

SPRING CREEK CANYON

A Master Plan, Management Plan and Implementation Effort

Balancing the Demands on a Nationally Significant Resource



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BACKGROUND

- Spring Creek is an internationally renowned blue ribbon fly-fishing stream located in central Pennsylvania.
- 1,800 acres of environmentally sensitive land surrounds Spring Creek; all acreage is currently a part of the Rockview State Correctional Institute (RSCI).
- Spring Creek is fed by a series of springs and vernal pools; the Creek has gouged a 3-mile long canyon out of limestone.
- 17 endangered species and 3 unique biohabitats can be found in the Canyon.
- In 2007, the Sierra Club named the Canyon as one of the nation's 52 most imperiled ecologically significant places.



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TIMELINE

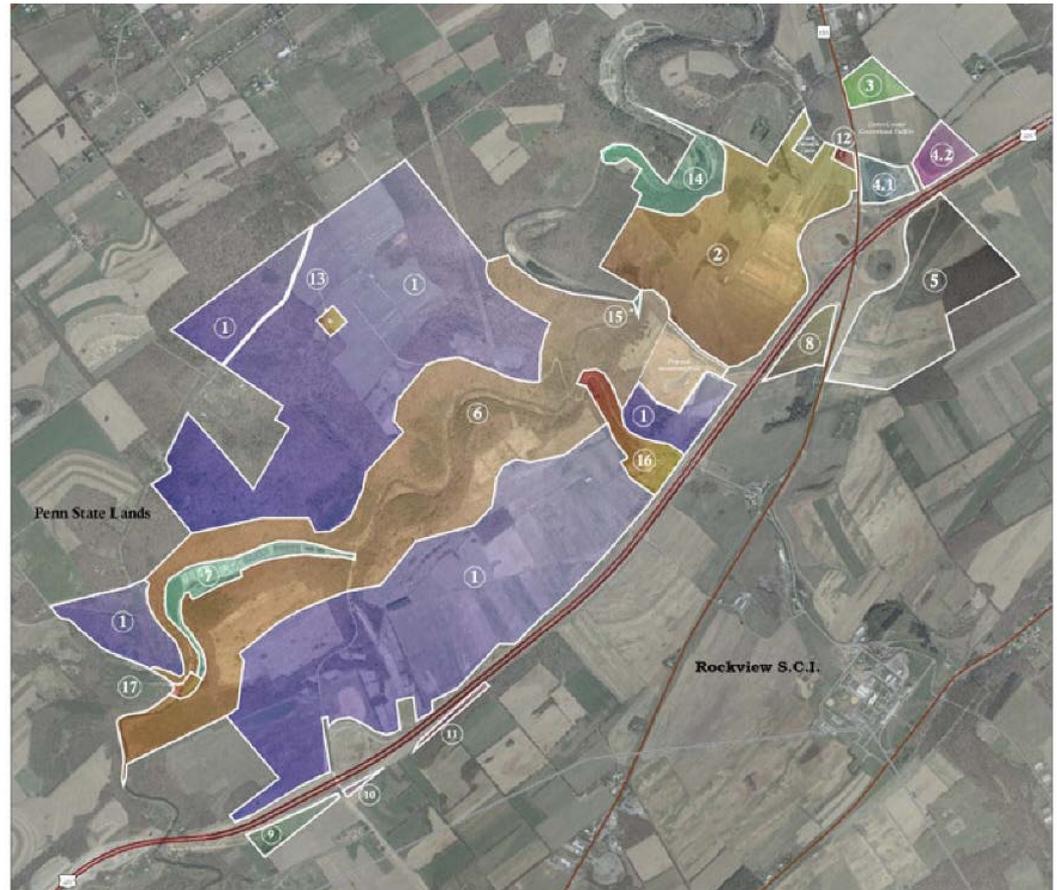
- 2000 - State determines surplus land
- 2004 - the Governor announced plans to divest 1,800 acres out of State ownership.
- Fall 2007 - a local state legislator authored a bill to divide the 1,800 acres between 4 potential owners.
- Spring 2008 - the Department of Conservation and Natural Resources (DCNR) initiated a planning process.
- Spring 2009 - the Master and Management Plans were formally endorsed by the Steering Committee after 10-months.
- Summer 2009 - a second local state legislator drafted a competing bill to transfer the land to different public interests; split public opinion.
- Summer 2010 – Legislation passed.

