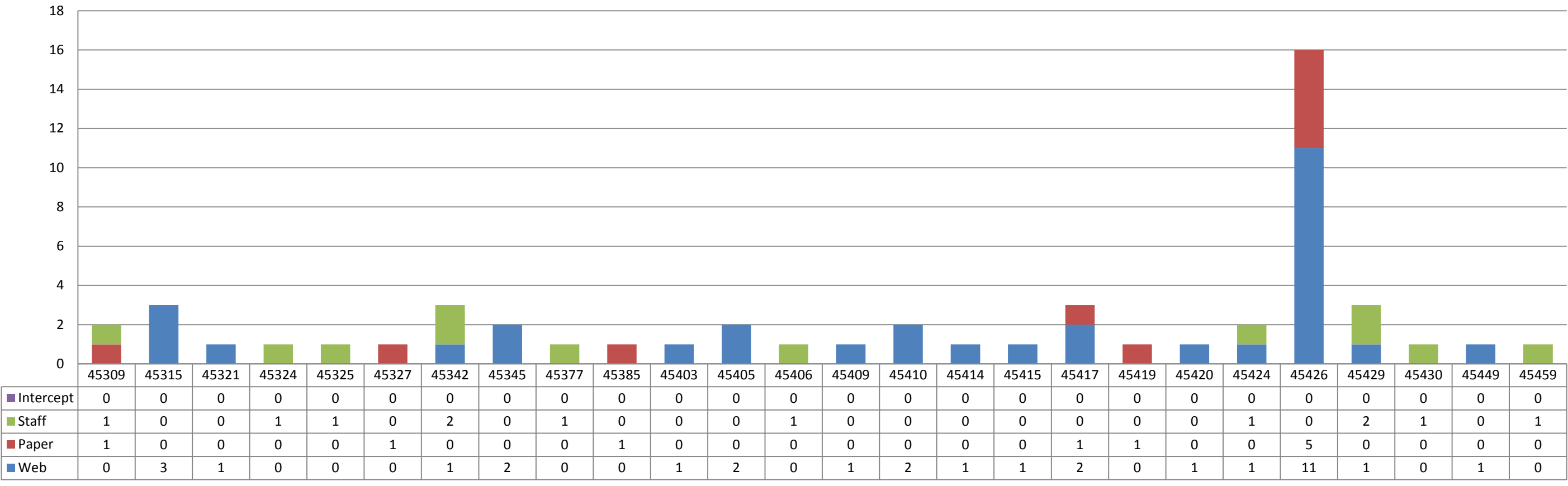
	American Indian or Alaska Native	Asian	Black or African American	Hispanic or Latino	Native Hawaiian or Pacific Islander	Non-Hispanic White	White or Caucasian	Two or More Races	Other
Intercept	0	0	0	0	0	0	0	0	0
Staff	0	0	0	0	0	0	12	0	0
Paper	0	0	3	0	0	0	9	0	0
Web	0	0	5	0	0	0	26	1	0

## Age of Respondents



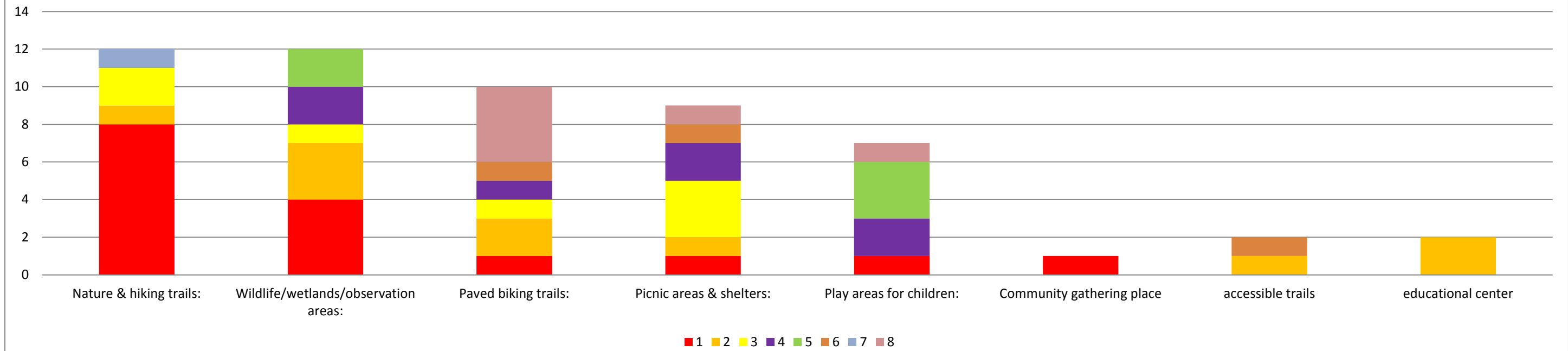
	18 or under	19-24	25-34	35-45	46-55	56-65	66-75	76+
Intercept	0	0	0	0	0	0	0	0
Staff	0	0	4	4	2	1	1	0
Paper	0	0	0	0	3	3	3	0
Web	0	1	4	6	8	11	2	0

Home ZIP Code

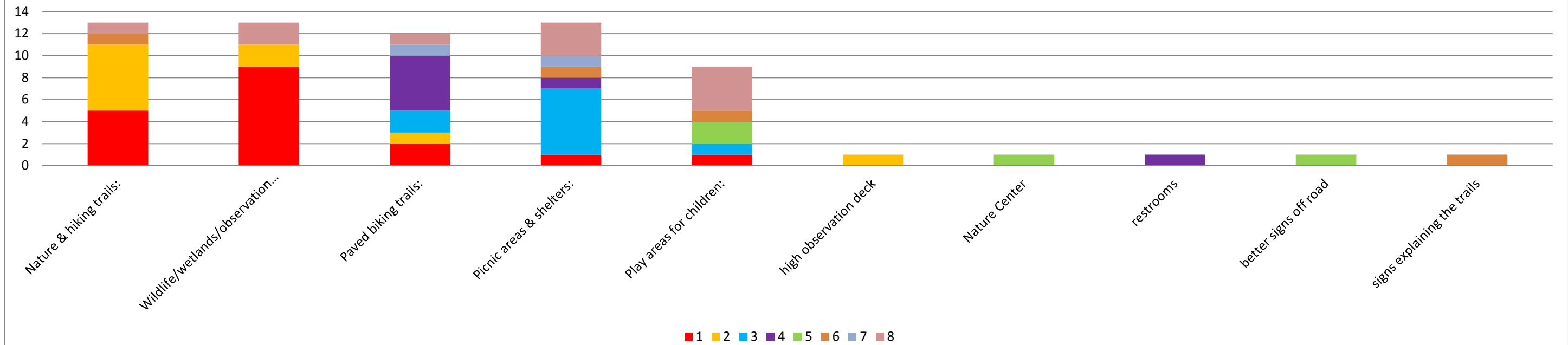




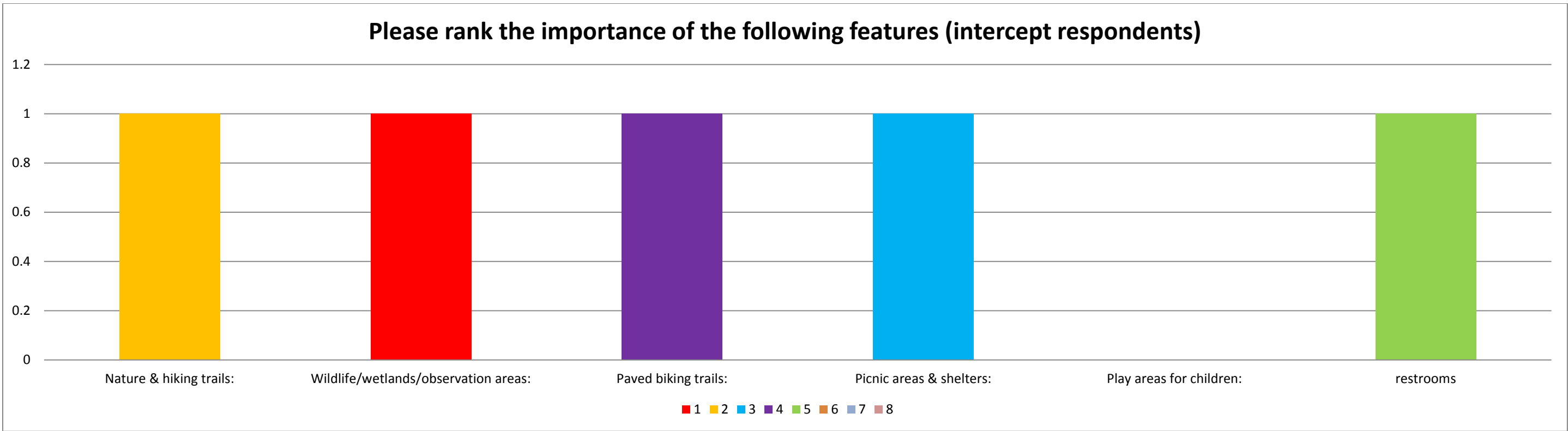
Please rank the importance of the following features (paper respondents)



