



THE RIDGE TRAIL

CLINTON AND LYCOMING COUNTIES



Master Plan – Summary Report
December 2014



The Ridge Trail

Clinton and Lycoming Counties

Master Plan Summary Report

December 2014

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Clinton and Lycoming County Commissioners

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The Ridge Trail

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Special Thanks

A special thanks to Jim Dunn for his vision of an enhanced quality of life for his community and the entire region.

The Ridge Trail Master Plan – Report Contents

Vision	12
Concept Design	14
Benefits	19
Inventory & Analysis	21
Master Plan	25
Visual Tour	31
Community Involvement	46
What Trail Users Want	56
More Than a Trail	68
How Can the Ridge Trail Help?	76
Branding, Marketing and Promotion	96
Interpretive Themes	101
Safety, Liability, Operations & Maintenance	107
Partnerships	111
Master Plan Segments and Costs	114
Phasing and Schedule	125
Project Case Studies	128
References and Links	158
Report Appendix Documents (CD)	162



The Ridge Trail – Vision

The Ridge Trail is envisioned as a multi-use recreation and conservation corridor linking the River Towns of the West Branch Susquehanna River. The Ridge Trail proposes to use existing and new trail and roadway segments to create a unified and formalized trail from Muncy to Lock Haven. The Ridge Trail will encourage diverse, non-motorized recreation (hiking, biking and equestrian use), creating a recreational amenity for residents and visitors. The Trail will connect people to the beauty and heritage of the mountain landscape, while interpreting and conserving important habitats and water resources. The Ridge Trail will build public-private partnership and encourage regional coordination and cooperation in the project's construction and sustainable operations and maintenance.

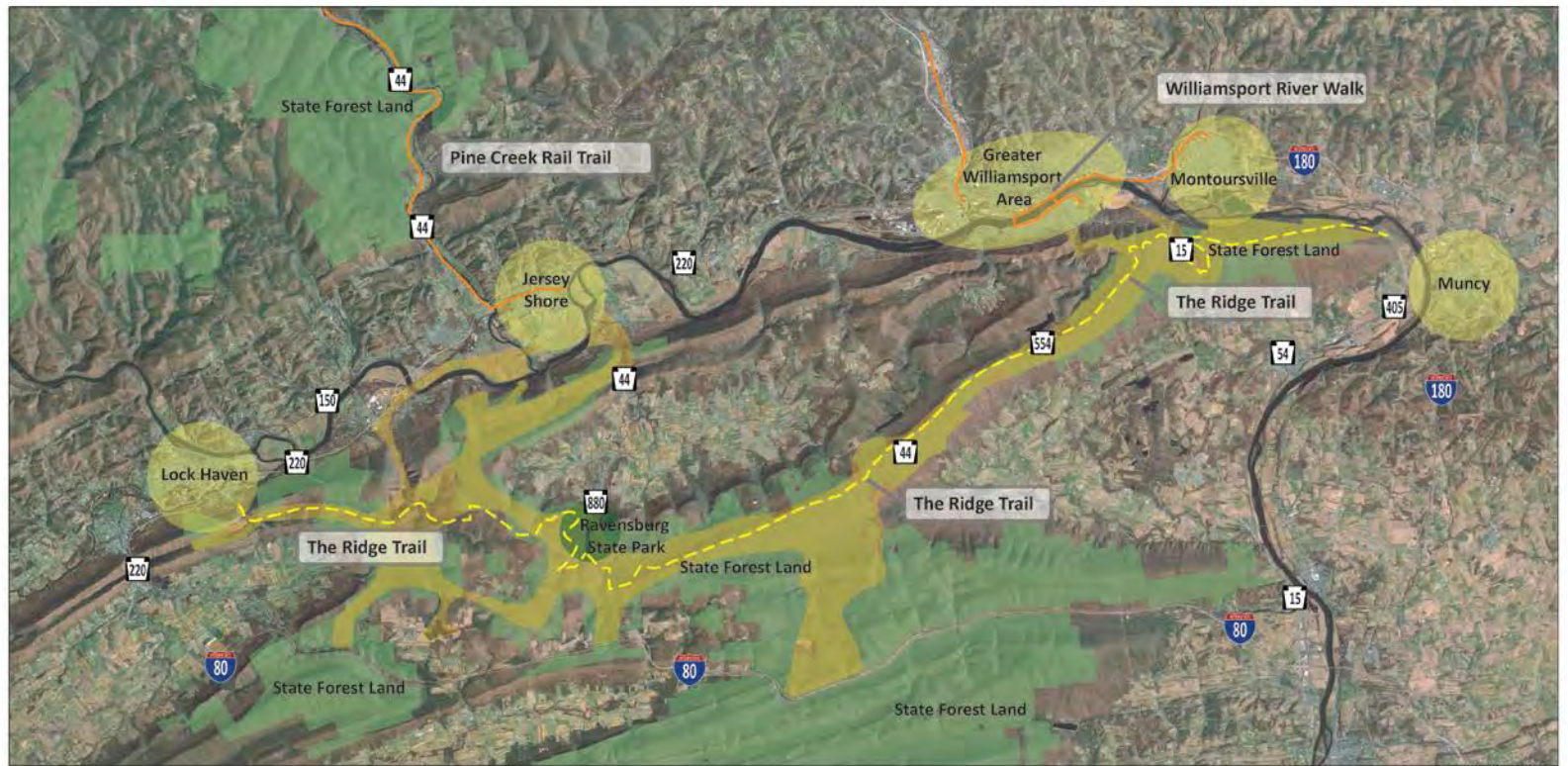


*The Network of State Forest Lands
of the West Branch Susquehanna River*

Study Area

Building upon the extensive network of Commonwealth State Forest, the Ridge Trail identifies a ridge-based trail corridor to interconnect the West Branch River Towns of Lock Haven, Jersey Shore, the greater Williamsport Area, and Muncy, following the Bald Eagle and White Deer Ridge.

Ridge Trail – Concept Design



Concept Plan - April 24, 2014

A concept design of the Ridge Trail linking the West Branch Susquehanna River Towns of Lock Haven, Jersey Shore, the greater Williamsport Area, and Muncy.

Creating Connections



The Ridge Trail can be viewed as an extension to the popular Pine Creek Rail Trail. Diversity will be added to the user experience as the trail climbs steep, green hollows following mountain streams on Bald Eagle Mountain and White Deer Ridge, and follows the ridge tops with views of the Nippenose and West Branch Susquehanna River Valleys. The Ridge Trail will help to realize the vision of the Susquehanna Greenway – creating a network of trails and natural areas, while complementing the on-going river-based greenway and trail development in Lycoming and Clinton counties.

Building on Success – Ridge Trail as Extension of the Pine Creek Rail Trail

The New York Times listed the Pine Creek Rail Trail as one of the 10 Best Rail-Trails in the world. The Ridge Trail seeks to build upon the Pine Creek Rail Trail's notoriety and by connecting to the rail trail, will add mileage and diversity to the visitor's experience. The Ridge Trail will add 50 miles to the region's growing trail network. The Ridge Trail offers a completely different trail experience - challenging the visitor to climb the steep wooded ridges of the corridor. The intrepid traveler will be rewarded with the rush of coldwater streams, breezy ridge top vistas, the green of spring and summer, and spectacular fall foliage.



Scenes from the Pine Creek Rail Trail

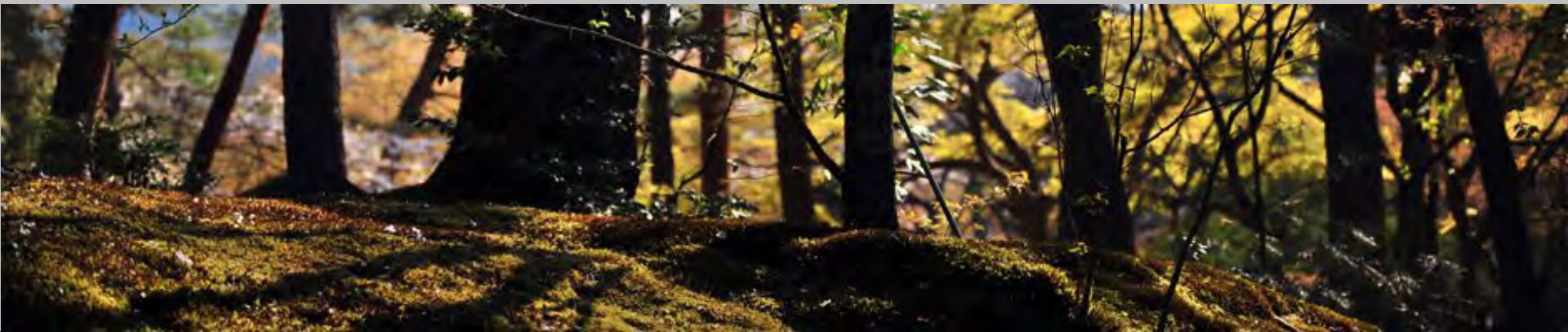


*Concept Design Panel Maps for the
Susquehanna Greenway (above) and the
Susquehanna Greenway Logo (below)*



Helping to Build a Mega Greenway

The Ridge Trail will help to realize the vision of the Susquehanna Greenway –creating a network of trails and natural areas, while complementing the on-going river-based greenway and trail development in Lycoming and Clinton counties. The Ridge Trail, utilizing the system of state and public lands, can be expanded in the future to include connections to Centre, Union and Northumberland counties. The Ridge Trail is also strategically located to contribute to the even larger 400 Mile Genesee - Susquehanna Greenway (GSG) that will link the Great Lakes with the Chesapeake Bay.





*Conceptual Alignment of the Genesee –
Susquehanna Greenway linking Lake Ontario
with the Chesapeake Bay*

The Ridge Trail - Benefits



Parks and Recreation

- Close to home recreation
- Recreation for all ages and abilities
- Developing a diverse partnership for trail development, operations and maintenance
- Accommodate growing recreational user groups – trail runners, hikers, mountain bikers, bikepackers, cross-county skiers, and equestrians

Health and Wellness

- Partnership with the Lock Haven, Susquehanna Health and Muncy Valley Hospitals
- Access to trails and recreation opportunities for all ages and abilities
- Recreation at your door step – connector trails to towns and cities along the corridor



Tourism and Economic Development

- Extension of the Pine Creek Rail Trail – more miles and greater diversity of trails
- Ridge Trail Marketing and Promotion Strategy – Lumber Heritage, PA Wilds, River Towns
- Highway Gateways – Trail Head on I-80 Rest Area
- PA Wilds / Lumber Heritage and Visitors Bureau Partnership
- Small Business Development – Bike Shops, outfitters, B&B, shuttle services, guide and interpretive services
- Encourages Asset-Based Development and Smart-Growth
- Improves Human Health and Quality of Life
- Attracts the Creative Class and Economic Opportunities
- Trail can be a venue for Activities and Events



The Ridge Trail - Benefits

Resource Management and Stewardship

- Grow the volunteer support network for existing land owners – DCNR Bureau of Forestry and Parks, and Lock Haven City Authority, Williamsport Municipal Water Authority and Montoursville Borough Water Works
- Accommodate the increased number of recreational users coming to the region
- Ridge Trail will address Source Water Protection, Important Birding Area Habitat Protection, Viewshed Protection, Environmental Education, Habitat Enhancement, Sustainable Timber Management and, Forest Health
- Project will offer opportunities for hands-on projects for Watershed Restoration, Wildlife Habitat and Water Quality Enhancement

Education and Interpretation Programming

- Engage school districts and the region's colleges and universities to create outdoor learning and hands-on research projects.
- Develop an interpretive program – telling the story of the Ridge





*Stream Crossing Reconnaissance
Field Work during Summer 2014*



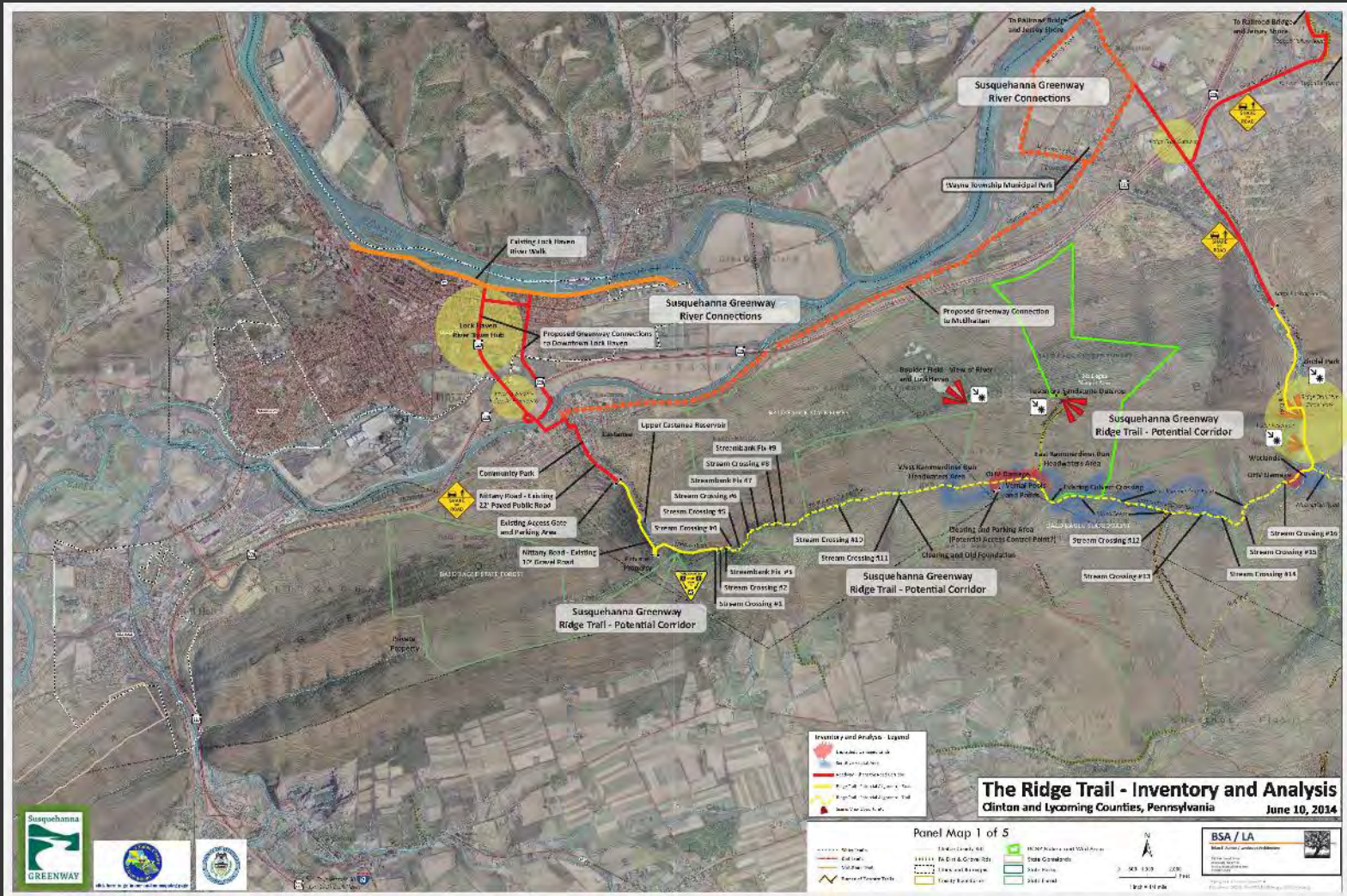
*Field view to consider US Route 15
trail crossing locations and options*

Master Plan – Inventory and Analysis

Extensive field work and site visits were conducted during master planning process. Every segment of the proposed trail corridor was hiked or biked – with many segments being visited numerous time to better understand conditions at different times of year. Approximately 25 separate field work site visits were conducted as part of the master planning process. The observed condition of the trail corridor was documented by photographs, field notes and an inventory and analysis mapping, an example of which is shown on the opposite page.

Field visits were used to explore alternative trail routes, such as the trail work-around that would avoid using Route 880 as part of the designated trail, and the Sawalt Road alignment alternative Kalbfleisch and VanDyke Road segments. Field visits were also used to engage agency personnel to define trail routing solution – such as engaging the PennDOT District Pedestrian – Bicycle Coordinator in selecting a preferred alternative to the trail crossing US Route 15.

The Ridge Trail Inventory and Analysis



The Ridge Trail – Photo Inventory Overview

Lock Haven City Authority Lands



Zindel Park Area



PA DCNR Bureau of Forestry Roads – Falling Spring



The Ridge Trail – Photo Inventory



Connections to:
Ravensburg State Park...