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PURPOSE OF THE PLAN

- Compile existing resource data and analyze “carrying” capacity.
- Establish appropriate uses and activities.
- Delineate the appropriate locations for the uses and activities to minimize conflicts.
- Identify management responsibilities and define appropriate management structure.
- Evaluate capacities of potential property owners to fulfill plan goals.



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PARTICIPANTS AND PROCESS

- Consultant team comprised of landscape architects, recreational planners, ecologist, civil engineers and agricultural experts.
- Steering Committee composed of representatives of the potential property owners and DCNR.
- 25-person Technical Advisory Committee.
- 15-person Public Advisory Committee.
- Numerous interviews of key stakeholders including agencies and non-profits.
- General public through advertised community meetings/open houses.

CONSULTANT TEAM

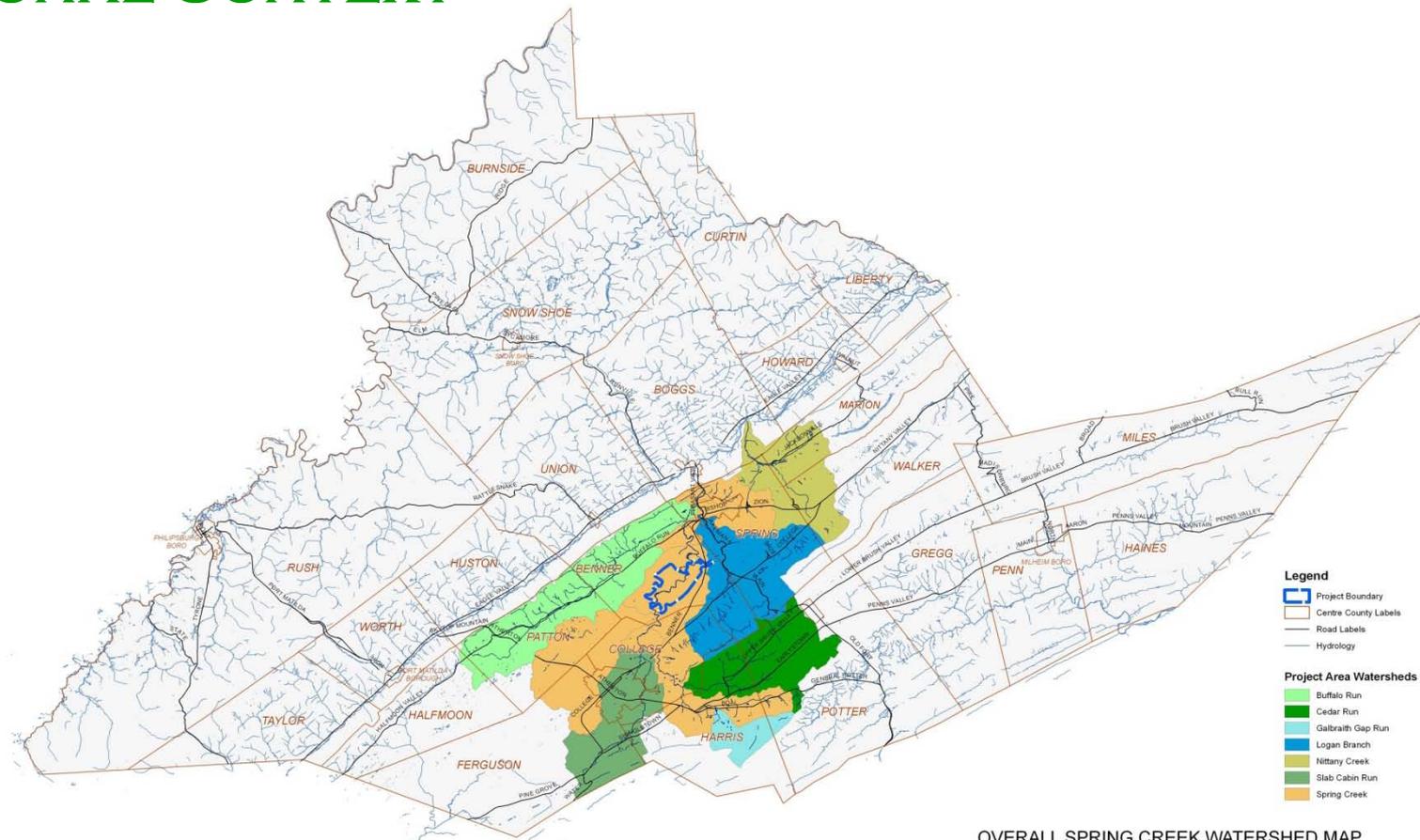
- Environmental Planning & Design, LLC
- Toole Recreation Planning, Inc.
- Johnson, Mirmiran & Thompson Inc.
- Maille Consulting Services, Inc.