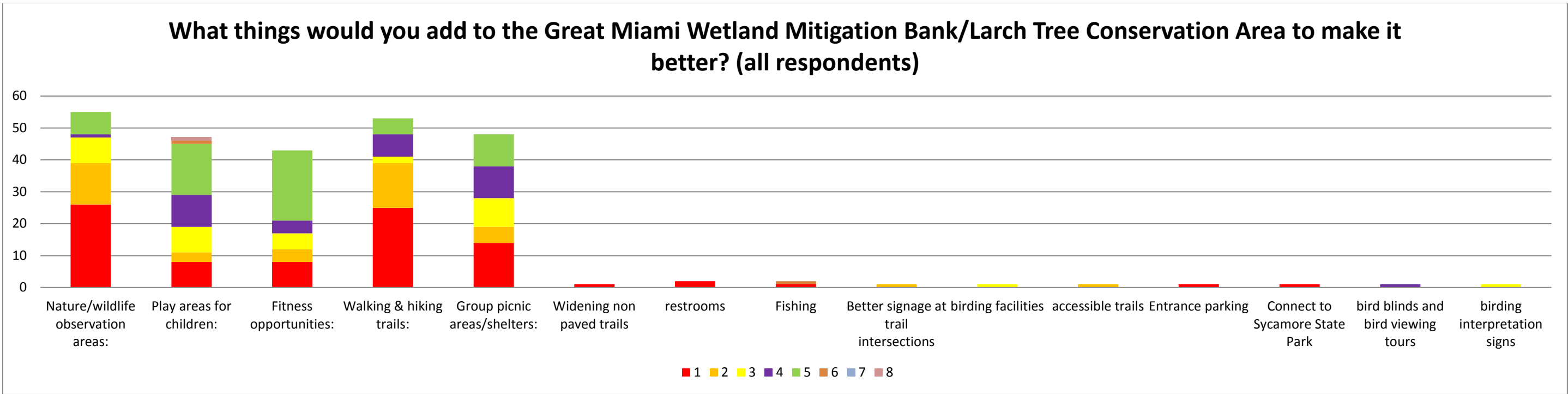
Please rank the importance of the following features (staff respondents)



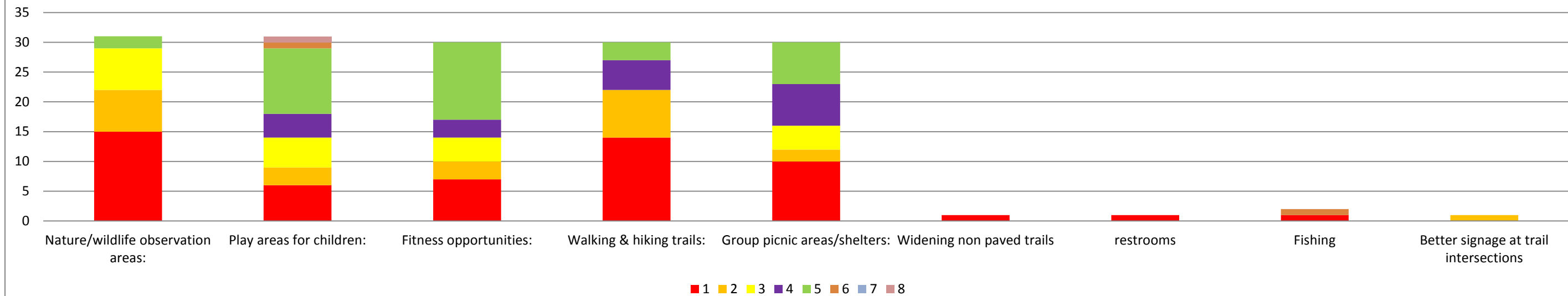
Please rank the importance of the following features (intercept respondents)



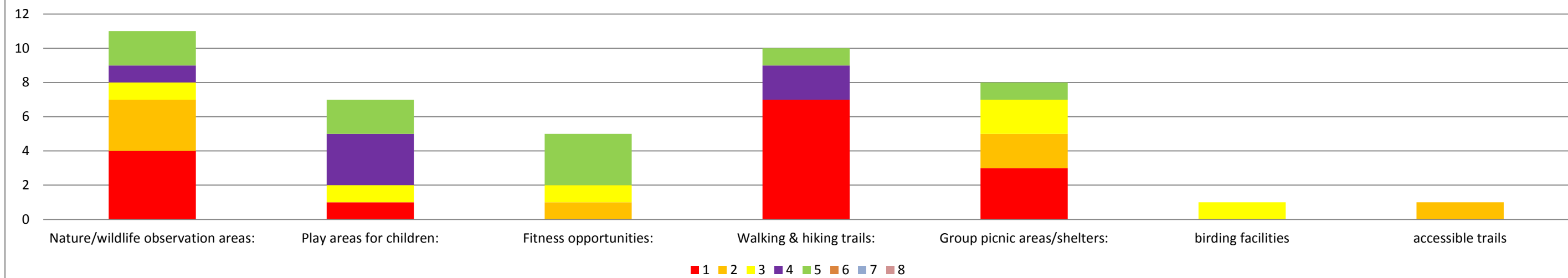
What things would you add to the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area to make it better? (all respondents)



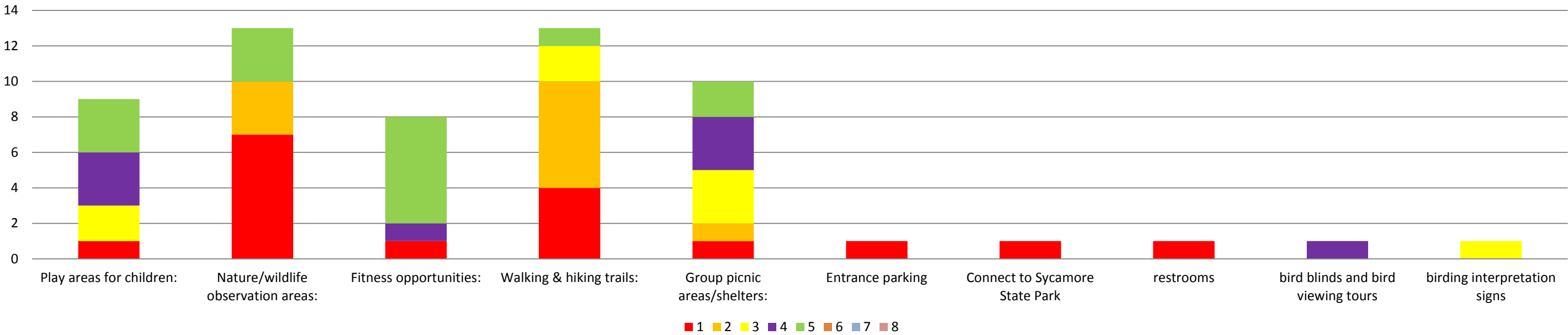
## What things would you add to the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area to make it better? (web respondents)



## What things would you add to the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area to make it better? (paper respondents)



What things would you add to the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area to make it better? (staff respondents)