Van Dyke, Sawalt and Sand Spring Road



Summit Trail



Skyline Drive



Armstrong Road

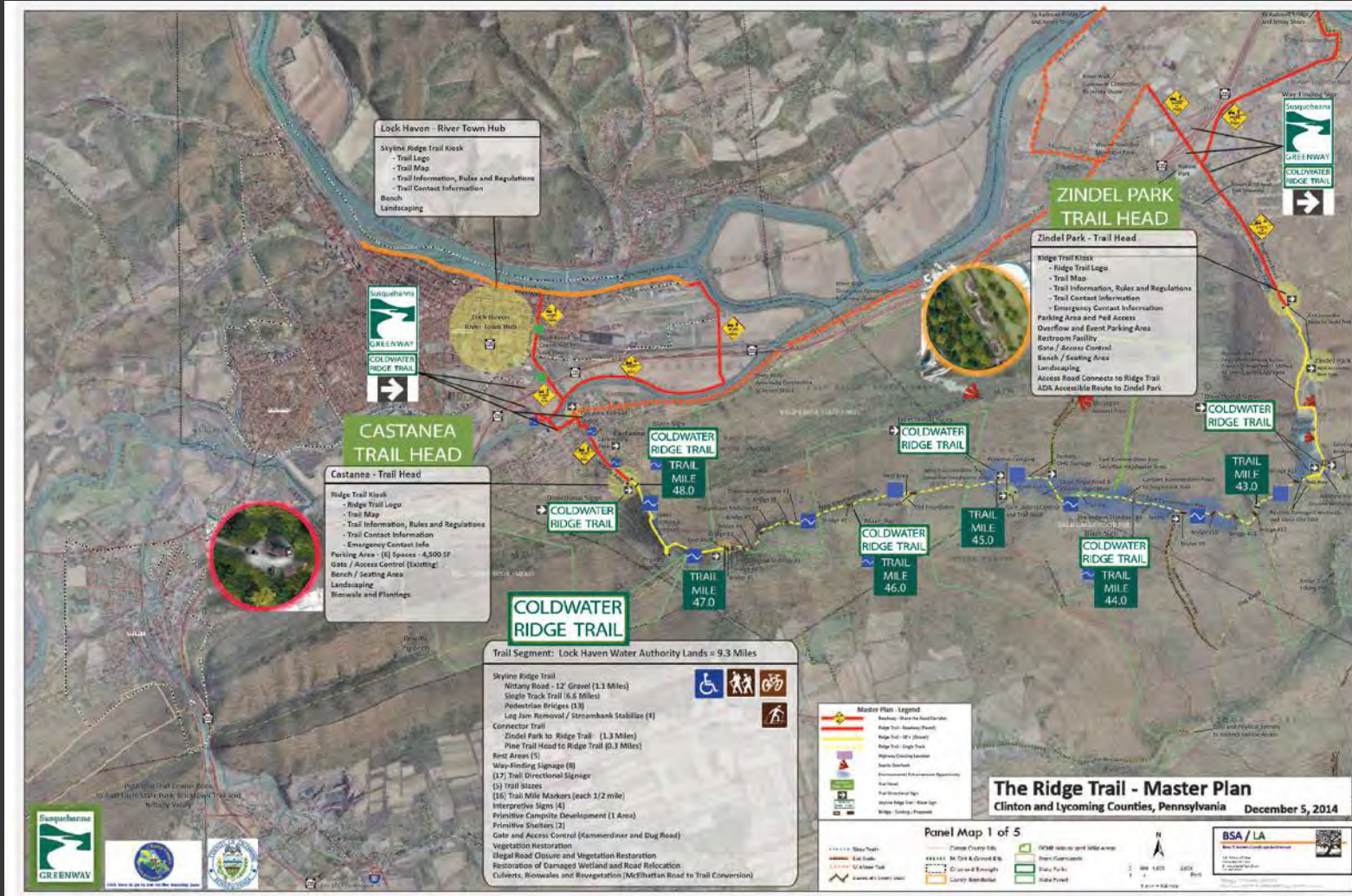


A detail view of the Ridge Trail Master Plan depicting the trail alignment near Ravensburg State Park

Why A Master Plan?

While the Ridge Trail corridor is almost entirely in public ownership, a planning process was needed to better understand the resources of the corridor and define the character of a desirable trail. The Ridge Trail Master Plan was funded by Clinton and Lycoming counties in the spring of 2014 and took approximately one year to complete. The master plan outlines the trail alignment, implementation strategy, partnerships, phasing and estimated costs to build the trail and its support facilities. The master plan also proposes a long-range plan for the region's ridge-based trail network. The Ridge Trail is a linear trail and the master plan identifies not just the Ridge Trail alignment, but also identifies and envisions a larger multi-county trail network spreading out from the Ridge Trail. This larger vision could take a decade or more to realize but is intended to inspire land managers, community leaders, trail users and volunteers to get involved.

The Ridge Trail – Master Plan – Panel 1 of 5



Ridge Trail Master Plan depicting connections to Lock Haven and connecting the Upper Castanea Reservoir to the Keller Reservoir and Zindel Park

The Ridge Trail – Master Plan – Panel 2 of 5



Ridge Trail Master Plan depicting connections from Zindel Park to Ravensburg State Park, and connection to Sand Spring and Sawalt Roads

Ridge Trail Master Plan depicting connections from Sawalt Road, depicting a sustainable trail re-route to an off-road trail paralleling VanDyke Road and on to the Summit Trail

SKYLINE RIDGE TRAIL

Trail Segment: Summit Trail

Summit Trail Head - Future Expansion West of 554
 12' Summit Trail - Crushed Gravel Surface - 5.5 Miles
 (3) Scenic Overlook / Rest Areas
 Possible Camping Area - (1) Site
 (4) SGP Way-Finding Signage
 (3) Trail Blazes
 (12) Trail Mile Markers (each 1/2 mile)
 Interpretive Signs (4)

Ridge Trail to Valley Trail Connectors
 Culbertson Trail - 3.0 Miles
 Mosquito Valley Connector Trail - 2.0 Miles

Source Water Protection Projects
 Wetlands, Sustainable Trail Designs, Buffer Zone,
 Wetland and Upland Habitat Enhancements

WHITE DEER TRAIL HEAD

Ridge Trail Kiosk
 - Ridge Trail Logo
 - Trail Map
 - Trail Information, Rules and Regulations
 - Trail Contact Information
 - Emergency Contact Information
 Parking w/ Designated Equestrian Area
 Restroom Facility
 Horse Hitching Post
 Manure Composting Area
 Gate / Access Control (Existing)
 Bench / Seating Area
 Landscaping

SKYLINE RIDGE TRAIL

Trail Segment: Skyline Drive

Skyline Trail Head
 Summit Trail Head
 15' Asphalt Road Surface - 5.8 Miles - Existing
 No Improvement Option
 Surface Repair Option
 Re-Paving Option
 12' Gravel Trail - 0.4 Miles - New Trail to Underpass
 Skyline Singletrack (Parallel to paved road) - 3.3 miles
 (7) Scenic Overlook / Rest Areas
 Possible Camping Area - (1) Site
 (4) SGP Way-Finding Signage
 (8) Trail Directional Signage
 (3) Trail Blazes
 (12) Trail Mile Markers (each 1/2 mile)
 Interpretive Signs (4)

Blue Dot Trail - Existing Trail Improvements
 Blue Dot Loop Trail - 1.3 Miles
 Blue Dot - Sustainable Trail ReRoutings - 2.75 Miles
 BCK Ridge Trail - ... Miles
 Powerline Trail - Ridge to Valley Connector - 2.5 Miles
 Trail - (25) Technical Features

Source Water Protection Projects
 Trail Restoration, Sustainable Trail Designs, Buffer Zones,
 Wetland and Upland Habitat Enhancements

SKYLINE RIDGE TRAIL

Summit Trail Head

Ridge Trail Kiosk
 - Ridge Trail Logo
 - Trail Map
 - Trail Information, Rules and Regulations
 - Trail Contact Information
 Parking - Mostly existing
 Gate / Access Control (Existing)
 Bench / Seating Area
 Landscaping
 Parking - Future Parking Area on West Side
 of Route 554 to Improve Safety

THE RIDGE TRAIL - MASTER PLAN
 Clinton and Lycoming Counties, Pennsylvania
 December 5, 2014

Panel Map 4 of 5

Legend

Trail
 Skyline Ridge Trail
 Ridge Trail
 Summit Trail
 Blue Dot Trail
 BCK Ridge Trail
 Powerline Trail
 Mosquito Valley Connector Trail

Way-Finding Signage
 Skyline Ridge Trail
 Ridge Trail
 Summit Trail
 Blue Dot Trail
 BCK Ridge Trail
 Powerline Trail
 Mosquito Valley Connector Trail

Other Features
 Skyline Trail Head
 Summit Trail Head
 Ridge Trail Kiosk
 Summit Trail Kiosk
 Skyline Ridge Trail Kiosk
 Summit Trail Kiosk
 Skyline Ridge Trail Kiosk
 Summit Trail Kiosk

Scale
 0 1 2 3 4 5 Miles

North Arrow

BSA / LA

Ridge Trail Master Plan depicting Summit Trail and Skyline Drive segments with conceptual ridge to valley connections to the Williamsport Municipal Water Authority's existing trail network

[illegible]

Ridge Trail Master Plan depicting trail passing under US Route 15 in a culvert underpass, connecting to Armstrong Road and a network of evolving singletrack trails on Bald Eagle Ridge.

The Ridge Trail - Scenery and Key Resources

A Visual Tour...



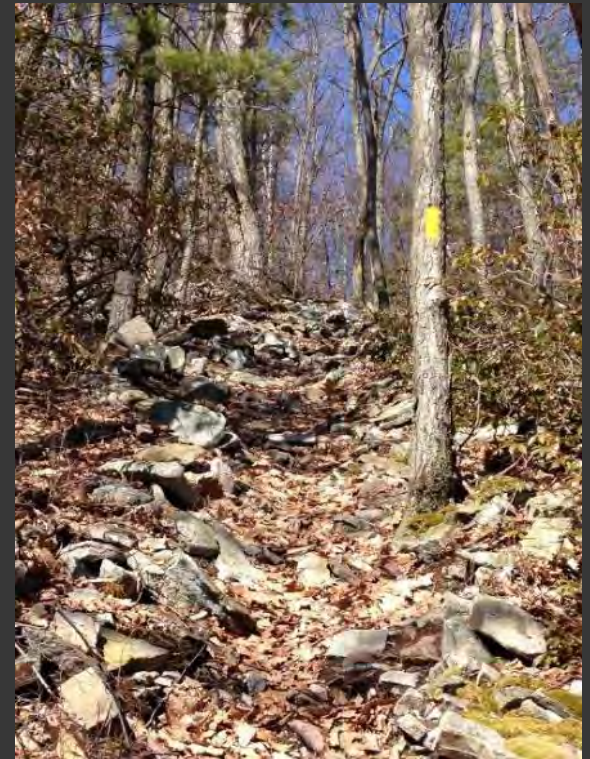
Bald Eagle Mountain as viewed from the town of Jersey Shore

Lock Haven Water Authority Lands -



Ridge Trail – Spur to Mt. Logan Natural Area

*Tuscarora Sandstone boulder field at the crest of
Bald Eagle Mountain at Mt. Logan Natural Area*



*The Winchester Trail to
Mt. Logan Natural Area (Above)
and a fossil stone (below)*



Ridge Trail – Spur to the Boulder Field



Tuscarora Sandstone boulder field, on the north slope of Bald Eagle Mountain, overlooking the Great Island and the West Branch Susquehanna River. Other than Hyner View – this is likely the region's most popular view – but difficult to access (photo from Mega Transect – Brian Newcomer).

Connections to Zindel Park



The 'Caretakers Home, Depression era stone work and scenic setting of Zindel Park

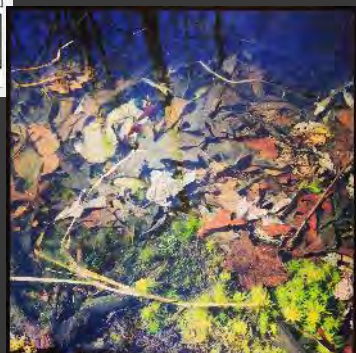
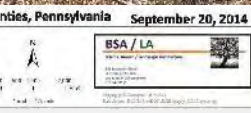
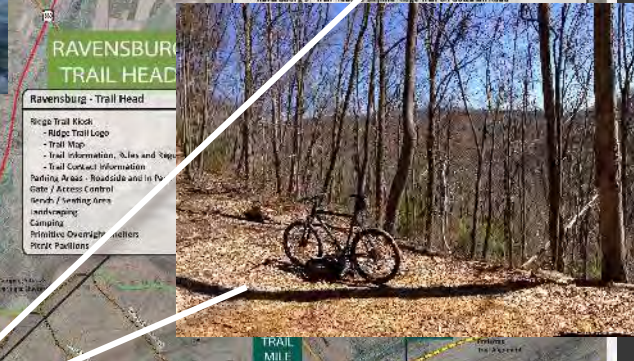
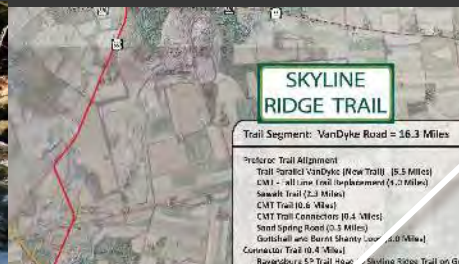
Ridge Trail – Spur along Gorge Trail to Twin Falls



The Gorge Trail follows McElhattan Creek (left) from Keller Reservoir to Ohi Reservoir. Twins Falls (above) is a 5-mile hike from Zindel Park, with rock outcrops (below) and beautiful mountain scenery along the way.



Ridge Trail – Falling Spring



Ridge Trail – Ravensburg State Park Area



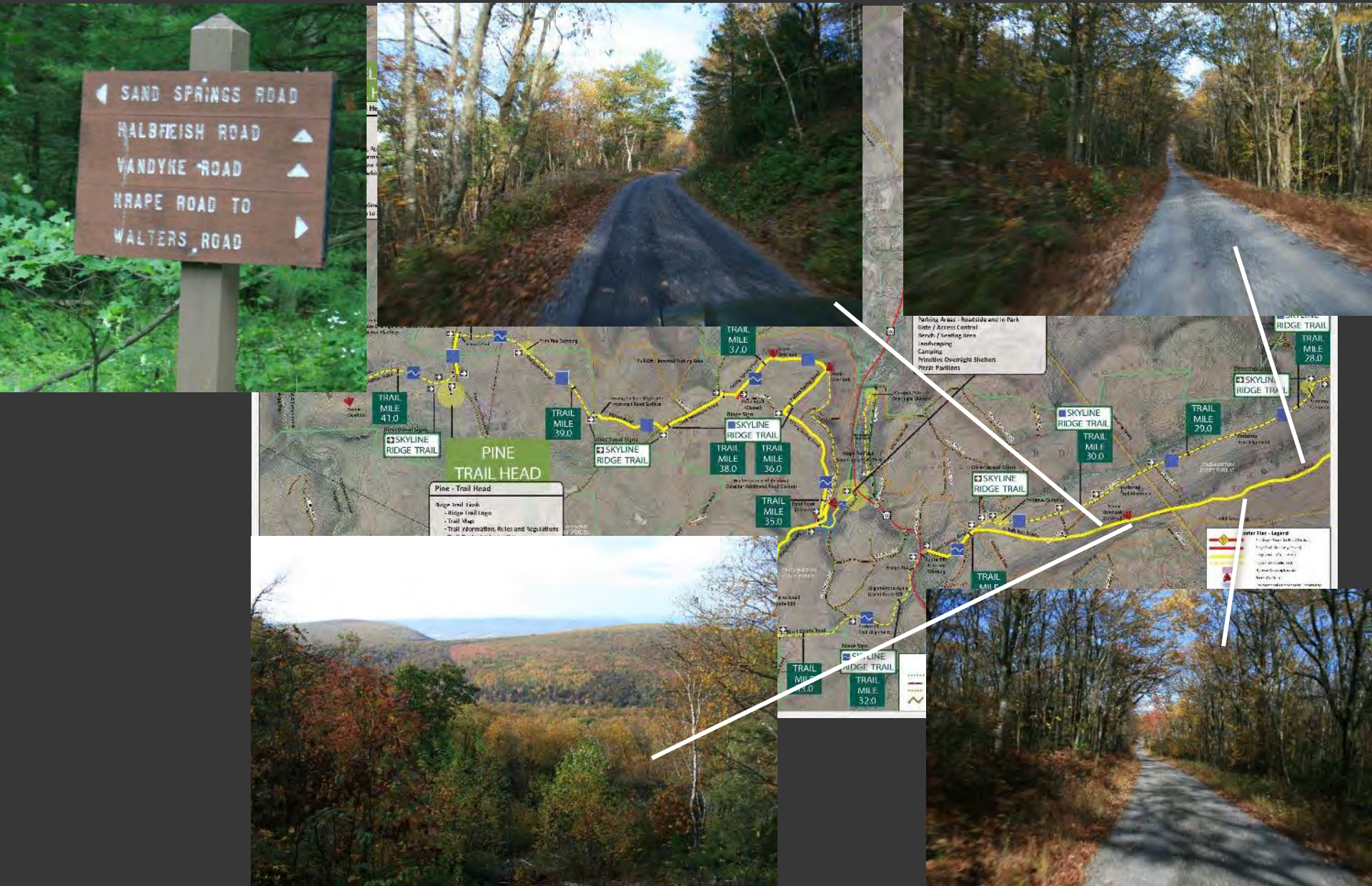
Ridge Trail – Sawalt Trail



Ridge Trail – Sawalt / Horse Path Trail – Sustainable Trail Design / Re-route



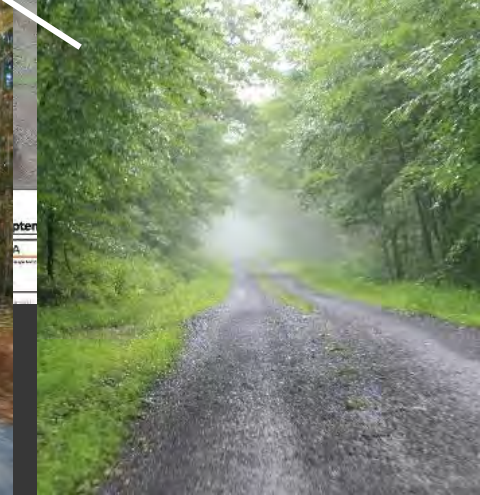
Ridge Trail – Kalbfleisch and VanDyke Roads