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REGIONAL CONTEXT



OVERALL SPRING CREEK WATERSHED MAP

SPRING CREEK CANYON MASTER PLAN

Prepared for: Benner Township
Prepared by: Environmental Planning and Design, LLC
Johnson, Mirmiran & Thompson, Inc.

July 29 2008
2049.08.05

0 9,000 18,000 Feet

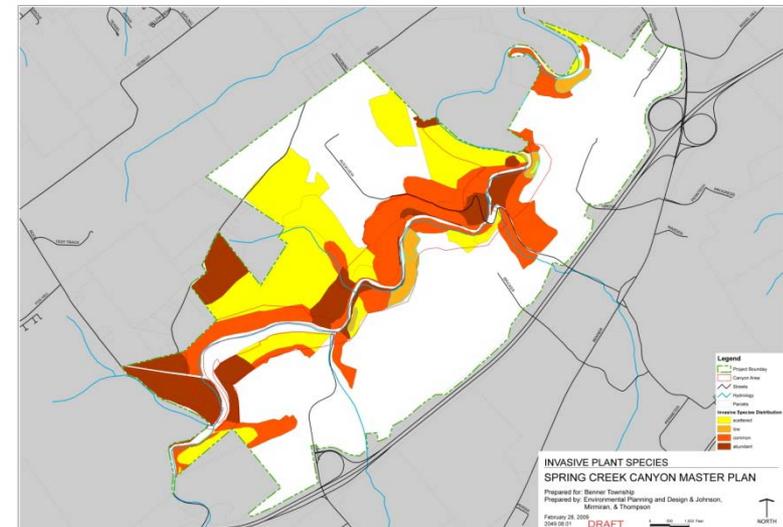
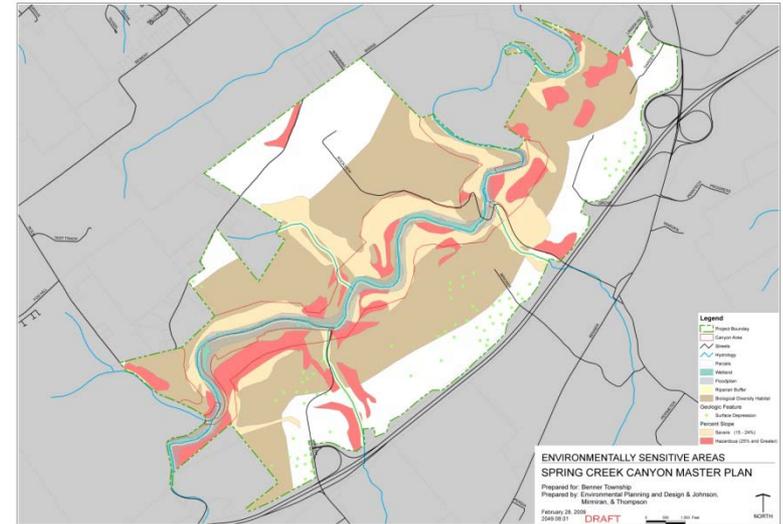