10. Any other comments or ideas that you would like to share?

Source	Comments
Web	clear out a little more around the ponds so children could enjoy fishing as well as adults
Staff	Get clarity of City of Trotwood's plans for a community center.
Web	I hope that it gets more opened up - more advertising so that it is used more.
	i hope this area is preserved as a premier birding /wildlife park, one of the finest in the county.
Web	I believe allowing or encouraging dogs in this area would greatly impact the wildlife.
Web	I love what has been done with this conservation area, and I think the less impact/change on the area would be best. Allow for natural succession and mow/controlled burn certain areas on a cycle to retain wetland/prairie habitat for wildlife who's livelihood depends on it.
Web	I need to take time to learn about this area. I have heard some people talk about this area.
Staff	I think this needs to connect to Sycamore State Park which would complement each park.
Staff	I would really love to see the bank and surrounding area stay relatively wild, but with a few hiking trails. I think that type of area draws a different crowd that has an interest in the less "parky" type of nature. We've already got other, gorgeous, parks that are highly engineered but the bank is a special place.
Staff	Keep it natural - not all polluted up with people. People come - natural life goes.
Web	like the parks just fine like they are!
Web	more advertising for people to know about it
Paper	I believe the wetlands area should be named the Trotwood Five Rivers Metropark.
Paper	Maintain bow hunting. Establish hunting similar to Sycamore State Park or waterfowl controlled hunting opportunities.
Paper	maintenance is extremely important to keep park moving in the right direction.
Paper	Restrooms closer to shelters.
Paper	Concentrate on habitat for wildlife.
	The north and west portion of the county is often described as ‘underserved’ – which I mostly agree with – though I do not think that developing this property will satisfy the needs of the community there. It is not a walkable or bikeable area, therefore anybody who would get there by car could just as easily go to the nearby Possum Creek MetroPark (8 miles), Englewood MetroPark (10 miles) or Germantown MetroPark (13 miles). As we’ve already seen with Possum Creek, which is less than 15 min away and in a similar neighborhood, having the infrastructure does not necessarily bring visitors. It offers more amenities than the Bank would be able to, yet visitation is still low. Building shelters and making trails would only disrupt the incredible beauty and decrease the habitat quality that we have worked so hard to establish. These things are obviously inevitable, so I would recommend keeping them minimal and exclusively on the Larch Tree side. It’s a long shot, but if the opportunity ever arises and we have the resources to handle it, taking over Sycamore State Park would be a better option to fill in the gaps to serve the community.
Staff	I cannot stress enough what an incredible resource we have at this location. We stand at the crossroads of developing something invaluable to conservation for our region or potentially ruining an opportunity that we may never find again in the shrinking green space we have left. Each year we continue to add rare and endangered species to the list of animals who are utilizing this area - that’s an enormous and undervalued accomplishment. We will only continue to do so if we manage this area with care and responsibility.
Web	This is one of the best places to birdwatch in county. I truly hope. The southern half encompassing the wetlands is not developed beyond trails and viewing areas.
Web	This would be a great oppurtunity for Trotwood
Web	Trotwood needs further development of parks.
Web	Use the existing cart paths as fitness walking trails.
	Visit Tawawa Park in Sidney OH to see how well they have blended the natural woods, wetlands, flood plains, and hiking trails along with the playground equipment.
Web	This approach allows for families, and older hikers to enjoy the park and still preserve its natural state.
	Would like to have the paved paths cleared for elderly and handicapped.
Web	Willing to assist in that effort.

What do you like most about the Great Miami Wetland Mitigation Bank/Larch Tree Conservation Area?

Source	Comments
Web	Beauty of nature, solitude, reminds me of ara where I grew up
Web	Bird variety. Peace and solitude
Web	Bird watching
Staff	bird watching
Web	Birding
Staff	Birding, Solitude, unique habitats
Paper	Close to home
	Close to home
Web	It's not a landfill
Web	conservation activity, lots of birds
Web	Great birding, solitude
Web	great place to see nature and wildlife and enjoy a walk.
Web	Great resource for students
Staff	Have never visited
Web	Have not been there
Web	have not visited yet planning to in the near future
Web	I have no idea where this area is located.
Staff	I like knowing that we have a mitigation bank in the region.
Web	I like the fact that proactive steps are being taken to preserve wetland ecosystems for birds, bees and butterflies - and as a place where young people can LEARN about wetland conservation
Staff	I love how wild the bank is and haven't really been on the golf course at all.
Web	I love that it is close and relaxing.
Web	I think it's a great idea to sustain and develop further the mitigation bank so that wildlife and flora are conserved further.
Staff	interesting use of land
Paper	It is close to my home.
Paper	It is in Trotwood. And it has extreme potential.
Web	It provides wildlife habitat that is unique to any other location in Montgomery County, therefore, there are species of wildlife that can only be found in this conservation area and nowhere else in the county. One example of this was a Virginia Rail that I found there recently that is a rare find in the county, and the first one seen in several years in Montgomery County. Also, it is one of the few places in the county to see Bobwhite Quail, Short-eared Owls, Northern Harriers, and Nelson's Sparrows among others.

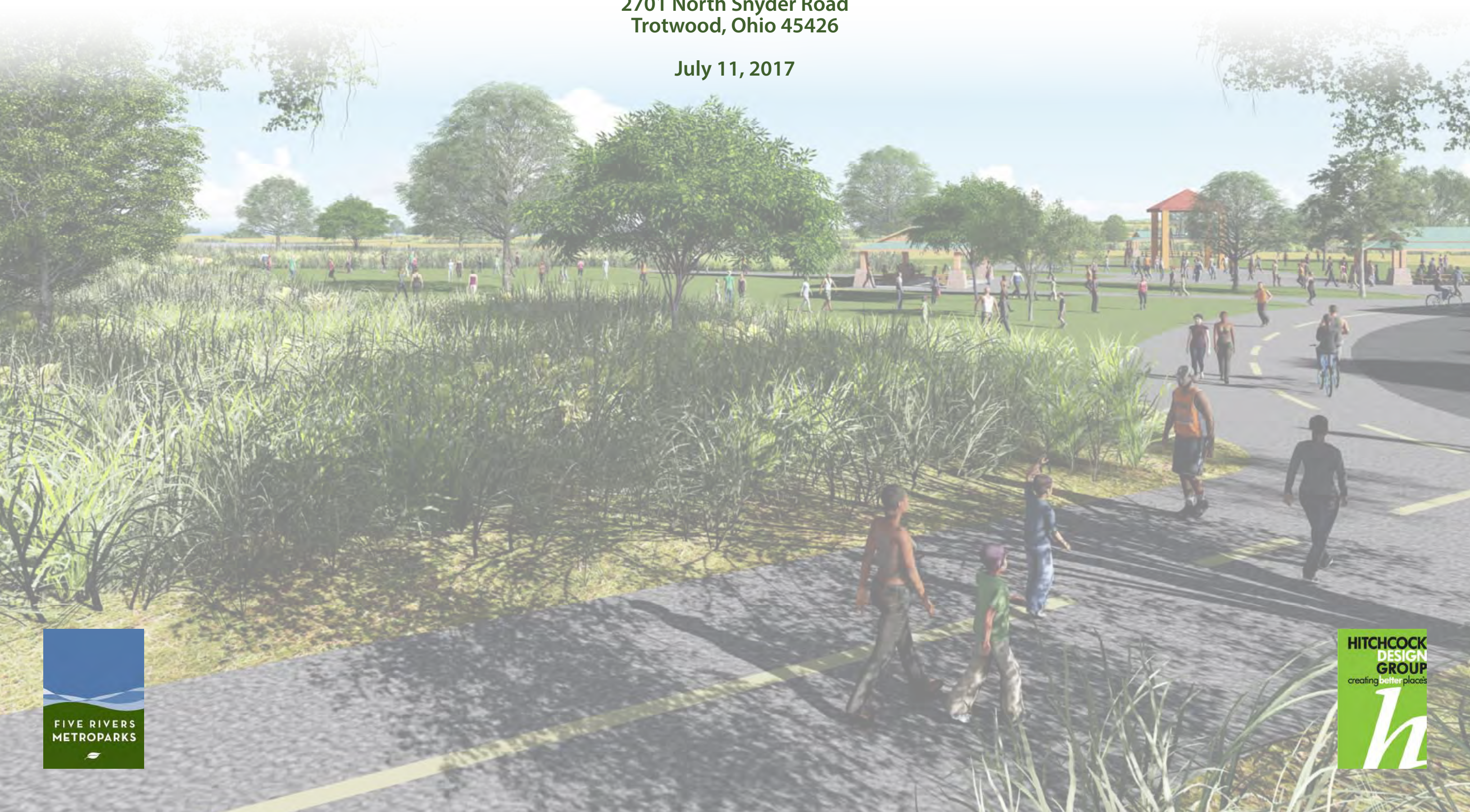




# Larchtree Reserve / Mitigation Bank Master Plan

2701 North Snyder Road  
Trotwood, Ohio 45426

July 11, 2017





# Executive Summary







# Executive Summary

## Larchtree Reserve & Great Miami Wetland Mitigation Bank MetroPark Master Plan

Welcome to Larchtree! Visitors will enjoy the absolute best this beautiful 553-acre MetroPark offers, with improvements geared to help them Recharge through Active Nature Experiences.

Positioned just south of Sycamore State Park and the Wolf Creek Regional Trail, near the community of Trotwood, Larchtree’s activation provides meaningful recreation experiences within this underserved area within the Five Rivers MetroParks service area. As defined in the Comprehensive Master Plan, Larchtree’s typology is “Nature Park”, and its assets support the definition perfectly. The Great Miami Wetland Mitigation Bank’s adjacency to the former Larchtree Golf Course sets the stage for nature emersion, and a lengthy menu of educational opportunities and interpretive discoveries.

Larchtree’s master plan achieves Five Rivers MetroPark’s Power of 10 experiential strategy, through these five objectives:

- Attract the local community to experience nature
- Engage educators, students and the curious through bio-diversity
- Provide personal recharging through active nature experiences
- Add asset-value through habitat restoration
- Establish a management and maintenance presence

And here is the context behind each:

Attracting the Local Community to Larchtree is a mission-driven objective, and is accomplished, initially through comfortable experiences had within the proposed “core-area” improvements. The experience begins with safe, well-signed, easy to use vehicular access and parking, a staffed Welcome Center and regional scale nature-based play environment – all visible from the front entrance. Larchtree’s “beating-heart” is a space for community and families, supported by accessible picnic shelters, gathering spaces, restrooms and pathways, and enhanced through select artistic expressions. The iconic observation tower, one of three within the MetroPark, enhances future nature-lovers’ perspective of the broader site, launching them into further exploration. In addition, Larchtree is proposed to connect to the Wolf Creek Trail through Sycamore State Park, further linking this MetroPark to Trotwood’s neighborhoods.