VanDyke Road along North White Deer Ridge



Trail Head Location



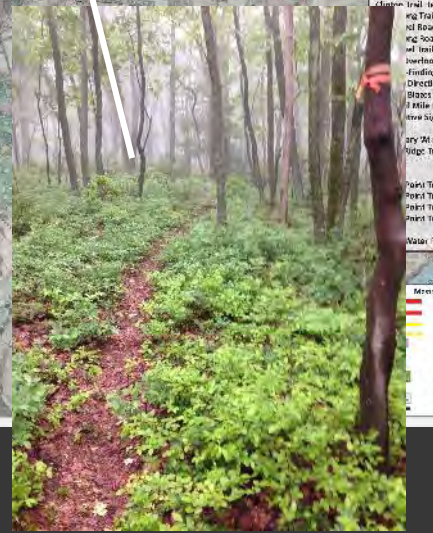
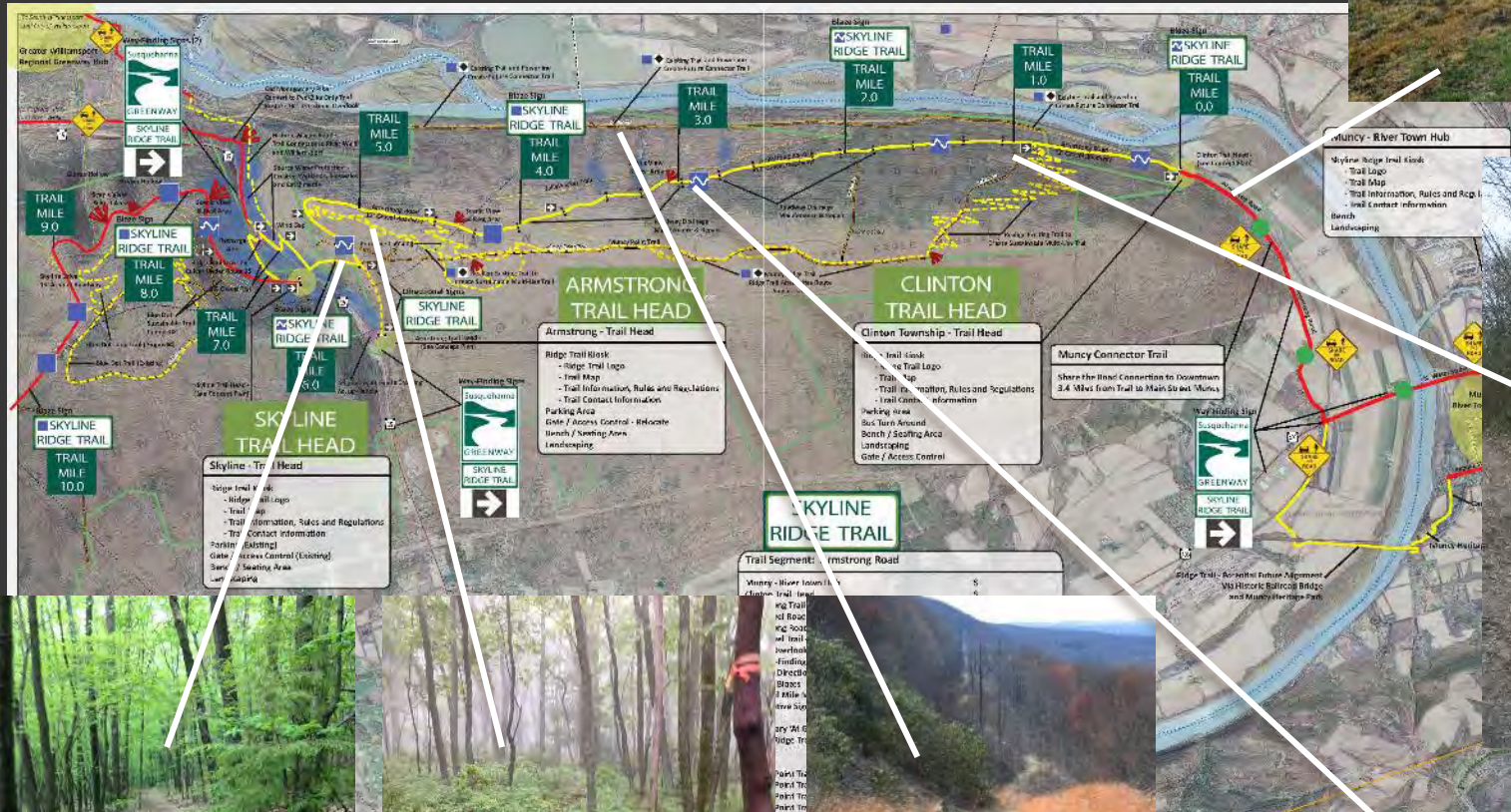
A photograph of a snowy road with a white arrow pointing to a dark car parked on the shoulder. The road is covered in snow, and there are trees in the background. The arrow is white and points from the bottom center towards the car. The car is dark and parked on the right side of the road. The background shows a line of bare trees under a cloudy sky.



Ridge Trail – Spur Connection to Greater Williamsport Area



Ridge Trail – Armstrong Road to Muncy





The master planning process involved Executive Committee and Study Committee meetings, Focus Groups and Key Person Interviews, and on-site Field Views

Community Involvement – Balancing the Needs and Desires of Land Managers and Trail Users

An extensive community engagement process was conducted as part of the master planning process. Focus Group and Key Person Interviews were held with PA Department of Conservation and Natural Resources (DCNR), Williamsport Municipal Water Authority, Lock Haven City Authority, Montoursville Borough Water Works, PennDOT, Municipal Officials and Emergency Responders, Researchers and Academicians, Construction Contractors and Trail Users. Below are the key take-home messages from each of these key stakeholders.



VanDyke Road – a PA DCNR Bureau of Forestry maintained roadway

PA Department of Conservation and Natural Resources

Two meetings were held with PA DCNR staff over the summer of 2014, one held at the Union County Government Center in Lewisburg in June, and one hosted at the DCNR District Office in Laurelton in August. The key input received includes:

Concern about User Conflicts between Hunting, Logging and Traffic – Need Trail Rules and Regulations

Limited Budgets and Staff – Limit Construction, Operations and Maintenance Capabilities

General Public Does not Understand Working Forests and Would the Ridge Trail Require a Buffer?

Opportunity for Education (Multi-use of Forests, Sustainable Forestry Management)

Plan Needs to Balance Trail Users and Forestry Management

Bureau of Forestry Needs Help – Policing, Law Enforcement and Emergency Services. Numbering Intersections or Trail Miles to Aid Emergency Response

Problem with Lawless Off-Road Vehicles and Illegal Activities

PA Department of Conservation and Natural Resources - Continued

Need to change the 'Creep Factor' at Rest Areas and concerns about Overnight Shelters. True Primitive Camping is Permitted on Forest Lands

Trail Construction on BOF lands will face Union Contract Issues. Options to work with Municipal Staff or formation of a Friends Group through PA Parks and Forests Foundation

DCNR is not for creating NEW Trails – but maintaining, re-routing existing trails

Need to Control Access and Close Illegal Roads

Value Volunteers – Keystone Trails Association, IMBA Chapters, PA Equine Council

Establish a Standard Level of Care – in Trail Management Plan

Need MOU among DCNR, municipalities, authorizes, trail user groups and organizations to address trail ownership, operations and maintenance roles and responsibilities

Water Authorities / Companies



*Mosquito Valley Reservoir of the
Williamsport Municipal Water
Authority*

Several meetings were held with the three water authorities / companies along the Ridge Trail Corridor, including the Lock Haven City Authority, Williamsport Municipal Water Authority and the Montoursville Borough Water Works. Many of the companies face the same issues and challenges related to recreational use of their lands, and some have their own unique challenges and concerns. Some of the key findings include:

Priority One - Protect the Source Water Supply

Opportunities for greater Watershed and Source Water Protection

Opportunities for Watershed Restoration Projects – that will reduce erosion and sedimentation

Need Better Protect Against Damage from Off-Road Motorized Vehicles and Illegal Trail Building

Lack of Staff or Police Support to regulate access, use, illegal parties / activities and Few Resources for Operations and Maintenance

Threat of Terrorism to Facilities and/or Contamination of the Water Supply

Lock Haven City Authority Needs to Coordinate All Proposed Changes with The Nature Conservancy – to stay in compliance with the Authority's Sustainable Forest Initiative

Need to coordinate with Timbering Plan (LHMA – Zindel Area)

Need to coordinate with Communications Tower Construction (WMWA – Summit Trail)



PennDOT field view meeting exploring potential route 15 trail crossing options

Pennsylvania Department of Transportation

Two Meeting with Chris King, Pedestrian and Bicycle Coordinator, with PennDOT District Office in Montoursville, with one meeting at the PennDOT office in Montoursville and the other an on-site field view exploring Route 15 trail crossing locations. Key findings include:

The Route 15 Corridor Study and Engineering Design predated the Ridge Trail Study – so no thought was given to a pedestrian crossing of the highway near Skyline Drive

The current highway design has a jug handle design south of the Skyline Drive rest area and would offer the only ‘temporary’ crossing location for the Ridge Trail

After conducting a field reconnaissance trip – it was the conclusion of the group that the best long term solution for a trail crossing would be a culvert underpass (under US Route 15) ¼ mile north of the Skyline Drive rest area at the old stockpile site.

This culvert crossing location would require excavation to access the culvert from the west side of the highway, and daylight into hillslope on the east side of the highway.

In subsequent conversations with construction cost estimators – this culvert road crossing would cost approximately \$2 million



Municipal officials and emergency responders had specific suggestions on how to improve emergency response to the Ridge Trail

Municipal Officials and Emergency Responders

Two meetings were hosted to meet with municipal officials and emergency responders. One meeting was hosted at the Wayne Township Building in McElhattan, targeted to Clinton County participants, and one meeting was hosted at the Lycoming County Planning Office in Williamsport, targeting Lycoming County participants. A total of 18 people participated in these meetings with 6 attending the Clinton County Meeting and 12 attending the Lycoming County Meeting. The Key input includes:

Very positive support for the Ridge Trail concept

How to manage Trail Users and Hunting?

Opportunity to connect to the 23 acre Nature Park in Wayne Township

Trail would offer entrepreneurial opportunities – trail shuttle services, small business development, etc.

New Housing could benefit from link to Ridge Trail

Local Fire Companies are challenged to meet State Rules and Regulations. Fire and EMS has a good support system – the small companies are very independent but support each other

Municipal Officials and Emergency Responders - Continued



*An example of a specially equipped
ATV suitable for remote trail rescue
and emergency response*

Opportunity to benefit from Paramedics Extern Program at Penn College and possibly Lock Haven University

Local Companies have access to special equipment (ATV) – capable of accessing remote areas of the trail

Trail Mile Markers or Intersection Numbering System to aid Emergency Responders

Concern about Trail Construction and Maintenance Costs

Consider Partnering with Municipalities for Access to Municipal Equipment and Labor

More Trail Users will Help Eliminate ‘Creep Factor’ and illegal activities occurring in remote areas

Make the Connection to Muncy – consider Railroad Bridge as alternative gateway to Muncy

Form a Ridge Trail Advisory Committee so that all land managers, municipalities and trail advocates have a place at the table to address issues of concern, as well as take advantage of opportunities to grow and enhance the Ridge Trail



Researchers and Academicians

Meetings with Katie Faull from the Comparative Humanities Program in the Department of Foreign Language Programs at Bucknell University, and Robin Van Auken, archaeologist educator at Lycoming College and professional archaeological consultant. Key findings include:

Take advantage of the newly designated Captain John Smith National Historic Trail designation for funding and research

Captain John Smith National Historic Trail – the designation also encourages land conservation of important historic sites and habitat areas

Opportunities for Student and Faculty Research – to develop the Ridge Trail interpretive program

Significant Native American and Historic Transportation sites and corridors on the Ridge Trail – including proximity to the Allegheny Airline crash site near Armstrong Road

The Captain John Smith National Heritage Trail designation will enhance the opportunity for funding land conservation and land acquisitions



The Captain John Smith National Historic Trail has been extended, thanks to the work of Katie Faull and others, to include the West Branch Susquehanna River to Lock Haven

Trail Users



The diversity of trail users

A large group meeting, hosted at Penn College, with various trail users to get their reaction to the Ridge Trail concept. Attendees include hikers, mt. bikers, road bikers, trail runners, cross-county skiers and equestrians. The group was asked about the usefulness of the trail for their preferred activities and asked whether the various user groups could all get along and how to avoid conflicts if possible. The key findings include:

Full Support of the Ridge Trail Concept – the trail offers something for all user groups

Different Segments have different user groups – Opportunity to separate user types and avoid conflicts

Looking for Loop Trail Experience – leave and return to a trail head

Grant Funding and Trail Building Professionals to build the Ridge Trail ‘Spine Trail’ – and volunteers build the adjacent singletrack trails and loop trail systems

Active and growing clubs to provide volunteers: PA Equine Council, Bald Eagle Mt. Bike Association, Susquehanna Valley Velo Club, Easy Ridgers Hourse Club, Alpine Club of Williamsport

Trail Users - Continued



A separate meeting was held with 13 Equestrian Trail Users, at the Hampton Inn Meeting Room in Lewisburg. Some of the key findings include:

Horses have conflicts with bikes, motor bikes and ATVs, dogs AND rattlesnakes

Equestrian Users have unique needs – large trail head to accommodate truck / trailer and hitching

Overnight group camping sites – space for trailers and hitching

Access to many miles of trail to make it a worthwhile outing (Minimum 12-16 mile Loop – but prefer much longer...)

Excellent Group Camping Site is Hall Mountain Group Site in Bald Eagle State Forest north of Livonia

Required to haul manure off site – is burdensome. Identify opportunities for manure composting – accessible for use by public

Could use trough spring development along trail (this would be good for horses and water quality)

Link Ridge Trail to Central Mountains Trail System to Hall Mountain Group Site



What Trail Users Want

The Ridge Trail planning process includes an extensive community involvement process. A trail-user focus group was held to receive input on the Ridge Trail concept, and participants included hikers, trail runners, mountain bikers, equestrians and cross-country skiers. The idea of the Ridge Trail was enthusiastically supported by all participants - each seeing benefits for their own preferred type of active outdoor recreation. Most users identified different segments of trails that would be better suited for various activities but understood the need of multi-use trails and the need to share the corridor.

The one message that clear from all trail users was their preference for non-motorized trail corridors. Proposed trail segments, such as VanDyke Road which is open to vehicular traffic, do not provide the trail user experience people are seeking. Other segments such as Pond and Falling Spring Roads, it was suggested, should be gated to restrict vehicular access, or build connector trails that would eliminate Ridge Trail use of roadways open to motorized vehicle traffic.

Something for Everyone



Hiking

The Ridge Trail would offer hikers a smooth hiking surface. Segments of the trail could be designed for ADA access – for example the Zindel Park Trail Head could be linked to Zindel Park home and small reservoir area to provide universal access. Most of the trail corridor, due to steep grades, would not be ADA accessible.