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NATURAL RESOURCE CAPACITY

- Spring Creek is fed by several fresh-water springs; the most productive produces 1,000,000 gallons of water per day.
- The Canyon's springs charge the Creek and support 2 trout hatcheries and a prison housing 2,000 inmates.
- There are nearly 1,200 acres of environmentally sensitive land with 150 highly sensitive acres not suitable for human intrusion. Another 400 acres of Class 1 soils are highly productive for agricultural purposes.
- By 2020, RSCI will expand its inmate population 200% and will increase its water demands.



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CULTURAL AND RECREATIONAL RESOURCE CAPACITY

- The Canyon contains several Native American cave dwellings and numerous Revolutionary War-era settlements and industrial artifacts; the Canyon was the cradle of Centre County.
- The 1,800 acres of land and the Creek have been “officially” closed to the public for more than 100 years.
- The prime canoeing/kayaking season overlaps with the infamous Mayfly hatch and the peak trout fishing season.
- The Canyon is part of a regional greenway and is the focal point for trail development.

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MASTER PLAN

Overall Site

- Construct road and parking area cartways and ADA accessible parking with materials to enable 4-season access
- Install interpretive signage at parking area/trailhead to emphasize the Site as a system of exceptional natural resources to be enjoyed and protected
- Install gates at road entrance/parking areas as a management tool for Site access
- Promote stormwater infiltration in parking areas
- Eradicate invasive species throughout the Site
- Mark trails with blazes

Northwestern Uplands

- Designate Barns Lane as a trailhead entrance
- North of Spring Creek: Establish barrens communities to maximize potential groundwater recharge; Promote seed germination of barrens species found on Site
- Designate the North Uplands Trail within the Site's former orchard area

Spring Creek Corridor

- Delineate the stream-side Spring Creek Trail
- Explore feasibility of on-site canoe/kayak put-in in conjunction with construction of off-site take-out
- Existing Fish and Boat Commission Facility

Rock Road Access

- Rock Road should serve as a trailhead access
- Promote fishing access at Rock Road entrance
- Explore feasibility of on-site canoe/kayak put-in in conjunction with construction of off-site take-out

Shiloh Road Access

- Identify Shiloh Road as a trailhead access and as an access for landowners
- Promote fishing access at the Shiloh Road entrance
- Formalize the lands for agriculture research/education for conservation by physically defining their extents on the Site

Eastern Uplands

- Formalize the lands for agriculture research/education for conservation by physically defining their extents on the Site
- Create a South Fields Trail within the Site's southwest and south central quadrants
- Relocate trails as necessary based upon progression and locations of restoration activities

Northern Uplands

- Designate Paradise Road as a trailhead entrance
- Establish a pedestrian connection between the the South Fields Trail and Paradise Road trailhead
- Formalize the lands for agriculture research/education for conservation by physically defining their extents on the Site
- South of Spring Creek: Restoration to include the planting of warm-season grasses and successional species in appropriate areas

LEGEND

- Conservation/Existing Woodlands
- Restoration
- Agriculture Research/Education for Conservation
- Spring Creek
- Primary Trail Network
- Access Gate (Typ.)
- 🚗 Vehicle Access
- 🏊 Water Access Point
- ◆ Streamside Gateway into the Site

ILLUSTRATIVE MASTER PLAN SPRING CREEK CANYON MASTER PLAN

Prepared for: Benner Township
Prepared by: Environmental Planning and Design, LLC
Date: April 15, 2009
2049.09.11r1

0 500 1000 Feet



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MANAGEMENT CAPACITY

- The management capacity assessment outlined a range of administrative, financial and operational responsibilities as per the uses and activities anticipated in the Master Plan.
- A host of potential stakeholders was evaluated based on their ability to perform the defined responsibilities.
- The capacity assessment considered the availability of scientific/professional expertise, availability of man-power and equipment, financial means and organizational mission.