Engaging educators, students and the curious through bio-diversity is how Larchtree is positioned best, once intentioned visitors arrive. Two bus-friendly parking areas and access points provide group-staging and informed entrance options into the Larchtree and the Mitigation Bank’s other two observation towers and stacked-loop trail network, traversing a variety of prairie, woodland, grassland, wetland and open-water habitats. Respectively, the landscape, and the improvements that provide meaningful access to its diversity, provide a rich setting for simple observation, contextually accurate interpretation and advanced laboratory experiences.

Providing personal recharging through active nature experiences is the supporting objective for Larchtree’s positioning statement and is realized through multiple trail-options (paved, aggregate and mown) and climbing the three observation towers to capture this MetroPark’s signature panoramic and axial views, observe the 300+ documented bird-species, and experience nature’s many scenes. Expanding and enhancing Larchtree’s two ponds sets the stage for walking over water, fishing for pan-fish and bass, and up-close water’s-edge encounters. Accessible shelters, restrooms, and Larchtree’s other support amenities, all encourage visitors to extend their stay.

Adding asset-value through habitat restoration supports the “Nature” within Larchtree’s Nature Park typology. Completing the implementation of the Great Miami Wetland Bank will happen independently of this master plan implementation, but remains an impactful portion of this objective. In addition, establishing and enhancing Larchtree’s cool season grassland though species diversity, as well as select woody material clearing and reforestation/ephemeral establishment add security to ground-nesting bird species and support other local wildlife. Where the grasslands meet the roadway, core-activity area and secondary access, a more managed turf-like landscape will appear, creating a visually appealing edge that leads the eye to focal points throughout the park. Expanding the “frog-pond” and combining the northeast ponds, and enhancing them both with emergent wetland edges, filter-strips and proper depth for fisheries overwintering, will add the critical aquatic support component to the MetroPark. Altogether, Larchtree and Mitigation Bank combined offer an unprecedented human and wildlife oasis.

Lastly, establishing a management and maintenance presence at Larchtree may sound like protocol for Five Rivers MetroParks, but supporting the previous four objectives will require this commitment for success. The Welcome Center building will be modest in size accommodating restrooms, office space and a multi-purpose room. When staffed, the front-office presence provides a welcoming element for the tentative future nature-enthusiast and onsite coordination for school groups and shelter rental parties. The Maintenance Building will follow Five River MetroPark standards, arranged with pull-through bays and exterior fenced storage, screened from view.

Overall, since this site is essentially undeveloped, the Larchtree Reserve & Great Miami Wetland Mitigation Bank MetroPark Master Plan proposes and accommodates many significant new improvements – purpose driven to support its Nature Park status within Five Rivers MetroParks system.

The proposed physical improvements include new branded entry features, split boulevard roadway system, three parking lots (main, +/- 150-stalls), secondary (+/-100-stalls) and remote (+/-15-stalls); a Welcome Center, a Maintenance Building, 1.3miles of paved trails (connecting Sycamore State Park through the site to Little Richmond Road), 4.5 miles of internal aggregate trails and 5-miles of mown trails (through Larchtree’s grassland and Mitigation Bank’s diverse wetland); 4-boardwalks, 2 bridges, 2 improved ponds with improved water’s-edge fishing stations, a regional-scale nature-based play environment, 5-shelters (4 on the Larchtree site, 1 on the Mitigation Bank site), 3-observations towers, and remote site features including arbors, a small-amphitheater feature and a council ring.

The proposed style and character of the above improvements are illustrated in the conceptual renderings and representative images within this plan, which capture a rustic, yet contemporary aesthetic, making a premier-quality statement with function and form, while allowing the site to be the forward feature. All improvements are proposed to be designed, engineered and constructed to meet applicable codes and guidelines and to represent the Five Rivers MetroParks brand and standard.

In compliance with the Mitigation’s Bank impact limitation requirement, the combined footprint of the remote access, mown trails, boardwalks and observation tower are planned to be within the 4-acre maximum footprint.

The master plan cost opinion within this plan is organized by systems and improvement areas, and represents projected order of magnitude costs. This tool is meant to help MetroParks staff to begin discussions about funding, budgeting, phasing, scale and quality.

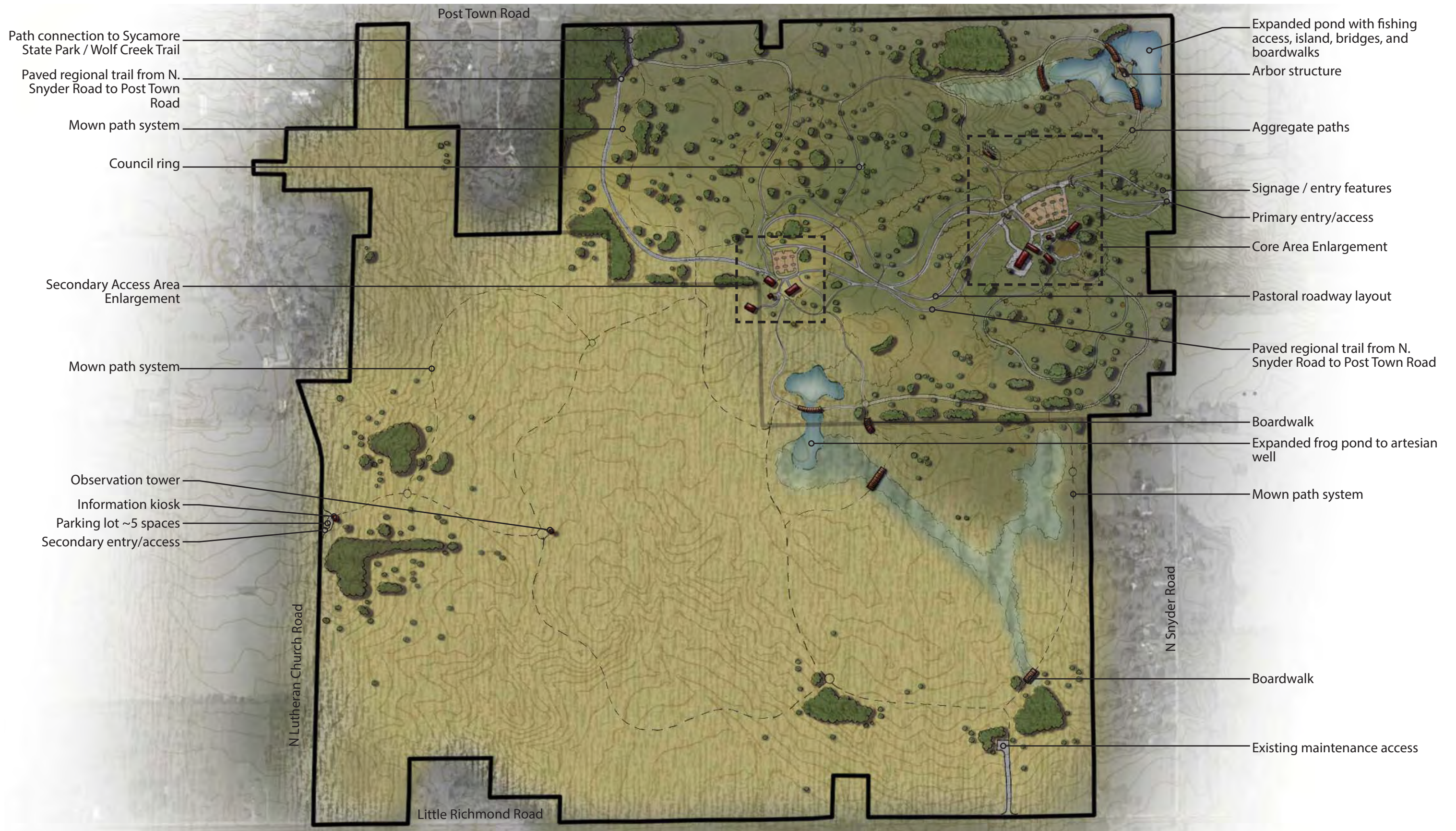
Again, welcome to Larchtree! Let your Recharging through Active Nature Experiences begin!