The Ridge Trail will provide hikers improved access to numerous primitive hiking trails along the corridor. The trail heads, benches, rest areas, and interpretive signage and materials will enhance the hiking experience. The improved trail surface will improve safety for hikers of all ages and abilities. The proposed bridges will improve safety by reducing the need to ford streams.

Hikers are looking for a trail experience that gets them into and connected to nature. A uniform trail surface will allow hikers to turn their attention to their surroundings and not their next step on a rocky trail surface.

A typical day out for a hiker will include the completion of an out and back or loop trail experience returning to a trail head. Distance traveled will vary greatly with the physical capability of the hiker but generally range from 5 to 15 miles.

Ridge Trail segments ideally suited for hiking can be accessed by the Castanea, Zindel Park, Pine, Ravensburg, Summit, Skyline Drive, Armstrong Road and Clinton Township trail heads.



Mountain Biking

This trail user is attracted to diverse and challenging terrain. Trail corridors for mt biking will seek out non-motorized, singletrack trails over rocky areas or rock outcrops to provide interest and challenge to the ride. Other types of riders will seek out smooth trails with flowing, banked turns that can be ridden at faster speeds. The Bald Eagle and White Deer Ridges tend to be very rocky and lend themselves to rocky more technical trail designs, however there will be locations suitable to build smooth, flowy and fast trails.

The proposed crushed gravel Ridge Trail surface is not typically what mt bikers would choose to ride. However the Ridge Trail will provide the 'ride to your ride' - a trail that mt bikers will use to access their preferred trail riding experience. The Ridge Trail is also seen as an opening in discussions with DCNR and Water Authorities in proactive trail planning and coordinated trail construction.

A typical day out for a mt bike ride could range from 10 to 30+ miles and is a loop trail experience bringing you back to a trail head. An 'after work' trail ride could be a 10-15 mile loop ride. The Ridge Trail, being a linear trail, will not provide a loop trail experience - but the Ridge Trail can be an important component of a loop trail experience.

Ridge Trail segments ideally suited for mt biking can be accessed by the Zindel Park, Summit, Skyline Drive, Armstrong Road and Clinton Township trail heads.



Bicycling

Biking, as compared with mt biking, is done with a hybrid bike or light (no shock / suspension) mt bike. The Ridge Trail is envisioned as a smooth, crushed gravel surface one would find on the Pine Creek Rail Trail - so the bikes you find using the Rail Trail would be suitable for use on the Ridge Trail.

Biking the Ridge Trail will be different from the Rail Trail experience primarily due to the challenge of terrain. Segments such as Summit Trail and the western part of Skyline Drive will be flat or rolling rides. However most segments will include areas of steep climbs and as well as fast downhill descents. So the distances a rider will do on the Ridge Trail, as a result of the topography, will be less than a rider can do on the Rail Trail.

Bike riders are looking for a uniform smooth surface so their attention can be on their surroundings and connections to nature - not navigating a technical trail. So the proposed surface of the Ridge Trail is ideally suited for your typical bike rider.

A typical day out for a bike rider will include the completion of an out and back or loop trail experience returning to a trail head. Distance traveled will vary greatly with the physical capability of the riders but generally range from 10 to 30 miles (likely less due to the topography of the Ridge Trail).

Ridge Trail segments ideally suited for biking can be accessed by the Castanea, Zindel Park, Pine, Summit, Skyline Drive, Armstrong Road and Clinton Township trail heads.

Horseback Riding



Equestrians are attracted to trails that accommodate their needs for access with trucks and trailers – AND that offer a full day or longer trail riding experience. The horseback riding experience preferably avoids bikes, dogs (and rattlesnakes), as well as minimizing interactions with motorized vehicles.

Trailhead and overnight camping areas will require a plan for manure management – either a ‘pack it out’ policy, or a composting area in locations where manure is a desirable commodity that will be hauled away by residents. Equestrian trailheads, that accommodate truck and trailer, share a lot of similarities with trailheads designed for snowmobiles – so there is the potential to create a 4 season use in appropriate areas.

Equestrians will ride singletrack trails, but old logging roads offer a perfect width for side-by-side riding. Horses can navigate rocky terrain and prefer a natural surface. The smooth gravel surface proposed for the Ridge Trail would be acceptable for equestrians and may be used as an out and back or part of a loop trail experience.

Due to the logistics of horseback riding – a minimum planned ride should be 4 hours or 12-16 miles. An all-day ride could be 8+ hours and over 30 miles. Trailheads designed for equestrian use should have easy access to a network of trails to numerous destinations and of sufficient distances to attract overnight and repeat visits.

Horseback riders could begin their ride at the Pine, Ravensburg and White Deer trail heads – have an all-day ride – and camp at the Hall Mountain Group Site just north of Livonia in Bald Eagle State Forest. This ride could use a combination of dozens of trails and gravel forestry roads and due to the distance and diversity, attract visitors from a greater distance and encourage repeat visits.

Ridge Trail segments ideally suited for horseback riding can be accessed by Pine, Ravensburg, White Deer, as well as the Clinton trail heads.



Trail Running

Trail runners use the widest range of routes and surfaces – from gravel roads to scaling boulder fields. The Ridge Trail would offer trail runners a smooth running surface and an easy access to the numerous trails and roads along the corridor. The improved trail surface will enhance safety for older or less experienced trail runners and the proposed bridges will improve safety by reducing the need to ford streams.

Trail runners, like hikers, are looking for a trail experience that gets them into and connected to nature and provide a challenging workout. A uniform trail surface will allow runners to turn their attention to their surroundings and not their next step on a rocky trail surface.

A typical day out for a trail runner will include the completion of an out and back or loop trail experience returning to a trail head. Distance traveled will vary greatly with the physical capability of the hiker but generally range from 5 to 25 miles.

Two popular trail running events are held in the area – the Megatransect and the Frozen Snot races are held in October and January, respectively. Many people visit the trail segments of these races to train for these events and has made trail running a 4 season activity.

Ridge Trail segments ideally suited for trail running be accessed by the Castanea, Zindel Park, Pine, Ravensburg, Summit, Skyline Drive, Armstrong Road and Clinton Township trail heads.



Fishing

The western end of the Ridge Trail, referred to in the master plan as the 'Coldwater' segment of the Ridge Trail – provides access to several beautiful trout streams. Streams along the Ridge Trail corridor include Harveys Run, West Kammerdiner Run, East Kammerdiner Run, McElhattan Creek, Lucus Run, Gottshall Run, Rocky Run and Rauchtown Creek. All of these streams are classified as High Quality Coldwater Fisheries, except Rauchtown Creek which is classified as a Coldwater Fishery – with native brook trout and other trout species. The Ridge Trail will provide improved fishing access for many miles of high-quality trout streams.

Streams and Their PA DEP Designations

Harveys Run (HQ CWF) Source to Reservoir
West Kammerdiner Run (HQ CWF)
East Kammerdiner Run (HQ CWF)
McElhattan Creek (HQ CWF) Source to Keller Reservoir
Lucus Run (HQ CWF)
Gottshall Run (HQ CWF)
Rocky Run (HQ CWF)
Rauchtown Creek (CWF)

HQ – High Quality

CWF – Coldwater Fishery

See PA DEP Stream Classifications:

<http://www.pacode.com/secure/data/025/chapter93/s93.9l.html>



Birding

The Ridge Trail connects with the Bald Eagle Ridge, identified as an Important Birding Area in Pennsylvania (IBA) by Audubon. Important Birding Areas, designated by the Pennsylvania Ornithological Technical Committee, are the most critical regions in the Commonwealth for conserving bird diversity and abundance, and are the primary focus of Audubon Pennsylvania's conservation efforts. The Bald Eagle Ridge is a long linear corridor passing through Lycoming, Clinton, Centre, Huntingdon, and Blair counties (from Muncy to Altoona). The ridge provides an important flyway for migratory birds and is important habitat for the following bird species: American Woodcock, Broad-winged Hawk, Cerulean Warbler, Ovenbird, Scarlet Tanager, Wild Turkey, Wood Thrush and Worm-eating Warbler.



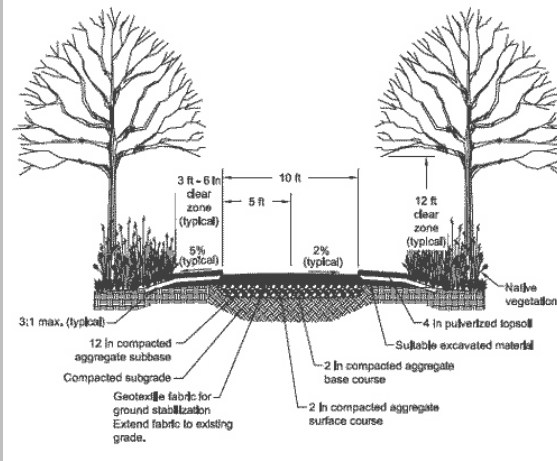
Building A Trail for All Seasons Trail Running, XC Skiing, Snowshoeing, and Fat Tire Biking

The Ridge Trail has the potential to attract users in all 4 seasons. The winter months can be used by traditional winter trail users such as cross-country skiers, hikers and snowshoeing, as well as snowmobiles in appropriate areas.

The trail could also be used in the winter by trail runners and fat tire bikers – both of which are growing rapidly in popularity. The White Deer trail head is well designed for snowmobiles and offers access to a large network of forestry roads and trails. Winter trail runners and hikers would find access to good trails from the Castanea, Zindel Park, Pine, Ravensburg, Summit, Skyline, Armstrong and Clinton trail heads. Fat Tire Mt. Bikers could find good access to trails at the Zindel Park, Pine, Ravensburg, Summit, Skyline and Armstrong trail heads. Cross County Skiers would find good access to trails from Zindel Park, Pine, Ravensburg, White Deer, Summit, Skyline, Armstrong and Clinton trail heads.

Ridge Trail – Designing a Trail for All Season





The Ridge Trail will have a different character in various locations. The trail will be 12' wide in high-use areas such as around trail heads

The Ridge Trail - Character, Surface and Width

The Ridge Trail will provide a uniform, solid, smooth and well-drained surface throughout the 50 mile corridor. The Trail width will vary from place to place depending on the existing trail conditions and the expected number of trail users in a given area. For example – the trail in proximity to a trail head will likely be wider to better accommodate a higher number of users – before trail users spread out on the Ridge Trail itself or disperse onto the larger trail network.

These areas around trail heads and high use areas will be designed to be a Full Width Trail - 12' wide – using a Driving Surface Aggregate (DSA) or Trail Surface Aggregate (TSA). The DSA will be used in areas where they expect heavy equipment or maintenance vehicles to periodically access and use the trail corridor.

In areas outside of the trail heads and expected high-use areas – the trail will be a narrow singletrack trail – typically 3' wide – constructed with Trail Surface Aggregate (TSA) or crushed limestone fines with an average of 6' width clearance of vegetation and obstacles. This will provide the user experience that many trail users look for to better connect with the natural environment. In areas with poor access – natural stone, processed through an on-site rock crusher will be used instead TSA or fines. Also - in areas where the existing trail is solid, smooth, and well drained, a natural trail surface may be used.



The Ridge Trail will have a solid, smooth, well-drained trail surface throughout the 50 mile corridor – and will include segments with a gravel surface (above) and natural surface (below)



The trail will be designed to give the trail user a high-quality recreational experience. The trail, trail features and amenities will be well designed and constructed. The trail and trail features will use natural materials and integrate with the landscape. The trail will be designed around the human scale. In areas where the trail uses old forestry and dug roads – the trail will seek to modify the geometry of the ‘vehicle’ and replace it with a meandering and curving alignment of a trail. These old road conversions will be designed to limit vehicle access by create natural barriers such as rock and tree plantings – to prevent vehicular access from using the trail and damaging sensitive environmental areas. The road to trail conversions can also be used to improve water quality to improving drainage and reducing erosion and sedimentation from entering adjacent streams.

The trail will work with the natural landscape (existing trees, rock outcrops, scenic view, and working around sensitive aquatic and habitat areas) to create a trail that connects people with the natural environment while interpreting the trail corridor’s natural and cultural history.

More Than a Trail – Realizing the Full Potential of the Ridge Trail

The Ridge Trail seeks to be more than a trail. The Ridge Trail has the potential to be an integral part of the region's sustainable economic development plan, as well as playing a role in a large landscape conservation strategy for the Bald Eagle and White Deer Ridges. The Trail will encourage close to home, active living by our residents, while attracting tourism dollars to the local economy. The Ridge Trail can connect people to the natural world in a new and exciting ways. Using traditional interpretive signage, as well as new technology, the Ridge Trail experience can become an outdoor classroom on the widest range of topics. The following are a few of subjects in which the Ridge Trail can become the region's outdoor classroom and applied land management laboratory.

Recreation – This is the first thing most people think about when hearing about the Ridge Trail. Greenways are the evolutionary next step in recreation, as we move beyond 'parks', to an interconnected network of greenways that interconnect where we live, work and play. The Ridge Trail helps to build this connectivity – linking 50 miles along the region's scenic ridgelines. But the Ridge Trail also seeks to create the spur trail connections into Lock Haven, Jersey Shore, the greater Williamsport Area, and Muncy – to create access to great recreation right outside our door.

Health / Active Living – Our sedentary lifestyles and diets are killing us. We are in the middle of an obesity epidemic in this country and the statistics on the obesity rate in rural central Pennsylvania is significantly higher than the state average. Low activity levels and poor eating negatively affects physical and mental health. Encouraging an active lifestyle, where physical activity is an integrated part of peoples lives – is a key to improving human health. Investments in ‘walkable communities and greenways is an important investment in human health.

Environmental Education – The Ridge Trail passes through an environmentally significant landscape of forested ridges, vernal pools, headwater streams, core forest habitats, ancient rock outcrops, important bird habitats and a scenic backdrop to the populations centers of the middle West Branch Susquehanna River. The Ridge Trail would offer excellent outdoor classroom opportunities for school districts throughout the region as well as to Lock Haven University, Lycoming College and Pennsylvania College of Technology students and faculty.

Ecological Land Management – The Ridge Trail can demonstrate and interpret a broad range of principles associated with ecological land management including the principles of landscape ecology, plan succession, sustainable forestry practices, watershed planning, stream and habitat restoration, pests and invasive species control.

Large Landscape Conservation – the Ridge Trail can be an integral part of a large landscape conservation strategy for the Bald Eagle and White Deer Ridges. As the Ridge Trail concept expands into Union and Centre counties – a truly regional large landscape conservation network can emerge focusing on the forests and ridges of the Tiadaghton, Bald Eagle and Rothrock State Forests. The Ridge Trail will help to bring recognition to the ecological, smart growth and economic principles associated with large landscape conservation.

Habitat Enhancement & Invasive Pests – The Ridge Trail corridor is home to many stands of Hemlock and Ash and offer an opportunity to interpret current and historic changes to Penn's Woods. The trail will offer access and opportunities for salvage timber cutting, as well as demonstration projects for invasive plant control and reforestation efforts.

Source Water Protection – The Ridge Trail corridor passes through or adjacent to 3 different municipal water authorities / companies properties. The trail and the management of the trail corridor will exemplify sustainable trail design and the highest principles of watershed management. The trail corridor can also serve as case studies for source water protection and watershed restoration. The road to trail conversion of McElhattan Road (parallel to Lucus Run) will create biofiltration swales, improved drainage, settling basins, reforestation / revegetation projects that will reduce erosion and sedimentation from entering the stream. The Montoursville Borough Water Works property, adjacent to US Route 15 can demonstrate the widest range our source water protection projects, including removal of impervious surface, biofiltration swales, emergency spill containment basins, created wetlands, level water spreaders, gully restoration, and sustainable trail design. Easy access from the highway would make this an excellent Source Water Protection Best Management Practices demonstration site, as well as protecting an 'at risk' municipal water supply.

Strategic Conservation Investment – The Ridge Trail will be a strategic conservation investment. The trail corridor is entirely in public ownership so large sums of public money will not be used for easements or acquisitions. Investments in the trail will create a functional recreational amenity out of what is currently a disjointed and fragmented trail corridor – created value from an underused and underappreciated resources. The investment of funding for the Ridge Trail will also offset the displaced recreational users from the northern Tier areas negatively impacted by Marcellus Gas activities. The Ridge Trail will accommodate these displaced recreational users and be an ideal use of Act 13 impact fees.