# Master Plan



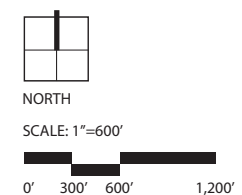




# Site Master Plan

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio



ISSUE DATE: July 11, 2017  
All drawings are preliminary and subject to change.  
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MetroParks  
Dayton, OH





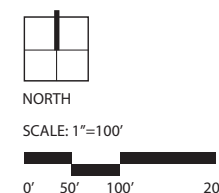
- Amphitheater
- Managed grassland
- Mown, managed grassland edge
- Entry feature
- MetroPark signage
- Main parking lot, permeable  
~150 spaces plus drop-off
- Paved regional trail
- Shelter, ±60 tables
- Aggregate path
- Observation tower
- Concrete paving
- Welcome center (multi-purpose  
room, restroom, office)
- Regional-scale nature play  
environment
- Mown path with activity nodes
- Shelter, ±90 tables
- Maintenance building with  
parking



# Core Area Enlargement

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio



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Dayton, OH





Secondary parking lot,  
Permeable ~50 spaces plus  
drop-off

Paved regional trail

Shelters (3), ±60 tables each

Mown, managed grassland  
edge

Aggregate path

Observation Tower

Concrete paving

Managed grassland

Wetland Bank  
Site

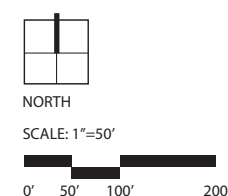
Larchtree Site



# Secondary Access Area Enlargement

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio



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MetroParks  
  
Dayton, OH



# Illustrations







# View of Core Area from MetroPark Entry

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio

Five Rivers  
MetroParks  
  
Dayton, OH

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# View of Fishing Pond from West Boardwalk

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio

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Dayton, OH

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## View of Secondary Access Area from Regional Trail

### Larchtree Reserve / Mitigation Bank

Trotwood, Ohio

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Dayton, OH

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# Character Images







Nature Playground



Shelter



Observation Tower



Fishing Access



Amphitheater



Council Ring



Education Access



Wayfinding and Interpretive Signage



Viewshed



Nature Appreciation



Lawn Games



Pastoral Roadway



Permeable Parking Lot



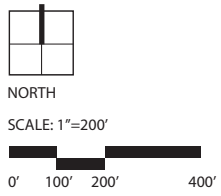
Paved, Aggregate, and Mown Path Networks



# Character Images

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio



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Dayton, OH









Master Plan Cost Opinion

Date: June 26, 2017  
RE: Larchtree Reserve & Great Miami Wetland Mitigation Bank MetroPark Master Plan

Main Roadway

Description	Qty.	Unit	Unit Cost	Extended Cost
temporary soil erosion and sediment controls	1	LS	\$ 20,000	\$20,000
asphalt road removal	10,400	SY	\$ 9	\$93,600
cart path removal	17,558	SY	\$ 7	\$122,906
general removals and site preparation	1	LS	\$ 5,000	\$5,000
earthwork (strip and redistribute topsoil, site grading)	14,100	CY	\$ 14	\$197,400
storm water utilities (culverts and riprap)	1	LS	\$ 30,000	\$30,000
electrical utilities (service and panel)	1	LS	\$ 70,000	\$70,000
roadway lighting (fixtures, conduit, and wiring)	14	EA	\$ 12,000	\$168,000
ornamental plantings	1	LS	\$ 30,000	\$30,000
native seeding	1	ACRE	\$ 5,000	\$5,000
native area management	by owner			
turf seeding and erosion control blanket	8,735	SY	\$ 4	\$34,940
entry sign and feature(s)	1	LS	\$ 20,000	\$20,000
vehicular gate (main entry)	1	EA	\$ 5,000	\$5,000
asphalt paving - vehicular	11,137	SY	\$ 32	\$356,384
pavement striping and markings	1	LS	\$ 10,000	\$10,000
concrete curb and gutter (at entry only)	80	LF	\$ 28	\$2,240
stone shoulder (along roadway)	9,600	LF	\$ 16	\$153,600
traffic and wayfinding signage	1	LS	\$ 5,000	\$5,000
Subtotal:				\$ 1,329,070
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$93,035
Design Contingency (%)	1	LS	20%	\$265,814
Bid and Construction Contingency (%)	1	LS	15%	\$199,361
Subtotal:				\$558,209
Main Roadway Total:				\$ 1,887,279

Core Area Improvements

Description	Qty.	Unit	Unit Cost	Extended Cost
temporary soil erosion and sediment controls	1	LS	\$ 20,000	\$20,000
removals and site preparation	1	LS	\$ 10,000	\$10,000
earthwork (strip and redistribute topsoil, site grading)	3,280	CY	\$ 14	\$45,920
storm water utilities (culverts and riprap)	1	LS	\$ 30,000	\$30,000
electrical utilities (service and panel)	included in entry road costs			
parking lot lighting (fixtures, conduit, and wiring)	10	EA	\$ 10,000	\$100,000
ornamental plantings	1	LS	\$ 100,000	\$100,000
native seeding	2	ACRE	\$ 5,000	\$8,750
native area management	by owner			
turf seeding and erosion control blanket	25,500	SY	\$ 4	\$102,000
permeable paving - vehicular (parking lots and drop o	63,700	SF	\$ 18	\$1,146,600
pavement striping and markings	1	LS	\$ 15,000	\$15,000
concrete curb and gutter	2,485	LF	\$ 28	\$69,580
traffic and parking signage	1	LS	\$ 7,500	\$7,500
concrete paving (walks and plazas)	2,400	SF	\$ 9	\$21,600
site furnishings (benches, receptacles, tables, bike ra	1	ALLOW	\$ 50,000	\$50,000
amphitheater				
amphitheater arbor	1	LS	\$ 30,000	\$30,000
amphitheater concrete paving (stage)	315	SF	\$ 12	\$3,780
amphitheater boulder seating	40	TON	\$ 750	\$29,742
pavilion lighting and GFI receptacles	1	LS	\$ 15,000	\$15,000
picnic shelters and tower				
shelter purchase and installation (50x100)	1	EA	\$ 130,000	\$130,000
shelter installation	1	LS	75%	\$97,500
shelter purchase (40x80)	1	EA	\$ 80,000	\$80,000
shelter installation	1	LS	75%	\$60,000
shelter footings	24	EA	\$ 800	\$19,200
shelter concrete pads	10,000	SF	\$ 9	\$90,000
observation tower structure	1	LS	\$ 750,000	\$750,000
buildings				
multi-purpose building and restroom (includes founda	3,500	SF	\$ 450	\$1,575,000
maintenance building (includes foundation)	7,500	SF	\$ 300	\$2,250,000
water service - well	1	LS	\$ 50,000	\$50,000
sanitary service - septic	1	LS	\$ 50,000	\$50,000
building FFE	1	ALLOW	\$ 100,000	\$100,000
playground				
playground fabrication and installation	1	LS	\$2,000,000	\$2,000,000
playground concrete curb	560	LF	\$ 30	\$16,800
playground surfacing - engineered wood fiber	835	CY	\$ 60	\$50,100
playground surfacing - rubberized (PIP, tiles)	2,500	SF	\$ 25	\$62,500
playground underdrainage	1	LS	\$ 50,000	\$50,000
mown path turf seed and blanket	1,000	SY	\$ 4	\$4,000
mown path fitness / activity / interpretation nodes	4	EA	\$ 7,500	\$30,000
Subtotal:				\$ 9,270,572
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$648,940
Design Contingency (%)	1	LS	20%	\$1,854,114
Bid and Construction Contingency (%)	1	LS	15%	\$1,390,586
Subtotal:				\$ 3,893,640
Core Area Improvements Total:				\$ 13,164,213

Secondary Access Area

Description	Qty.	Unit	Unit Cost	Extended Cost
temporary soil erosion and sediment controls	1	LS	\$ 10,000	\$10,000
removals and site preparation	1	LS	\$ 5,000	\$5,000
earthwork (strip and redistribute topsoil, site grading)	2,845	CY	\$ 14	\$39,830
storm water utilities (culverts and riprap)	1	LS	\$ 20,000	\$20,000
electrical utilities (service and panel)	1	LS	\$ 50,000	\$50,000
parking lot lighting (fixtures, conduit, and wiring)	8	EA	\$ 12,000	\$96,000
ornamental plantings	1	LS	\$ 50,000	\$50,000
turf seeding and erosion control blanket	19,100	SY	\$ 4	\$76,400
permeable paving - vehicular (parking lot and drop off)	33,500	SF	\$ 18	\$603,000
pavement striping and markings	1	LS	\$ 10,000	\$10,000
concrete curb and gutter	1,215	LF	\$ 28	\$34,020
traffic and parking signage	1	LS	\$ 5,000	\$5,000
concrete paving (walks and plazas)	27,400	SF	\$ 9	\$246,600
shelter purchase (50x100)	1	EA	\$ 130,000	\$130,000
shelter installation	1	LS	75%	\$97,500
shelter purchase (40x80)	2	EA	\$ 80,000	\$160,000
shelter installation	1	LS	75%	\$120,000
shelter footings	36	EA	\$ 800	\$28,800
shelter concrete pads	15,900	SF	\$ 9	\$143,100
observation tower structure	1	LS	\$ 750,000	\$750,000
site furnishings (benches, receptacles, tables, bike racks)	1	ALLOW	\$ 30,000	\$30,000
Subtotal:				\$ 2,705,250
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$189,368
Design Contingency (%)	1	LS	20%	\$541,050
Bid and Construction Contingency (%)	1	LS	15%	\$405,788
Subtotal:				\$ 1,136,205
Secondary Access Area Total:				\$ 3,841,455

Trail System

Description	Qty.	Unit	Unit Cost	Extended Cost
temporary soil erosion and sediment controls	1	LS	\$ 5,000	\$5,000
removals and site preparation	1	LS	\$ 5,000	\$5,000
earthwork (strip and redistribute topsoil, site grading)	12,613	CY	\$ 14	\$176,582
asphalt paved trails (15' width)	11,780	SY	\$ 24	\$282,720
aggregate trails	26,060	SY	\$ 18	\$469,080
mown turf trails	by owner			
mown path fitness activity nodes	5	EA	\$ 7,500	\$37,500
council ring - boulders	15	TON	\$ 750	\$11,250
trail signage	1	LS	\$ 20,000	\$20,000
trail furnishings (benches, receptacles)	1	ALLOW	\$ 15,000	\$15,000
Subtotal:				\$ 1,022,132
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$71,549
Design Contingency (%)	1	LS	20%	\$204,426
Bid and Construction Contingency (%)	1	LS	15%	\$153,320
Subtotal:				\$429,295
Trail System Total:				\$ 1,451,427

Expanded Northeast Fishing Pond

Description	Qty.	Unit	Unit Cost	Extended Cost
temporary soil erosion and sediment controls	1	LS	\$ 20,000	\$20,000
removals and site preparation	1	LS	\$ 5,000	\$5,000
earthwork (strip and redistribute topsoil, site grading)	200	CY	\$ 14	\$2,800
earthwork - pond excavation and site placement	14,500	CY	\$ 24	\$348,000
dewatering	1	LS	\$ 20,000	\$20,000
ornamental plantings	1	LS	\$ 30,000	\$30,000
native seeding	1	ACRE	\$ 5,000	\$4,000
native area management	by owner			
shoreline stabilization (seed and plugs)	1,180	SY	\$ 15	\$17,700
arbor structure	1	LS	\$ 50,000	\$50,000
arbor structure footings	4	EA	\$ 800	\$3,200
concrete paving (arbor area pad)	250	SF	\$ 9	\$2,250
prefabricated bridges (2) - 8' wide, purchase & deliver	355	LF	\$ 1,200	\$426,000
prefabricated bridge installation	1	LS	30%	\$127,800
bridge abutments	4	EA	\$ 5,000	\$20,000
boardwalk abutments	6	EA	\$ 1,500	\$9,000
boardwalk systems - (framing, decking, rails, footings)	3,345	SF	\$ 65	\$217,425
Subtotal:				\$ 1,303,175
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$91,222
Design Contingency (%)	1	LS	20%	\$260,635
Bid and Construction Contingency (%)	1	LS	15%	\$195,476
Subtotal:				\$ 547,334
Expanded Northeast Fishing Pond Total:				\$ 1,850,509

Expanded Frog Pond

Description	Qty.	Unit	Unit Cost	Extended Cost
temporary soil erosion and sediment controls	1	LS	\$ 50,000	\$50,000
removals and site preparation	1	LS	\$ 5,000	\$5,000
earthwork - pond excavation and site placement	9,000	CY	\$ 24	\$216,000
dewatering	1	LS	\$ 20,000	\$20,000
ornamental plantings	1	LS	\$ 15,000	\$15,000
native seeding	17	ACRE	\$ 5,000	\$85,000
native area management	by owner			
shoreline stabilization (seed and plugs)	825	SY	\$ 15	\$12,375
boardwalk abutments	2	EA	\$ 1,500	\$3,000
boardwalk systems (framing, decking, rails, footings)	5,000	SF	\$ 50	\$250,000
Subtotal:				\$ 656,375
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$45,946
Design Contingency (%)	1	LS	20%	\$131,275
Bid and Construction Contingency (%)	1	LS	15%	\$98,456
Subtotal:				\$ 275,678
Expanded Frog Pond Total:				\$ 932,053

Wetland Bank Improvements (all improvements on master plan less wetland bank flora improvements)

Description	Qty.	Unit	Unit Cost	Extended Cost
temporary soil erosion and sediment controls	1	LS	\$ 10,000	\$10,000
removals and site preparation	1	LS	\$ 10,000	\$10,000
earthwork (strip and redistribute topsoil, site grading)	600	CY	\$ 14	\$8,400
ornamental plantings	1	LS	\$ 5,000	\$5,000
wetland bank flora improvements	by owner			
wetland bank management	by owner			
turf seed and erosion control blanket	1,500	SY	\$ 4	\$6,000
information kiosk	1	EA	\$ 5,000	\$5,000
asphalt paving - vehicular (parking lot and drop off)	930	SY	\$ 36	\$33,480
pavement striping and markings	1	LS	\$ 2,500	\$2,500
concrete curb and gutter	170	LF	\$ 24	\$4,080
stone shoulder	280	LF	\$ 16	\$4,480
traffic and parking signage	1	LS	\$ 1,500	\$1,500
concrete paving (walks and plazas)	800	SF	\$ 9	\$7,200
observation tower structure	1	LS	\$ 750,000	\$750,000
boardwalk abutments	4	EA	\$ 1,500	\$6,000
boardwalk systems (framing, decking, rails, footings)	7,045	SF	\$ 65	\$457,925
Subtotal:				\$ 1,311,565
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$91,810
Design Contingency (%)	1	LS	20%	\$262,313
Bid and Construction Contingency (%)	1	LS	15%	\$196,735
Subtotal:				\$ 550,857
Wetland Bank Improvements (all improvements on master plan less wetland bank flora improvements) Total:				\$ 1,862,422

Larchtree Grasslands Restoration

Description	Qty.	Unit	Unit Cost	Extended Cost
grassland restoration (native seed and straw)	275	ACRE	\$ 4,500	\$1,237,500
Subtotal:				\$ 1,237,500
Other Project Costs				
Contractor General Conditions (%)	1	LS	7.0%	\$86,625
Design Contingency (%)	1	LS	20%	\$247,500
Bid and Construction Contingency (%)	1	LS	15%	\$185,625
Subtotal:				\$ 519,750
Larchtree Grasslands Restoration Total:				\$ 1,757,250
Total Construction Cost:			\$	26,746,608