Interpreting the Landscape – There are many themes to explore in interpreting the Ridge Trail corridor. These include: Physical Geography, the Ridge and Valley Region and when ‘Continents Collide’; Geology and Soils; Native American Cultures and their use of the Landscape; Human Settlement Patterns; Natural Resources and Resource Extraction; History of Transportation; Lumber Era; Watersheds and Stream Ecology; Forest Ecology and Working Forests – and The Nature Conservancy Forest Certification Program and Forest Stewardship Council; Deer and the Ecology of a Timber Cut; The Changing Forest; Wildlife; Migratory Birds and the Bald Eagle Ridge Important Birding Area



Embracing Our Heritage and Engaging Local Artisans

In addition to education and celebrating the trail corridor's natural environment, the Ridge Trail also seeks to spotlight the region's artisans and craftspeople. The design of the Ridge Trail's kiosks, shelters, bollards, benches, bridges, way-finding, interpretive signs and program, rest areas, and scenic overlooks, will be created by local designers and builders to create a unique look and feel to the trail corridor. The Ridge Trail design will emphasize the use of local materials, such as rock, timber, salvage materials, and celebrate the PA Wilds and Lumber Heritage context. The goal is for the trail and trail features to combine function and beauty that fit seamlessly into their context that is at once new and timeless.



Trail Features – Local Craftsmen Celebrating PA Wilds & Lumber Heritage



Ridge Trail – Create and Restore Scenic Overlooks



View of the City of Williamsport from the Gibson Hollow Overlook on Skyline Drive. Selective clearing of trees, understory vegetation management, and creating an informal seating / rest area would create a social gathering place on the Ridge Trail

How Can the Ridge Trail Help?

Projects that Address:

- Source Water Protection and Watershed Restoration
- Reducing Access by Motorized Vehicles and Repairing Damaged Lands
- Educating the Public
- Building a Strong Volunteer Network
- Establishing Trail Stewardship Program to Monitor Trail and Reduce Illegal Activities
- Developing New Partnerships and Sources of Funding
- Implementing Operations and Maintenance Agreements



Celebrating the Common Wealth

The Term Commonwealth derived from a term literally meaning "common well-being". In the 17th century the definition of "commonwealth" expanded from its original sense to mean "a state in which the supreme power is vested in the people; a republic or democratic state".

The Ridge Trail will creating a high-quality recreation experience on existing public lands. The Ridge Trail is nearly 50 miles in length, with 42.5 mile of the trail, or 84%, on DCNR Bureau of Forestry Land. The remaining 7.6 miles (15%) is on Lock Haven City Authority lands and a small percentage on Montoursville Borough Water Work. Miles of the Ridge Trail run immediately adjacent to the Williamsport Municipal Water Authority lands.

While many large trail projects struggle to cobble together complicated easements and costly land acquisitions necessary to construct the project, the Ridge Trail uses existing public lands to create a long-distance trail that is cost effective to build. The Ridge Trail will create a regional trail by linking previously disjointed, underused and inaccessible areas of public land.

Meeting the Needs of the Land

The Ridge Trail will create a recreational resource of the highest quality by integrating and sensitively responding to the landscapes through which it passes. The trail will provide access to the unique points of interest and scenic features of the corridor. The trail will also seek to avoid sensitive habitats and ameliorate damaged or degraded areas. For example - there are segments of the corridor damaged by off-highway vehicles. The Ridge Trail will limit access and close illegal roadways and trails to better protect sensitive habitats and water quality in these headwater tributaries.

Building Public / Private Partnerships to Assist Land Managers

Pennsylvania Department of Conservation and Natural Resources - Bureau of Forestry (BOF) owns and manages the vast majority of the Ridge Trail corridor. The BOF faces significant staff and budgetary constraints accomplishing their existing work load in managing a large forest system with diverse user groups. Similarly, the various public water authorities / companies, provide recreational access to their properties - but recreation and trails are far from their first priority. In both situations, the Ridge Trail will help to build the public-private partnerships necessary to finance, build, operate and maintain the trail now and into the futures. By creating a multi-use trail for residents and visitors - the Ridge Trail will build a diverse partnership of county, municipal, authority, tourism, economic development, non-profit and volunteer network to ensure a sustainable trail operations, maintenance and stewardship program.

Project: McElhattan Road to Trail Conversion



McElhattan Road is an historic 'dug road' built without proper drainage. The road bed captures and concentrates water runoff and is adding siltation to Lucas Run (at right) above the Heller Reservoir



Project: McElhattan Road to Trail Conversion



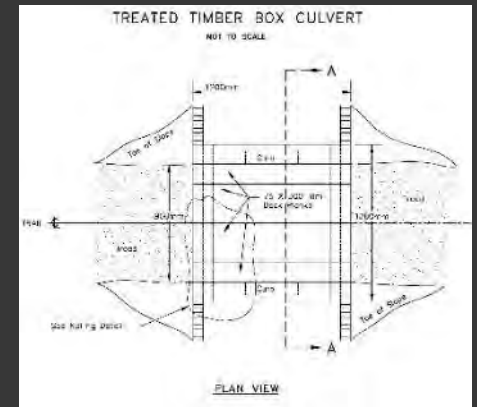
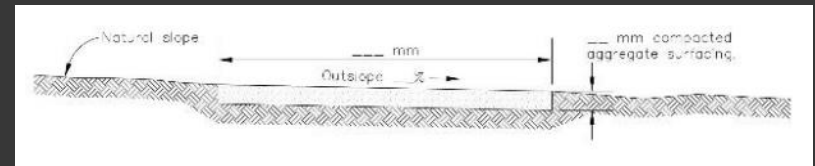
The Ridge Trail will integrate a trail into the historic road bed and improve the drainage issues with a series of bioswales, water bars, and settling basins.

Project: McElhattan Road to Trail Conversion



The Ridge Trail will mender within the old road bed and use a series of timber culverts to pass water under the trail. Native rock and plant material will be use to obliterate to old road geometry.

Project: McElhattan Road to Trail Conversion



Typical trail section detail (top). Timber culvert plan detail (above) and photo of a modified timber culvert (below)



Project: Road Closures and Access Control



There are several roads that access the Lock Haven City Authority property that provide easy access for off-road vehicle access. Better signage, gates and other physical barriers including placing boulders and tree plantings – can help reduce vehicle damage like this illegal road in the headwaters of East Kammerdiner Run (at right).



Project: East and West Kammerdiner Run Crossings



Field Survey of stream crossings on East and West Kammerdiner Run.

Project: East and West Kammerdiner Run Crossings



Kammerdiner Road at a ford across East Kammerdiner Run on Lock Haven City Authority Lands.

Project: East and West Kammerdiner Run Crossings



West Kammerdiner Run flowing towards Castanea Reservoir at a roadway ford location and a primitive log bridge crossing

Project: East and West Kammerdiner Run Crossings



Conceptual design of a pedestrian bridge on West Kammerdiner Run. The bridge would fit with the natural land form and use, to the maximum extent possible, local materials such as rock in gabion abutments and piers and sustainably harvested timber. The span of the bridge will accommodate both bank full and flood flows by spanning the floodplain. All bridge locations will be off the existing roadway alignment – so that all stream ford locations will remain.

Case Study: East and West Kammerdiner Run

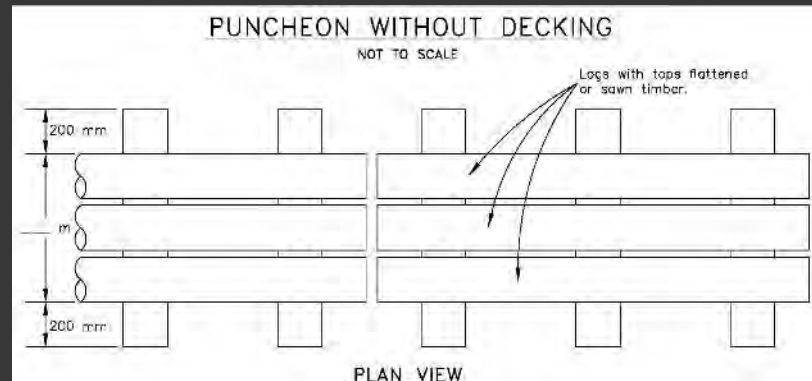


The construction of the pedestrian bridges and all Ridge Trail site features should use, to the full extent possible, locally available and sustainably harvested materials, such as the rock gabion abutments on this existing bridge structure over McElhattan Creek and salvage timber harvesting. The design of the trail and trail features should blend with the environment and protect sensitive environments and habitat areas

Project: Keller Reservoir Trail Re-Route & Restoration



Kammerdiner Road, in close proximity to Keller Reservoir, has been significantly damaged by motorized vehicle use. The Ridge Trail plan calls for the relocation of the trail to the adjacent side slope and the restoration of these degraded wetland areas



Project: Williamsport Municipal Water Authority



Create a buffer around all wetlands and reservoirs

Reroute Trails around wetlands and other sensitive habitat areas

Develop a recreation trail plan for the WMWA property by engaging existing trail users

Create trail stewardship network for policing of the trails and helping to prevent illegal activities



Project: Montoursville Borough Water Works



Create wetlands and containment ponds to better protect the watershed from an accidental spill on the crest of Route 15



Convert Old Montgomery Pike to Pedestrian / Bike Trail – reducing impervious surface and creating a series of infiltration and biofiltration swales



Case Study: Montoursville Borough Water Works



Create settling basins and water spread devices to address the issue of gulley erosion and sedimentation entering the stream from existing roadway storm water drains



Project: PA DCNR



*Falling Spring Road –
winter damage*



*Pond and Miller Roads –
winter damage*



*Pond Road – sediment runoff (above) and wet area
on Summit Trail (below)*



Project: PA DCNR



*Falling Springs Road –
scenic overlook view of
the Nippenose Valley*

Reduce road maintenance costs by controlling winter access and / or gating additional segments of road – specifically Pond and Falling Spring

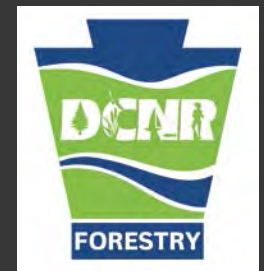
Organize sustainable trail design and development workshops for DCNR, municipal and trail steward volunteers – to develop the skills necessary to design, build and maintain the evolving trail network

Secure funding for a development of a demonstration segment of trail that includes trail construction and road to trail conversion

Develop MOU among DCNR, municipalities, authorizes, trail user groups and organizations to address trail ownership, operations and maintenance roles and responsibilities

Continue to pursue the regional trail authority – to share the burden of trail operations and maintenance

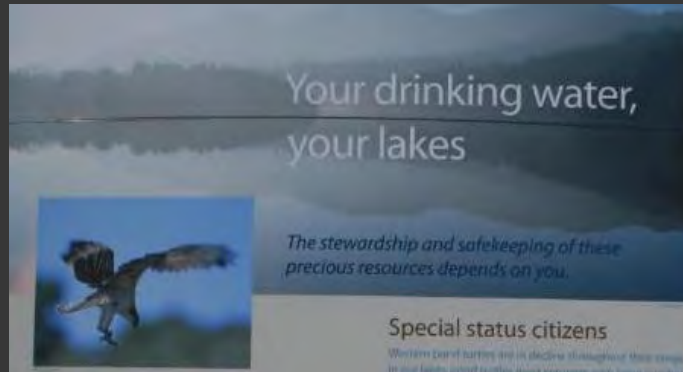
Develop new partnerships and alternative funding sources for the trail



Project: Public Education Signage and Programming



The Ridge Trail interpretive program can raise public awareness on a wide range of environmental issues including protecting the public water supply and sustainable forestry management practices



Branding, Marketing and Promoting the Ridge Trail



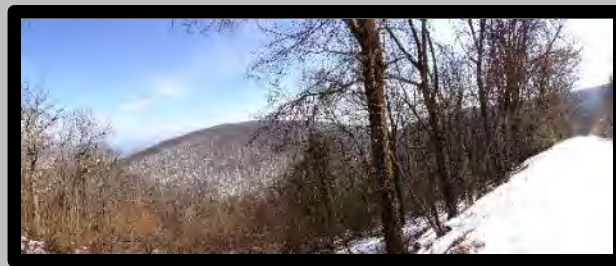
Coldwater Ridge Trail



Marketing the Ridge Trail will need to include many partners including Clinton and Lycoming counties, the Clinton County Economic Development Partnership (Chamber of Commerce and Visitors Bureau), Williamsport / Lycoming Chamber of Commerce and Lycoming County Visitors Bureau, Lumber Heritage Area, PA Wilds Planning Team and the Susquehanna Greenway Partnership. A collaborative effort and professional marketing assistance is needed to create a brand and market and promote the Ridge Trail in a way that integrates with other marketing programs and that benefits all partners. The Ridge Trail will enhance individual community's identify as trail towns and put the region on the map with over 100 miles of trail – meeting and exceeding all the criteria for a 'Destination Trail.' The trail will promote local business opportunities for dining, overnight accommodations, bike / equipment rentals, sporting goods, shuttle services, food / catering, and outfitter services.



Skyline Ridge Trail





Various images we use to promote tourism to our region (from Clinton County Visitors Bureau website)



Destination Tourism

Northcentral Pennsylvania is located within 300 miles of cities such as Philadelphia, New York, Albany, Pittsburgh, and Washington D.C. The region is easily accessed by Interstate 180, 80 and the new Interstate 99 corridor that offers accessible, timesaving transportation routes.* Northcentral Pennsylvania's unique natural and cultural landscape is easily* accessible by millions of potential tourists from east coast US cities, as well as the population centers of Canada. **Twenty-five million travelers who want to engage in destination travel live within a 4-6 hour radius of Pennsylvania.**** The Ridge Trail has the scale (distance in mileage), scenic beauty and compelling cultural heritage to be a destination trail.

*from Williamsport-Lycoming Chamber of Commerce

**Susquehanna River Valley Visitors Bureau

Asset Based Community Development

Asset-based community development (ABCD) - is a methodology that seeks to uncover and use the strengths within communities as a means for sustainable community development. ABCD is at the center of a large and growing movement that considers local assets as the primary building blocks of sustainable community development. Building unique natural and cultural resources, the skills of local residents, the power of local associations, and the supportive functions of local institutions, asset-based community development draws upon existing community strengths to build stronger, more sustainable communities for the future.



Sunset in the Ridge and Valley Region

Residents of north central Pennsylvania enjoy a rural, small town or small city lifestyle with easy access to the outdoors. The Ridge and Valley Landscapes of Central Pennsylvania offer endless forests, streams, rivers, and farmland, dotted with small towns and villages to explore and discover. Building upon our region's unique natural and cultural resources - celebrating our inherent qualities - is key to enhancing resident's quality of life while attracting tourism and sustainable economic development.



Mapping the State Forest Lands

The Ridge Trail is a case study for asset based development. The trail will immerse users into the region's scenic landscape and provide an authentic, challenging and ultimately rewarding experience. The after trail experience can include shopping, arts and dining, and with more miles of trails to explore, a stay in a bed and breakfast or hotel. Visitors often note this region's welcoming, friendly residents, and the Ridge Trail will be shared by residents and visitor, enabling our region to put our best foot forward.

Many avid trail users have noted the phenomenon know as 'Trail Magic' noting... "Have you ever seen an unhappy person on a trail?" So perhaps the Ridge Trail's scenic beauty is secondary, with residents being the trail's greatest asset, with locals willingly sharing 'trail magic' with friends and visitors.

Creating a Destination Trail



The Ridge Trail has potential to be a destination trail, like the Kingdom Trails in East Burke, Vermont

The Ridge Trail will benefit by being connected to the Pine Creek Rail Trail, the Clinton & Lycoming River Walk, and by being a component of the Susquehanna and the Genesee - Susquehanna Greenway, but the goal in the planning, design and construction of the Ridge Trail is for it to function as a standalone attraction. The trail will be expertly designed and build, the trail features and amenities will be custom made with the highest craftsmanship, and the interpretive program and user experience will create word of mouth promotion and repeat visitors. The goal of the Ridge Trail is to be a destination trail tapping into the vast tourism potential of the region for day and extended stay visitors.

The Ridge Trail meets all of the following criteria to become a 'Destination Trail' including:

- Length – The trail should be over 20 miles long
- Scenery – The trail should have scenic appeal
- Accessibility – The trail should be maintained so that a wide variety of guests can use it
- Attractions – The trail should have certain characteristics to draw tourists such as tunnels, trestles, wildflowers, spectacular views, a distinct landscape, regional characteristics, historical significance, points-of-interest, unique design or construction, water feature, or some other reason that would attract people to visit the trail
- Nearby attractions – In addition to the trail's inherent attractions it should also other reasons, nearby, to visit the area. (monuments, parks, architectural structures, waterfalls, mountains, etc.)
- Facilities – The trail should have at least the basics like parking and restrooms. It is also desirable for it to have water, educational signage, and campgrounds or access to lodging



Signage Design Guidelines

The Way-finding, Directional and Interpretive Signage of the Ridge Trail will work with the signage guidelines created by the Susquehanna Greenway Partnership to create a unified and high quality signage system. The Ridge Trail will have Way-finding signage on all the major highway corridors including (I-80, 220 / I-99, and US Route 15). Trail Heads will be identified on all the adjacent federal, state and local roadways (Nittany Road, Pine-Loganton Road, 880, 44, 554, US Route 15 and 405). The Ridge Trail will create it's own logo / brand to be used on all trail blazes and promotional materials.