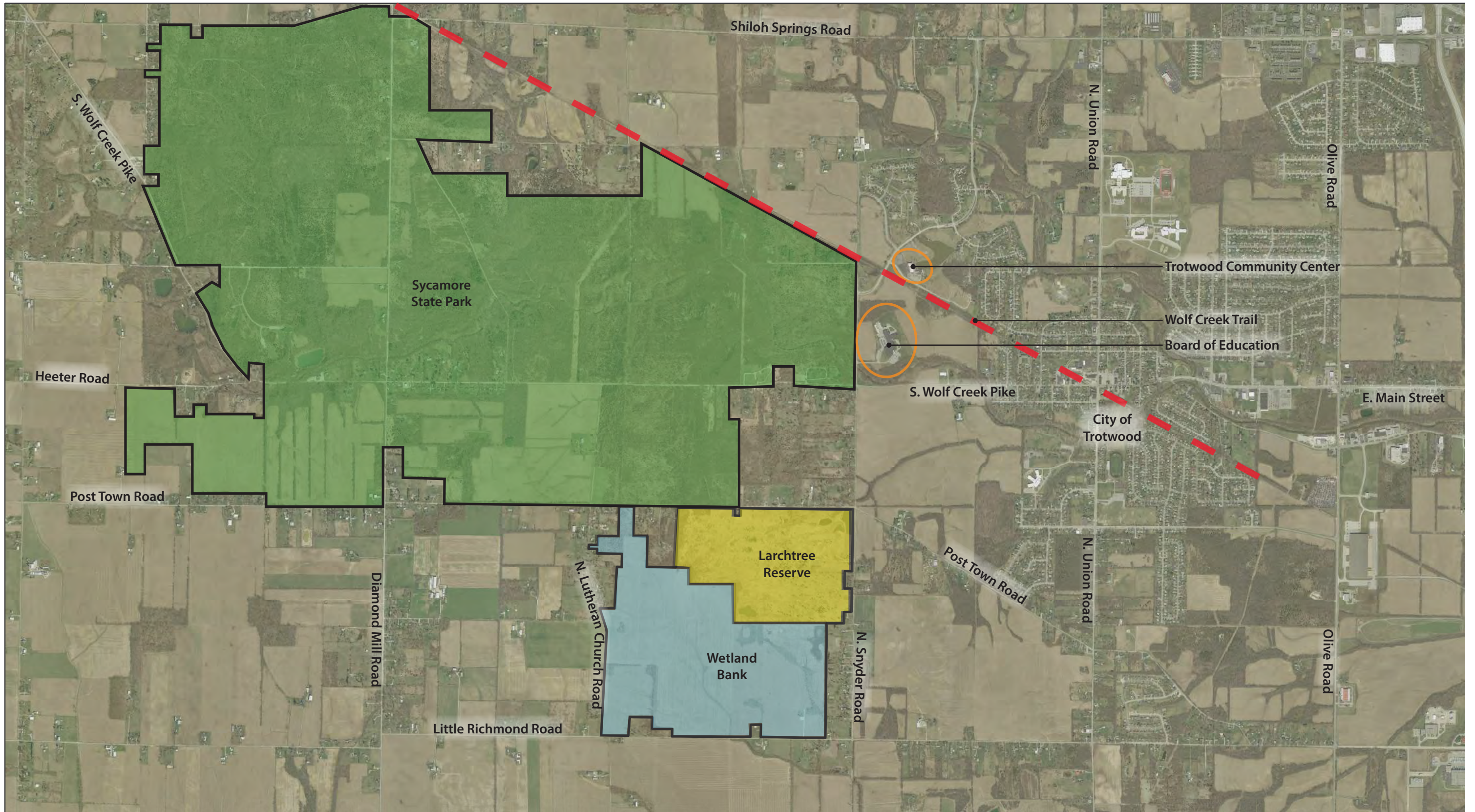




# Appendix



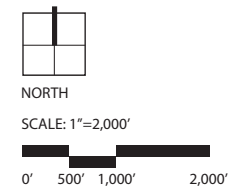




# Existing Conditions

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio



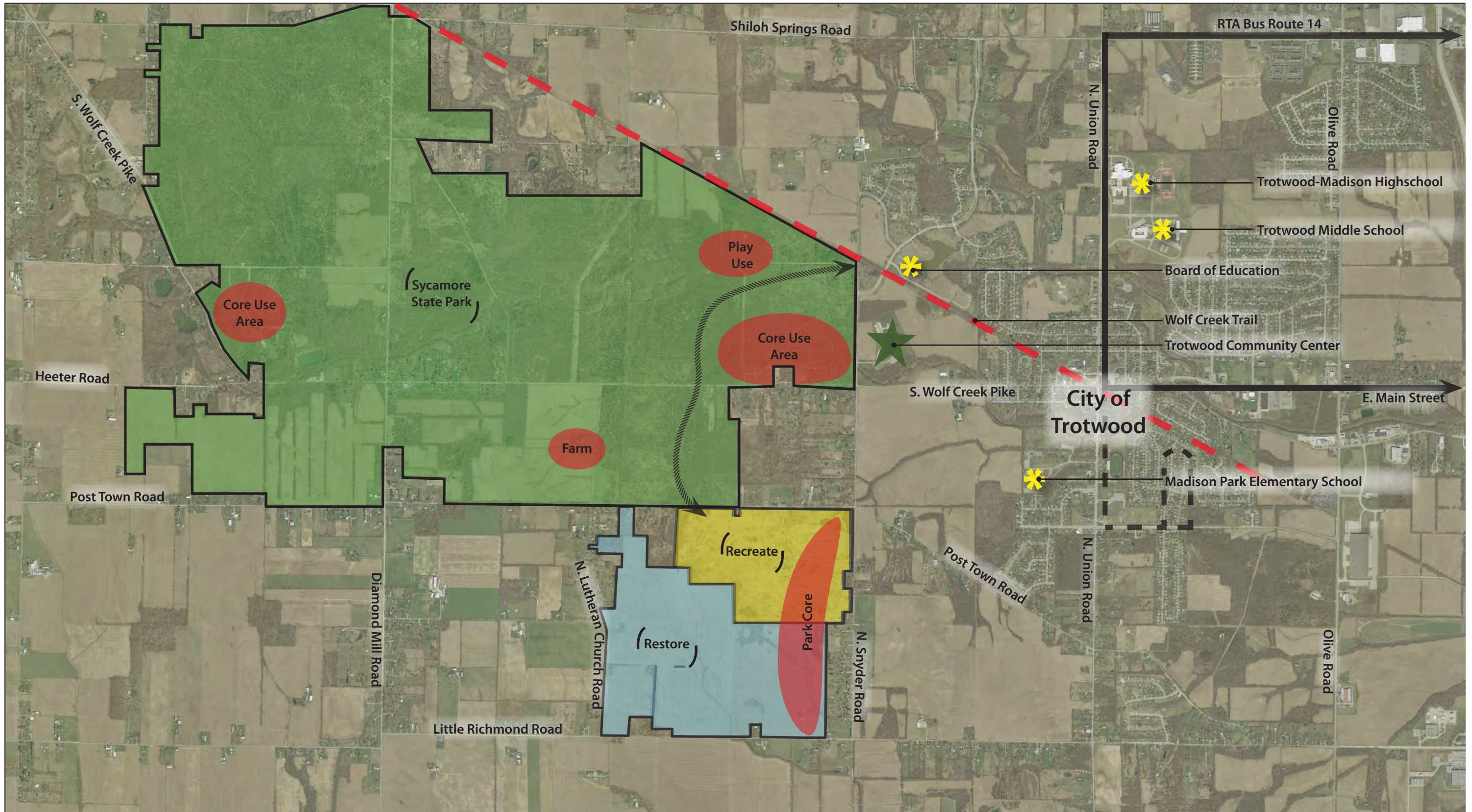
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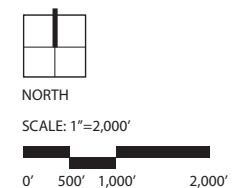




# Existing Conditions

## Larchtree Reserve / Mitigation Bank

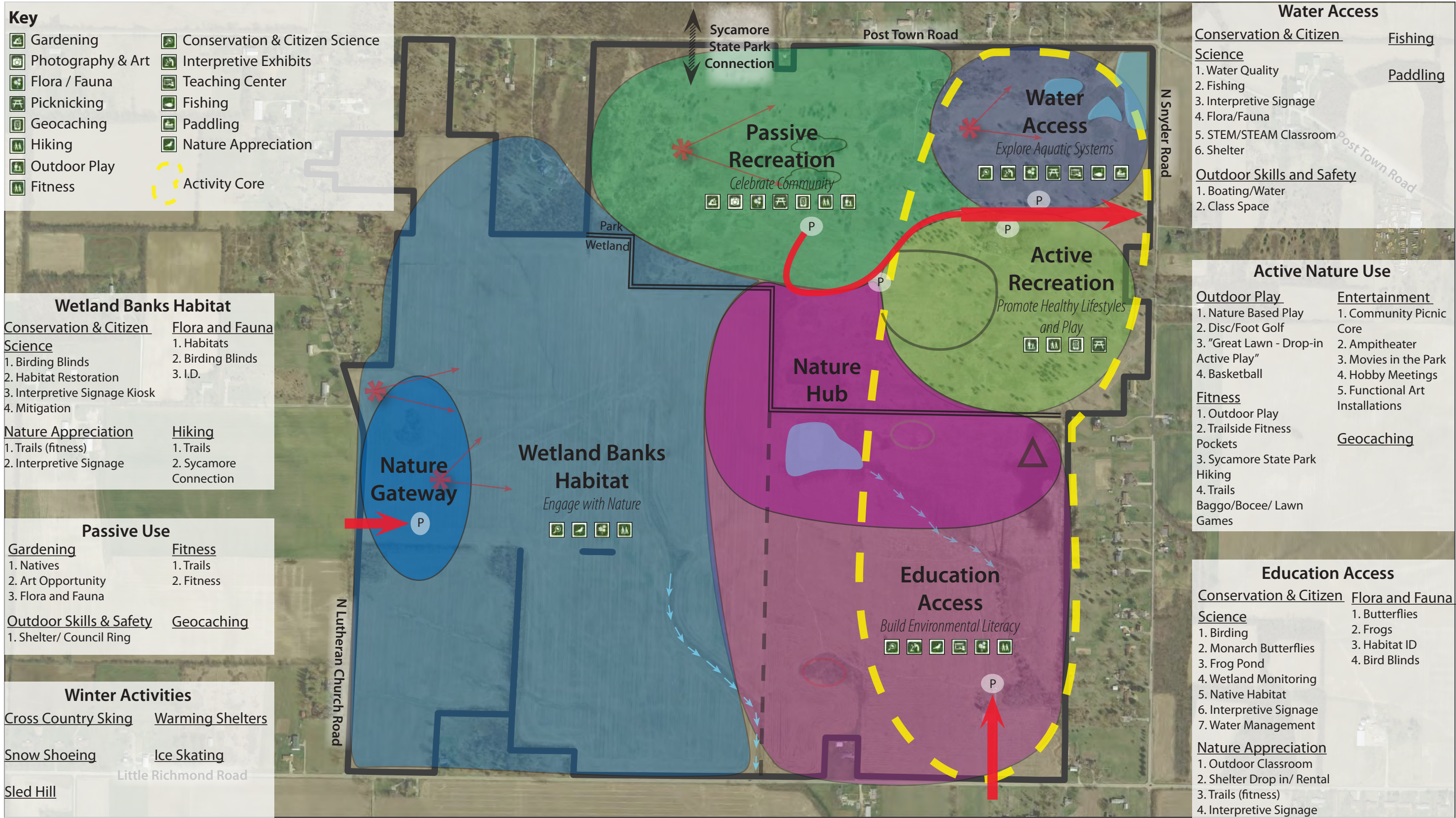
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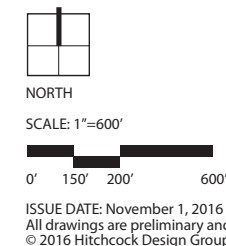