Ridge Trail – Heritage & Interpretive Themes

Telling the Story of the Ridge

Native American History

History of Transportation – Foot, Horse, Planes, Trains and Automobiles...

Sheshequin Path

Loyalsock Turnpike / Gibson Wagon Road / Toll Road

Old Montgomery Pike

Old Route 15 – Scenic Overlook

Current Route 15 - Overlook

Culbertson Trail

Allegheny Airlines – Crash Site

The Changing Landscape

Old Growth Forest

European Settlement

The Lumber Era

Forest Succession

Large Landscape Ecology and the Ridge Trail

Migratory Birds (Bald Eagle Ridge – Important Bird Area)

Marcellus and Displaced Recreation Use

The Changing Forest – Losing Hemlocks and Ash

The American Chestnut

Forest Management / Working Forests

Rock and Water

Ridge and Valley and the Susquehanna River

Wind Gap

Tuscarora Sandstone

Headwater Streams and Watersheds

Your Water Supply

Source Water Protection

Watershed Management / Restoration

Other Themes

Ridge Runners and Bootleggers



Ridge Trail - Regional Gateways

Interstate 80

Interstate 99 / Route 220

US Route 15



I-80 Trail Head – Marketing the Region’s Trails

(Insert Concept Plan Here)

Concept Plan for a trail network using existing Interstate 80 Rest Area as a trail head. The highway has 31,000 vehicles per day pass by daily and the trail head and trail system would provide a unique opportunity to market the region and promote the region’s growing trail network.

Another separate but complimentary trail project that could market and promote the region and serve as a sampler of the regional trail system could be designed at the Interstate 80 Rest Areas. The existing PennDOT rest areas located between I-80 miles 193 and 194 are located in a scenic, mountain pass. These rest areas are located near the edges of 4 counties (Centre, Clinton, Lycoming and Union) and where the Interstate highway’s PennDOT corridor abuts PA DCNR Bureau of Forestry land in Bald Eagle State Forest. The idea is to use these rest areas as trail heads to market the region to the 31,000 daily users of the interstate. From the rest areas – visitors would have access to a network of 5 to 10 miles of trail linking both rest areas, using a combination of new, and existing trails and gravel roadway segments. The ‘Sampler’ Trail would market the region and encourage the visitors to return for an extended stay to explore the region’s growing trail network. The trail would also be an amenity for local residents, a way for county and regional tourism promotion agencies to promote themselves, and local outdoor and recreation trail user clubs to advertise get recognition.

Marketing the Region's Trails

Interstate 80 Trail Head

"A Trail Sampler"

Give Visitors a Taste of the PA Wilds from I-80 Rest Area

Regional Gateway / Regional Marketing Opportunity

PennDOT and DCNR Bureau of Forestry Land Ownership

Partnership - PA Wilds, Lumber Heritage Area, PennDOT, Visitors Bureau / TPA (Clinton, Lycoming, Union, Centre)

Mile Run Rest Area - and Tea Spring Trail Head
10 Miles of Hiking and Mountain Biking Trails

Scenic Mountain Gap and Unique Ecological Area



Promoting Business Opportunities

Economic Opportunities Associated with Tourism



Outdoor Clothing & Gear

GPS & Maps

Backpacks

Bikes

Rentals

Car / Hitch

Gas

Groceries

Cafes &

Restaurants

Lodging

Races &

Events

Camping

Engaging Young People

Environmental Education and Research

Outdoor Classrooms

Club / Interscholastic Teams - Mt. Biking & XC

Community Service Projects

College Mentorship Programs

Susquehanna Studio



Trail Safety and Security

The Ridge Trail planning process included an outreach to municipal officials and emergency responders from throughout the 50 mile long corridor. Most felt that creating a formal 'Ridge Trail' would not pose much of a challenge to their ability to respond to a medical emergency on the trail – and that most of the volunteer responders had equipment to access even the more remote segments of the Ridge Trail. The Ridge Trail Master Plan did include trail mileage markers as a direct result of emergency responder's feedback – enabling a responder to quickly pinpoint the location of an emergency.

Trail Ownership

The Ridge Trail will be built on PA DCNR Bureau of Forestry lands in Bald Eagle and Tiadaghton State Forests, on Lock Haven City Authority land, Montoursville Borough Water Works land, and adjacent to Williamsport Municipal Water Authority lands. These landowners will in essence own the trail on their lands and coordinate operations and maintenance responsibilities with the evolving trail partnership that may include: municipal equipment and staff, clubs and service organizations, trail volunteers and potentially a regional trail authority.

Risk Management and Liability

Pennsylvania has a law that limits the legal liability of landowners who make their land available to the public for free recreation. The purpose of the law is to supplement the availability of publicly owned parks and forests by encouraging landowners to allow hikers, fishermen and other recreational users onto their properties. The Recreational Use of Land and Water Act ("RULWA"), found in Purdon's Pennsylvania Statutes, title 68, sections 477-1 et seq., creates that incentive by limiting the traditional duty of care that landowners owe to entrants upon their land. So long as no entrance or use fee is charged, the Act provides that landowners owe no duty of care to keep their land safe for recreational users and have no duty to warn of dangerous conditions. Excepted out of this liability limitation are instances where landowners willfully or maliciously fail to guard or warn of dangerous conditions. That is, the law immunizes landowners only from claims of negligence. Every other state in the nation has similar legislation.

The Ridge Trail will be a 'use at your own risk' facility that is free and open to the public, and all trail heads will post trail rules and regulations. A trail maintenance plan will also be developed to establish a schedule for trail inspections and maintenance and minimize risk exposure to park visitors. The free access, trail rules and regulations, trail maintenance plan with scheduled trail inspections and maintenance are all intended to meet all requirements of "RULWA" and thus minimize landowner liability exposure.

Trail Operations & Maintenance

A Regional Trail Authority would be the ideal organizational structure to coordinate operations and maintenance of the Ridge Trail. However, the Regional Trail Authority (RTA) may take time to establish – so the initial phases of the Ridge Trail will likely need to be operated and maintained by a coordinated partnership of state, municipal and private organizations and individuals. This trail partnership may include: PA DCNR, authorities / municipalities, clubs and service organizations, trail organizations and trail volunteers.

Trail Maintenance Plan

A Trail Maintenance Plan needs to be developed to minimize risk exposure to park visitors and guarantee full landowner protections provided by the Recreational Use and Land and Water Act (“RULWA”) legislation. The Trail Maintenance Plan will include a list and schedule of all regular and periodic trail maintenance needs. Maintenance can be completed more efficiently and safely during off-peak hours when fewer visitors are in the proximity of maintenance equipment. The Trail maintenance plan will rely on a combination of PA DCNR and Authority Staff and an network of trail stewards and volunteers to identify areas of safety concerns and required maintenance in a timely manner, and implement a swift response to address the problem to minimize risk to trail users.

Adopting the Plan

The Ridge Trail Master Plan must be adopted by Clinton and Lycoming counties, as well as the State Agencies and municipalities that own the trail corridor – including PA DCNR Bureau of Forestry, Lock Haven City Authority, Williamsport Municipal Water Authority and Montoursville Borough Water Works. The Ridge Trail project will also seek letters of recommendations and pledges of support from the individuals and organizations that participated in the Study Committee and various Focus Group and Key Stakeholder Interview Community Involvement process. The Ridge Trail will also be entered into the State of Pennsylvania's Trail Gap Survey and Seek priority trail status from PA DCNR.

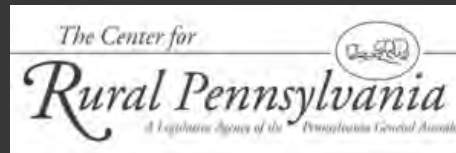
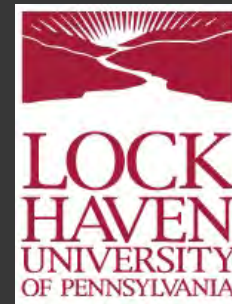
The Ridge Trail Master Plan will also be shared with municipal officials along the corridor, as well as the Police and Emergency Responders that service the trail corridor – to keep them updated on the planned incremental implementation of the trail.

The Ridge Trail also needs to be promoted to the general public – to raise awareness and support for the project, as well as to grow the volunteer network of trail stewards that will assist with long term trail operations, maintenance and self-policing.

Ridge Trail – Partnership

- PA DCNR and PA DCED
- Municipal Water Authorities
- Visitors Bureau / Chamber / Local Businesses
- PPL and Other Utilities
- Susquehanna Health / Lock Haven Hospital
- Recreational User Groups - Birders, Hikers, Equestrian, Bikers, Mt. Bikers, etc.
- Colleges / Universities / School Districts
- Susquehanna Greenway Partnership

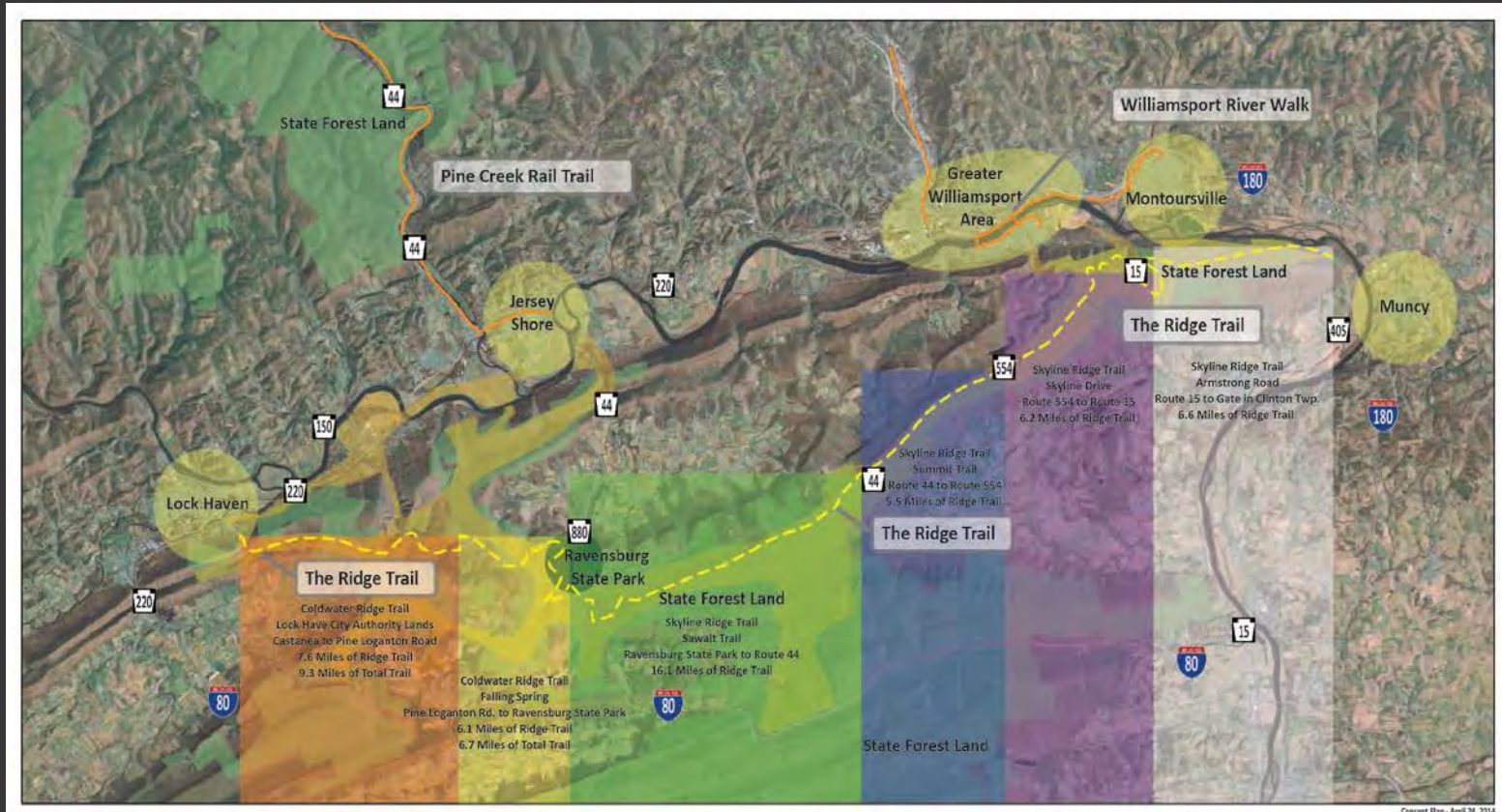
Grow and Diversify Funding Sources and Partnerships



The Ridge Trail – Master Plan Segments and Costs



The Ridge Trail – Corridor Segments



The Ridge Trail – Mileage Summary

Coldwater Ridge Trail – Clinton County

Segment

Lock Haven Water Authority Lands

Falling Spring

Miles

7.6 miles

6.1 miles

Skyline Ridge Trail – Lycoming County

Segment

Sawalt Trail

Summit Trail

Skyline Drive

Armstrong Road

Miles

16.1 miles

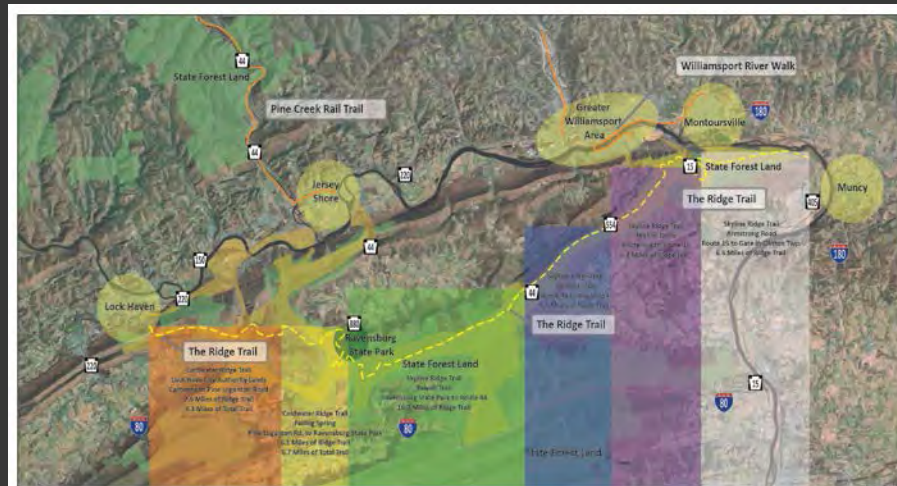
5.5 miles

6.2 miles

6.6 miles

Ridge Trail Total

48.1 Miles



Cost Estimates Include

Hard Costs - Trail Clearing, Trail Construction, Drainage Improvements, Trail Head Areas, Restrooms, Trail Amenities (Kiosks, gates, bollards, benches, shelters, signage, interpretive program, scenic overlooks, trail rest areas, landscaping).

Soft Costs - Landscape Architecture, Architecture and Engineering Fees, Surveys, Soil Testing, Hydro-Geologic Studies, Environmental Studies, PNDI Searches, PHMC Review, Legal Fees, Permitting, Construction Management, Project Administration, Cost of Fundraising, Maintenance Reserve Fund, Facility Start-Up Costs, Project Contingency. (Add 20% per segment / Trail Head).

The Ridge Trail – Trail Segment Costs:

Lock Haven City Authority Lands	\$ 1,050,000
Falling Springs	\$ 295,000
White Deer Ridge	\$ 996,000
Summit Trail	\$ 870,000
Skyline Drive	\$ 750,000
Armstrong Road	\$ 3,600,000

RIDGE TRAIL, TRAIL FEATURES & SUPPORT TRAILS

\$ 7,561,000

The Ridge Trail – Trail Head Costs



Castanea Trail Head (Nittany Rd.)	\$ 66,000
Zindel Park Trail Head (Reservoir Rd.)	\$ 205,000
Pine Trail Head (Pine-Loganton Rd.)	\$ 72,000
Ravensburg Trail Head (Rt. 880)	\$ 72,000
White Deer Trail Head (Rt. 44)	\$ 162,000
Summit Trail Head (Rt. 554)	\$ 70,000
Skyline Trail Head (Rt. 15)	\$ 90,000
Armstrong Road Trail Head (Rt. 15)	\$ 51,000
Clinton Township Trail Head	\$ 93,000

Trail Head Total Cost	\$ 881,000
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The Ridge Trail – River Town Kiosks

City of Lock Haven \$ 20,000

Greater Williamsport Area \$ 20,000

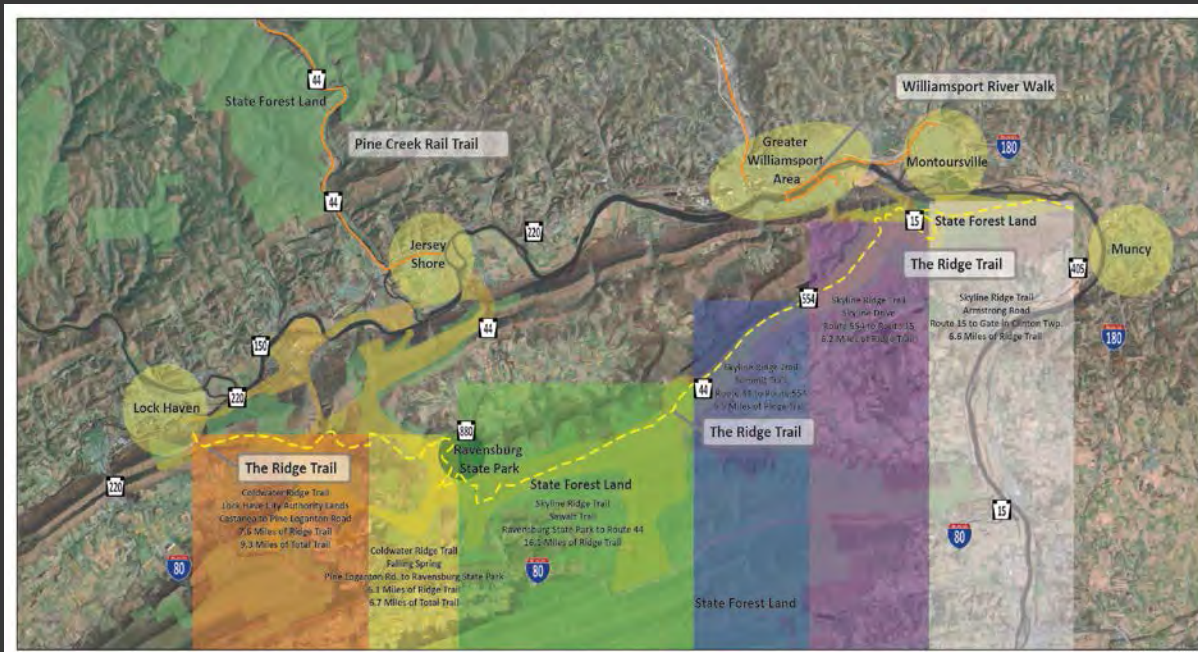
Muncy \$ 20,000

Trail Head Total Cost \$ 60,000



The Ridge Trail – Total Cost :

Ridge Trail – Total Distance	48.1 Miles
Additional Connector Trails & Support Trails	22 Miles +/-
Total Estimated Cost	\$ 8,500,000



Phasing and Schedule

The Ridge Trail will be designed, permitted and constructed in phases and the number of phases will depend on funding availability and diversity of the funding partnerships established in support of the Ridge Trail project. From the onset the goal of the master planning process was to identify a Ridge Trail early implementation project in both Clinton and Lycoming counties, and that segments would be designed, permitted and constructed over a period of 5 – 10 years. The following is a one version for how the Ridge Trail could be incrementally built.

Phasing and Schedule - Concept

Phase I – (1-2 Years)

Summit Trail Design and Permitting

Summit Trail and Summit Trail Head Construction

Lock Haven City Authority Lands Design and Permitting

Lock Haven City Authority Trails, Castanea and Zindel Trail Head

Construction and Environmental Restoration / Source Water Protection
Projects

Phase II – (3-4 Years)

Falling Spring Design and Permitting

Falling Spring Trail and Pine and Ravensburg Trail Head Construction

Sawalt Trail Design and Permitting

Sawalt Trail and White Deer Trail Head Construction

Phase III – (5-6 Years)

Skyline Drive Design and Permitting

Skyline Drive Trail and Skyline and Summit Trail Head Construction

Armstrong Road Design and Permitting

Armstrong Road Trail and Armstrong and Clinton Trail Head Construction
and Source Water Protection Projects Constructed

Phase III – (7-10 Years)

Route 15 Underpass Design and Permitting

Route 15 Underpass Construction

Project Case Studies

York County Water Authority

Allegrippis Trail

Tsali Recreation Area

The Kingdom Trails

Bay Area Ridge Trail

Marquette Trails



York Water Company – William Kain Park York, Pennsylvania

Description

Established in 1977, William H. Kain County Park consists of 1,637 acres and 2 lakes, Lake Williams (220 acres) and Lake Redman (290 acres). The park is made possible through a 50 year lease agreement between the County of York and The York Water Company. Features of the park include public fishing and boating, pavilions, horseshoe pits, volleyball court and playground, and a new bird viewing deck. The public is provide access for hunting as well as access to a multi-use trail system. public access for hunting

What Makes it Unique?

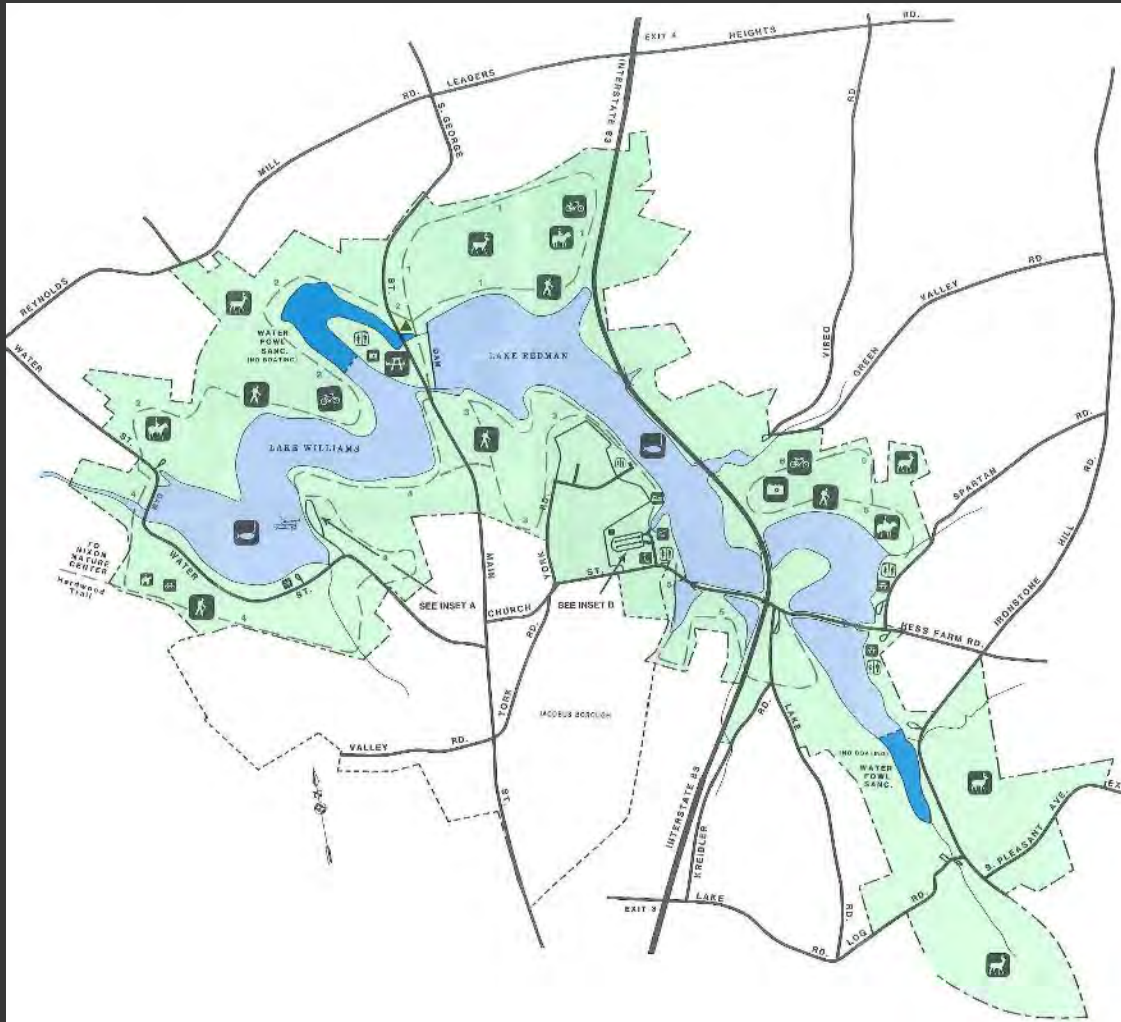
There was a unique partnership between York County and the York Water Company to make the William Kain Park possible. There are over 12 miles of marked trails for horseback riding, mountain biking and hiking. Trails are closed to mountain bikers and horseback riders during "wet conditions," as determined by Park Rangers. The county parks department operates and maintains the recreational components of the park, allowing the York Water Company to focus on their primary mission of providing city residents with high-quality drinking water.

What Lessons Can Be Applied to the Ridge Trail?

William Kain Park and the York Water Company are an excellent example of collaboration between county government and a water authority. It's close proximity (approximately 2.5 hours away) would make for a good day trip for Lock Haven City Authority board and staff to visit the park, talk to the York Water Company staff and see firsthand how this partnership is working.

Project Case Study

York Water Company – York, PA



*Recreational Boating on
Redman Lake*

Water Company & County
Recreation Partnership
Diverse Recreation
Hunting
Equestrian, Hiking and Biking
Boating and Fishing



The York Water Company
130 East Market Street, York, Pennsylvania 17405

Allegrippis Trails Huntingdon, Pennsylvania

Description

The Allegrippis Trail (AT) has 33 miles of smooth singletrack trail for hiking, trail running and mt. biking on the hills surrounding Pennsylvania's largest lake – Raystown. The property is owned by the Army Corps of Engineers and the AT system is leased by the Friends of Raystown Lake. The AT system is maintained by volunteer efforts of the Raystown Mountain Bicycling Association.

Trails range in difficulty from beginner to expert with three stacked loops. Using the same shape / color trail difficulty identification system as used at ski resorts, the AT trail signage system is easily understood by most riders.

The AT trail was designed by the International Mountain Bike Association as a dual-directional trail, and one of the first in the state of Pennsylvania specifically designed for mountain bikers. The trails are natural surface and are intended to be open year around – but in wet conditions the trails are closed because of the potential damage that may incur during such time. Equestrian use is prohibited on the AT.



What Makes it Unique?

The Allegrippis Trail (AT) was a unique partnership between the US Army Corps of Engineers, PA Department of Conservation and Natural Resources, and the International Mountain Bicycling Association. The trail lease option agreement between the US Army Corps of Engineers and the Friends of Raystown Lake.

The AT operations and maintenance program being headed by the Raystown Mountain Bicycling Association and local volunteers.

What Lessons Can Be Applied to the Ridge Trail?

The AT is a good illustration of how different ownership, operations and maintenance arrangements can work successfully. In advance of the formation of a Regional Trail Authority – a county / municipal and volunteer partnership may be the appropriate short-term solution for ownership, operations and maintenance of the Ridge Trail.

Seek partnerships with trail organizations such as the PA Equine County, International Mountain Bicycling Association and its local chapters (Bald Eagle Mountain Bike Association and Susquehanna Valley Velo Club) and Keystone Trails Association.

Project Case Study

Allegrippis Trail – Huntingdon, PA



Allegrippis Trails – trail map, signage, and scenic overlook of Raystown Lake





Tsali Recreation Area Trails Bryson City, North Carolina

Description

Tsali (pronounced “SAH-lee”) Recreation Area offers mountain biking, horseback riding, fishing, motorized boating, kayaking or camping at Tsali Recreation Area, all located within steps of Fontana Lake. The Tsali Trails have become a popular destination for mountain bikers and horseback riders and is best known as a challenging mountain bike course. Hikers may travel the trails on any day, but mountain bikers and equestrians—the primary users—are kept separated by alternating days on the trails.

What Makes it Unique?

The facilities are owned and operated by the USDA Forest Service – so the signage, features and amenities are well designed and uniform and the entire facility has a federal funding source for operations and maintenance.

The facility has a minimal daily use fee (\$2) for parking in the trailhead areas. These areas seem to only be used by visitors from outside the region, because ‘free’ parking can be found 100 yards down the road – which is where the locals appear to go.

The Tsali Trails found a good way to separate Horses and Mt. Bikes by alternative days for trail use. With a trail system that includes 4 large loops – there is plenty of trails to explore on a multi-day trip. Whether you are on horseback or mt. biking – you have about 25 miles of trail to ride each day.

The Tsali Trails are described as ‘challenging’ – but compared to the rocky terrain one finds in central Pennsylvania – the trails are smooth and fast with only a few rocky technical sections.



What Lessons Can Be Applied to the Ridge Trail?

The Tsali Trails found a great way to separate Horses and Mt. Bikes with alternating days for the use of the trails. This could have applicability in the White Deer spur trail parallel to VanDyke Road. The singletrack trail and VanDyke Roads could alternate days between Horses and Mt. Bikes.

The Tsali Trail has federal funding. What case can the Ridge Trail make to receive federal funding through the Captain John Smith National Historic Trail - perhaps for the development of the interpretive program for the corridor.

The Tsali Trail has loop trails that share a common spine trail. The loop trails are true singletrack, whereas the spine trail is roadway width yet functions as a singletrack trail. The Spine trail provide easy equipment and emergency vehicle access if needed – yet still has the feel of a trail (and not road) experience.

Project Case Study:

Tsali Recreation Area, Bryson City, NC



Project Case Study:

Tsali Recreation Area, Bryson City, NC



Kingdom Trails

East Burke, Vermont

Description

Located in the heart of the Northeast Kingdom of Vermont, the Burke area is home to breathtaking beauty, world class recreation and unique cultural offerings. Speed it up or slow it down. Bring your gear or leave it all at home. The Burke area is your four season vacation destination.

Home to Kingdom Trails and QBurke Mountain Resort, the outdoor enthusiast will have all the bases covered when visiting Burke. Country inns, B&B's, resorts, slopeside condos and vacation rentals are located throughout the area offering amenities unique to the our cultural heritage. Options for dining range from cafes, country stores and casual restaurants with lots of local ingredients on the menu. There are many country shops, local art studios, farms and museums nearby as well.

Summer and Fall offer endless opportunities to get outdoors and go hiking, boating, fishing, paddling, swimming, rock climbing, horseback riding, and of course, enjoy world class mountain biking on Kingdom Trails, recently named one of the Top Ten Places to Mountain Bike by USA Today. A must do summer activity is a visit to beautiful, glacial Lake Willoughby or preferably, many visits!





What Makes it Unique?

In an otherwise economically depressed region of rural Vermont – the village of East Burke has embraced recreational tourism and done it by highlighting the community's best natural and cultural assets. The trail system is phenomenal – very unique designs that leave a lasting impression on the user. However the highlight of the Kingdom Trails is the authentic small town Vermont experience. The hub of activity is the town's general store – which is located right next to the trail hut. Users pay their daily fee and locals will help you select the ride route to fit your skill level and the experience you are looking to have. The folks that man the trail hut are also trail users and are genuinely interested in you having a good time – and not some kid pitching you an attitude and wishing they were somewhere else.



The other unique feature is the private buy-in that was necessary to realize the trails. All the trails occur on private land. A trail of this scale and complexity on private land is unheard of here in Pennsylvania – and is another part of the unique Vermont experience. The State of Vermont has long experience of community collaboration and the Kingdom Trails seems like a recreational equivalent of a town hall meeting where the community comes together for a common cause. Some of the more risky trails and trail features – the things that make the trail experience so memorable – you have to wonder if they would exist if a state or federal agency was overseeing their design and development.



What Lessons Can Be Applied to the Ridge Trail?

Kingdom Trails is a case study in the best of asset-based community development. The trails connect you with the natural beauty of the fields and forest of Vermont AND to the charm of the village of East Burke.

Kingdom Trails provide the best trail experience with lots of diversity of terrain, and various skill levels to test all visitors. The trails are truly unique and memorable with trail types and trail features found nowhere else.

Kingdom Trails engages the entire community and the authentic connections with people and place is what makes for such a great visit and one you would want to come back to in the future. The Kingdom Trails has an incredible word-of-mouth marketing at work and a pretty clever and simple branding image (the Purple and Gold Crown Logo).