# Existing Conditions

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio

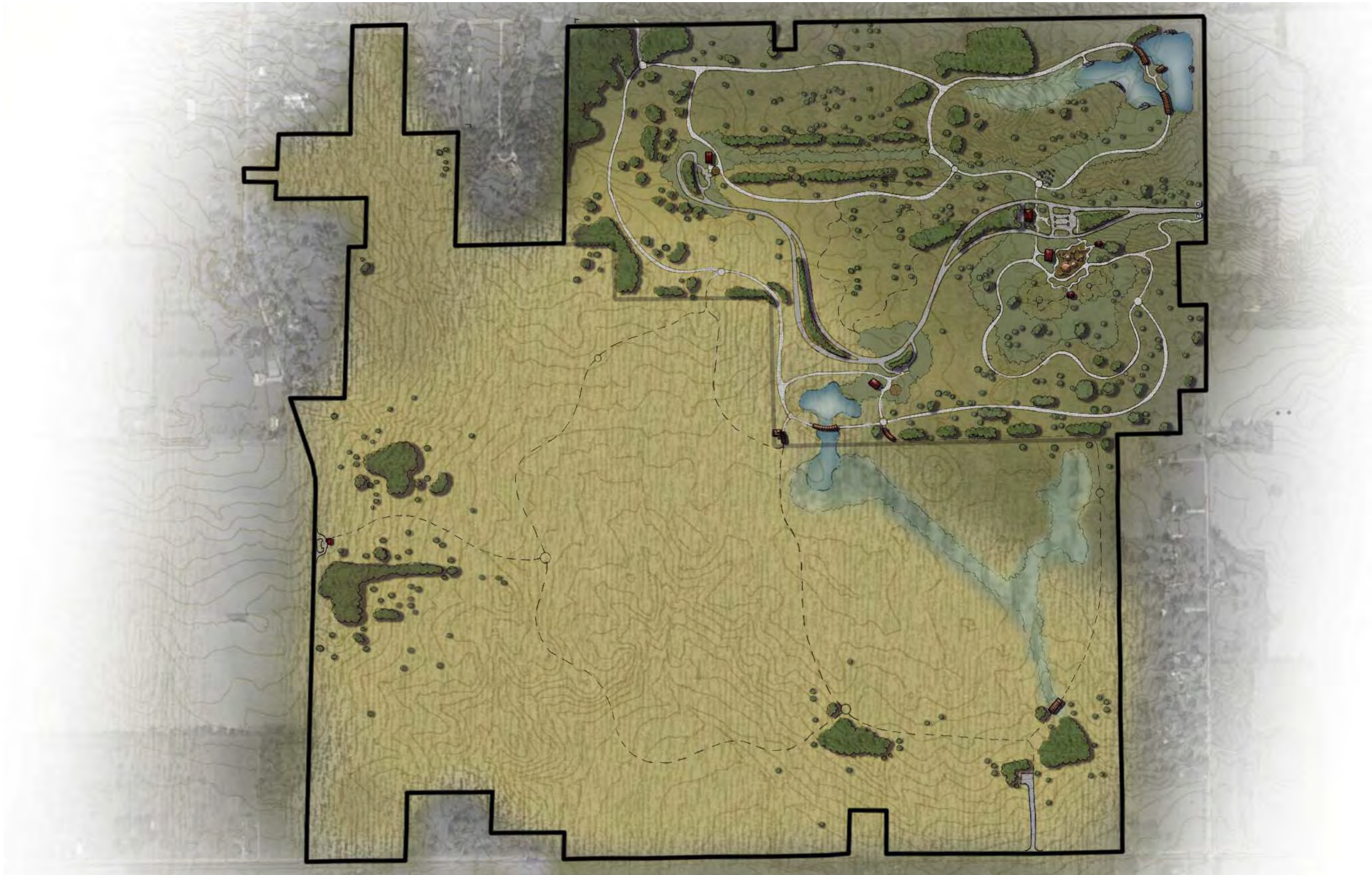


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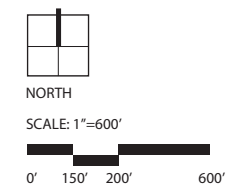




# Concept Plan A

## Larchtree Reserve / Mitigation Bank

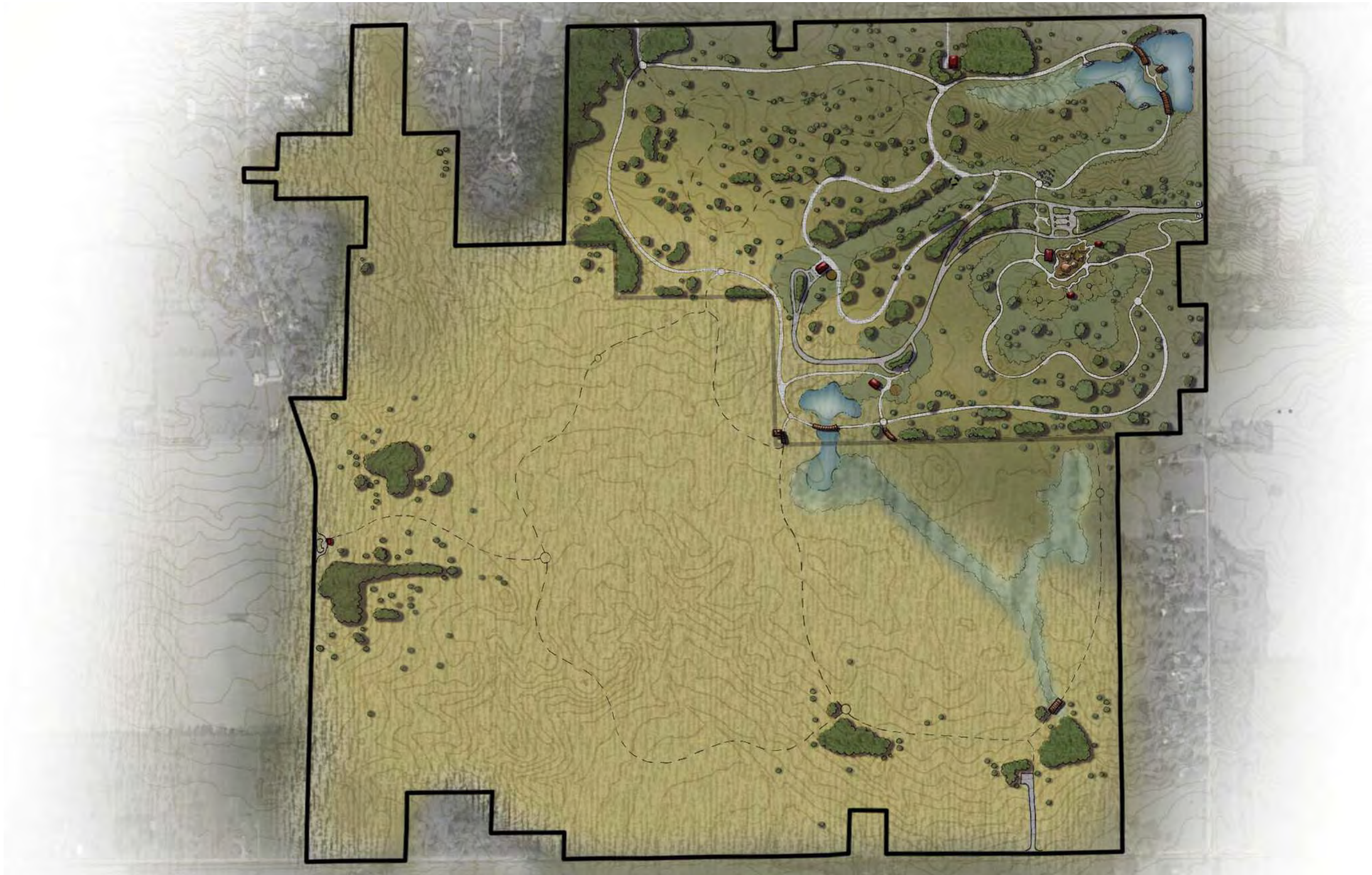
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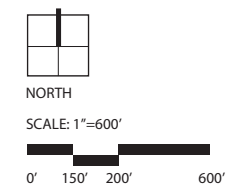




# Concept Plan B

## Larchtree Reserve / Mitigation Bank

Trotwood, Ohio



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