Project Case Study:

Kingdom Trails, East Burke, Vermont



Authentic Vermont Village Experience
Tourism-Focused Economic Development
Kingdom Trail Association
Non-Profit Board & Staff
Building Trails for 20 Years



Project Case Study:

Kingdom Trails, East Burke, Vermont



Challenging and Creative
Trails
Scenic Beauty
Good Marketing and
Branding



Bay Area Ridge Trail

San Francisco Bay Region - California

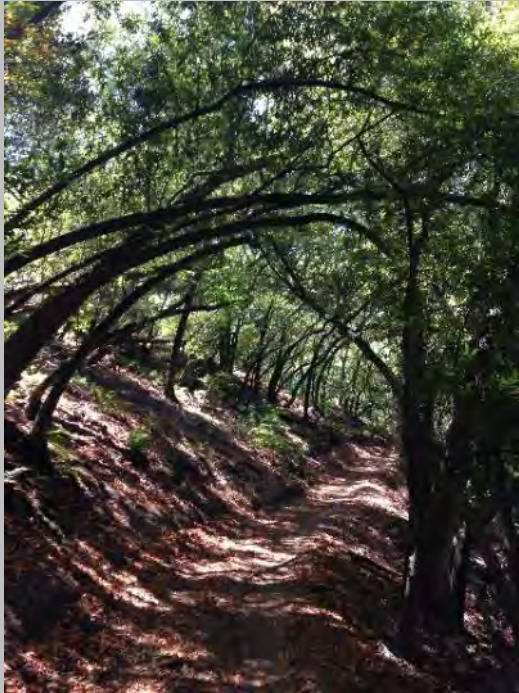
Description

The Bay Area Ridge Trail (BART) is a treasure for residents and visitors alike, offering easy access to the San Francisco Bay Area's renowned beauty. You can enjoy spectacular, expansive views of the Bay, Pacific coastline, mountain ranges, and city skylines, while crossing diverse landscapes of towering redwoods, open grasslands and dense California forests, wildflower-covered meadows, coastal bluffs and world-famous bridges.

The Bay Area Ridge Trail beckons with options for close-to-home, active outdoor recreation, as well as a quiet refuge in nature. When complete, the Ridge Trail will connect over 75 parks and open spaces. This continuous long-distance trail is also creating a protected greenbelt corridor for habitat and wildlife.

Planned as a multi-use trail for hikers, runners, cyclists and equestrians of all ages and abilities - over two-thirds of the dedicated miles are open to all users. Equestrians and cyclists each can enjoy over 85% of the trail across the region, depending on local policies. Please check local regulations before you visit, and be safe and share the trail.





What makes it Unique?

The scale of the initial vision is impressive. The first Ridge Trail segment was dedicated in May 1989. Existing trails in open public lands were quickly added to the Ridge Trail network allowing a 100-mile celebration in 1990 and ushering in 200 miles in 1995. The complex nature of this ambitious project slowed the initial rate of progress with new parklands needing to be acquired and more trails needing to be designed and built. We celebrated the opening of the 300th mile in 2006. Today 350 of the 550 miles system, or 63%, is complete, with many other segments in the planning phase.

What Lessons Can Be Applied to the Ridge Trail?

BART established an inspiring vision of a loop trail for the greater San Francisco Bay area and built immediate momentum by quickly establishing hundreds of miles of trail on existing public lands.

BART successfully accommodates millions of users per year by managing appropriate trail users for each segment – yet maintains the vast majority of the trail for shared use between Hikers, Bikers and Equestrians.

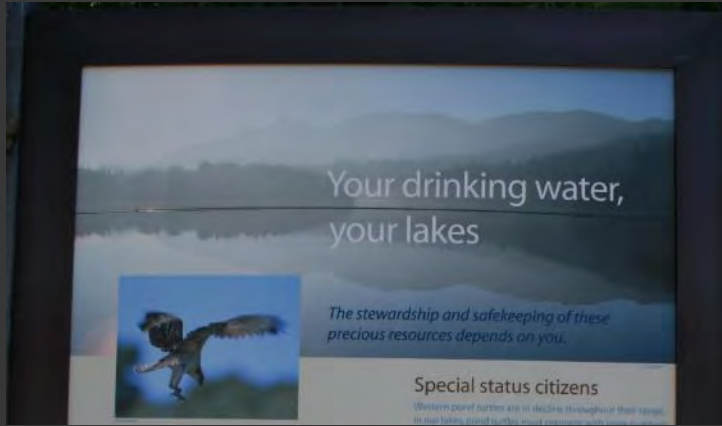
The BART has a positive and successful relationship with the various municipal water authorities throughout the corridor - balancing recreation and source water protection.

The BART has high quality and uniform signage system – including way-finding, mileage marker, blaze and interpretive signage. Some of the best interpretive signage is focused around watershed planning and restoration and source water protection.

The BART is also part of the even larger coastal trail that includes California, Oregon and Washington.

Project Case Study

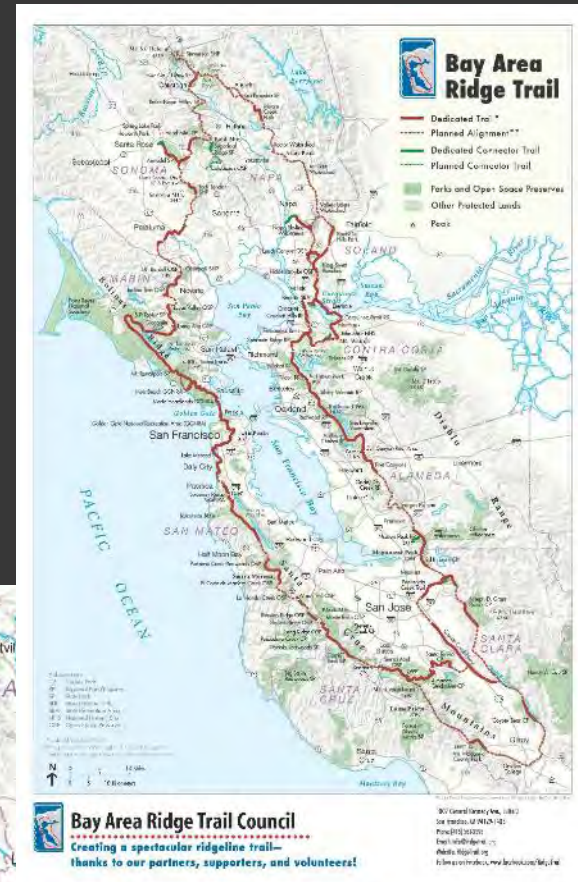
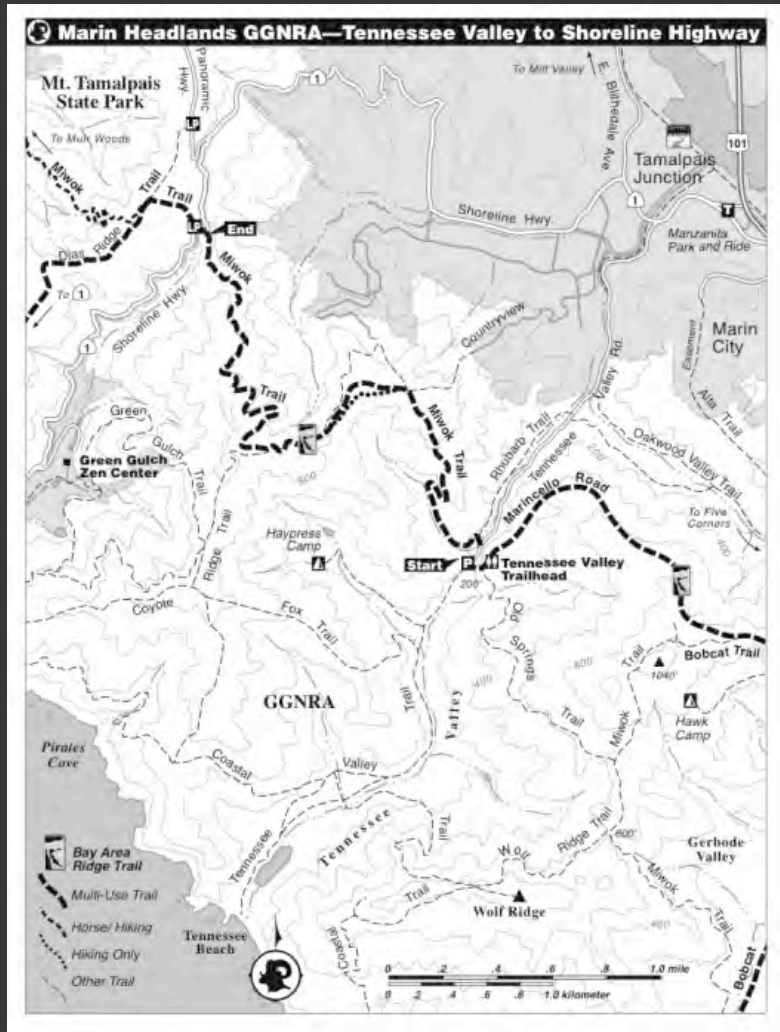
Bay Area Ridge Trail



Building Trails for 25 Years
350 / 550 Miles Built
Hiking, Equestrian, Bike
Linking Public Land
Public Water Supplies
Watershed Protection
Bay Area Ridge Council
www.ridgetrail.org

Project Case Study

Bay Area Ridge Trail



Project Case Study

Bay Area Ridge Trail



Project Case Study

Bay Area Ridge Trail



Project Case Study

Bay Area Ridge Trail



Marquette Trails

Marquette, Upper Peninsula, Michigan

Description

The terrain and extreme seasons of Marquette lend it to four-season silent sports activity, which has historically been part of the local culture. The Noquemanon Trails Network (NTN) is a 501c3 that emerged from an unofficial volunteer group concerned with maintaining trails when state resources became untenable about 10 years ago. At the same time, the city of Marquette was actively repositioning itself from a former industrial community to a premiere recreational tourism destination. In this pursuit, the city purchased 2,243 acres in the city and contiguous townships, enabling expansion of NTN's silent sports trail system within city boundaries and beyond. Unanimously approved by city officials, the acquisition was dubbed the "Louisiana Purchase" for its future economic importance.





While the city invested in strategic land purchases, NTN took up the challenge of major trail development as well as maintenance. NTN proceeded with the goals of erosion control, preservation, and an excellent trail experience for all skill levels, multiple generations and all user types. With this investment, mountain bike (Single Track) use exploded, and Marquette is now a national year-round silent sports destination. The city invested in connecting trails to the downtown. The city, Downtown Development Authority and Convention and Visitors Bureau all play a role in promoting this brand and attracting visitors. NTN's focus is changing from infrastructure development to events, many of which are coordinated with the city's downtown interests. The city will soon develop high-end condominium units in the popular Heartwood area providing immediate trail access for residents, and additional tax base for the community.

The Noquemanon Trails Network (NTN) is a 501c3 dedicated to developing, maintaining, signing and mapping a non-motorized land and water trail network throughout Marquette and Alger Counties in Michigan's Upper Peninsula. The network— used for hiking, running, off-road biking, horseback riding, skiing, snowshoeing, canoeing and kayaking—is vital to Marquette's success as a premiere destination for recreational tourism.

What Makes it Unique?

In 2012, Marquette was listed as one of the Top 10 best places to retire by CBS Money Watch; the #1 fan favorite for Distinctive Destinations, and; Top 10 Winter Family Getaways.

Marquette is located in the Great Lakes snow-belt and the lake effect makes the city the third snowiest in the continental US – with an average yearly snowfall of just under 150 inches.

Marquette can experience freezing temperatures 7 months out of the year.



What Lessons Can Be Applied to the Ridge Trail?

Noquemanon Trails Network (NTN) – is an interesting organizational model. As a 501c3 it works with the municipal government to leverage money for trail development and takes the lead on trail operations and maintenance.

Marketing itself as a ‘Silent Sport Trail System’ and repositioning itself from a former industrial community to a premiere recreational tourism destination.

Embracing the Winter season. Despite the challenging climate, and partially because of it, Marquette has become a trail destination. Marquette has embraced its long, snowy winters and become well known as a Fat Tire biking capital and is benefiting from the rapid growth in the sport. The trails are groomed specifically for Fat Tire bikes and remain active throughout the winter months.

The Ridge Trail has the potential to be a 4-season recreational destination. Various segments of the Ridge Trail lend themselves to different winter uses. The investment in snow grooming equipment could be shared by different user groups such as cross-country skiing (on Skyline Drive and Summit Trail) and Fat Tire Mountain Bikes (on Skyline Singletrack Trails, Sawalt Singletrack Trails, and Armstrong Road Areas). Winter Trail runners can use the Lock Haven Water Authority trail network. Snowmobilers can use the White Deer trail head and use VanDyke Road to access a large network of Bureau of Forestry roads to the south and southwest towards RB Winter State Park and the Hall Mountain Group Site north of Livonia.

Project Case Study:

Marquette, Michigan (Upper Peninsula)



Small Town Charm
Town – Regional Center
College / Hospital
Interesting History of Mining and Logging
Northwoods and Lake Superior
Natural Beauty



Project Case Study:

Marquette, Michigan (Upper Peninsula)



Town – Regional Center
University / Hospital
Interesting Architecture
Long Winters



References and Links – Walkable Communities

Difference Between a Road and a Street

Video by the New Urban Network:

<http://newurbannetwork.com/video/15370/importantdifference-between-road-and-street>

PA Safe Routes to School Resource Center

info@saferoutespa.org

www.saferoutespa.org

Pedestrian and Bicycle Information Center (PBIC)

www.pedbikeinfo.org

Active Living by Design (ALBD)

www.activelivingbydesign.org

National Center for Bicycling and Walking (NCBW)

www.bikewalk.org

How walkable is your neighborhood? Ask walk score

www.walkscore.com

America Walks

www.americawalks.org

Safe Kids

www.usa.safekids.org

Keep Kids Alive Drive 25

www.keepkidsalivedrive25.org

Partnership for a Walkable America (PWA)

www.walkableamerica.org

Bike to Work

www.biketoworkinfo.org

Walkable Communities

www.walkable.org

References and Links – General Interest

RULWA – Recreational Use of Land and Water Act – Factsheet

http://www.rachelcarsontrails.org/landowners/RUWLA_factsheet.pdf

Pennsylvania Integrated Water Quality Monitoring and Assessment Report

file:///C:/Users/Brian/Downloads/2014_Pennsylvania_Integrated_Water_Quality_Monitoring_and_Assessment_Report.pdf

Pocahontas State Park (VA) – Trail and Handcycle Bikes – IMBA Website

<https://www.imba.com/node/4861>

Colorado Town – Single Track Sidewalks

<http://www.bikeradar.com/beginners/news/article/colorado-town-approves-singletrack-sidewalks-42979/>

Train of Thought: The Coolest US Rail Trails

<https://roadtrippers.com/blog/rail-trails>

Audubon - Pennsylvania Important Birding Areas – Bald Eagle Ridge (Lycoming, Clinton, Centre, Huntingdon and Blair counties)

<http://pa.audubon.org/pennsylvanias-important-bird-area-program>

PennDOT – Roadway Daily Traffic Volume Map

<http://www.dot.state.pa.us/Internet/Bureaus/pdPlanRe.s.nsf/infoBPRTrafficInfoTrafficVolumeMap>

Regional Water Authority (Connecticut)

<http://www.rwater.com/products-and-services/recreation/>

General Information: <http://www.awwa.org/>

Map of Recreation Area:

<http://www.rwater.com/media/7782/53PDF1.pdf>

Kate Rau – Founder of the Colorado High School MTB League - International Mountain Bicycling Association - Feature Article:

http://www.denverpost.com/Lifestyle/ci_26824092/Kate-Raus-hugs-and-highfives-get-students-on-the-right-track?source=infinite

Bay Area Ridge Trail -

Website with a list of downloadable maps of different segments of trail

<http://www.ridgetrail.org/index.php/the-trail/trail-maps>

Detail of the Northern Portion

<http://www.ridgetrail.org/index.php/the-trail/trail-maps/42-north-bay>

Marin County (CA) – 17 Acre Bike Park-

The Stafford Lake Bike Park in Novato, CA., is intended to provide a bicycle riding area for the public designed for riders of all ages and skill levels, beginner through expert. The facility is designed to promote a community of learning and advancement while providing safe, fun and exciting bike riding experiences.

<https://www.imba.com/blog/tom-ward/bike-park-coming-marin-county-ca>

<http://www.staffordlakebikepark.com/Project.html>

Northwest Trail Alliance – Riverview Natural Area – Ride to Your Ride -

<http://www.nw-trail.org/forum/trail-care-trail-building/trail-project-updates/3787>

Bicycle Tourism Article - Here's a real short piece on the subject - that introduces a different take on our PA Bike Routes -

<http://momentummag.com/features/defining-bicycle-tourisms-impact/>

Oregon's Scenic Bikeway Program –

<http://rideoregonride.com/>

Regional Ridge Trail – Report Appendix Documents (CD)

- Ridge Trail Inventory and Analysis Panels (5)
- Ridge Trail Master Plan Panels (5)
- Summary Report (pdf)

The Ridge Trail

Clinton and Lycoming Counties

Master Plan Summary Report

December 2014

Prepared for: Clinton and Lycoming County Commissioners

Prepared by: Brian S. Auman / Landscape Architecture
www.bsalandplan.com