- Potential stakeholders that were evaluated:

PA DCNR

Benner Township

Penn State University (PSU)

PA Fish and Boat Commission (FBC)

PA Game Commission (PGC)

PA DEP (DEP)

Centre County government

Centre County Historical Society

ClearWater Conservancy (CWC)

The Nature Conservancy (TNC)

Western Pennsylvania Conservancy (WPC)

Trout Unlimited

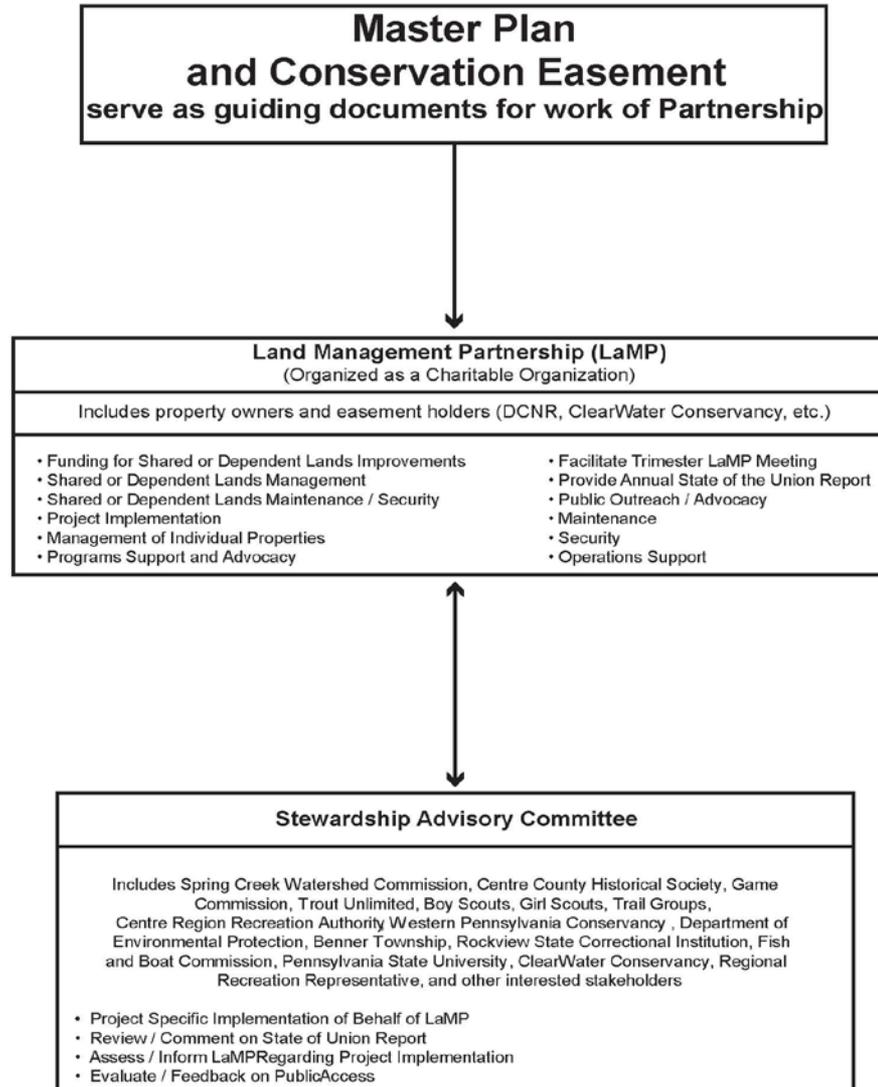
Local trail groups

Sierra Club elected not to participate in the assessment but maintained its opposition to potential property ownership by Penn State University and Benner Township.

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PROPOSED MANAGEMENT STRUCTURE

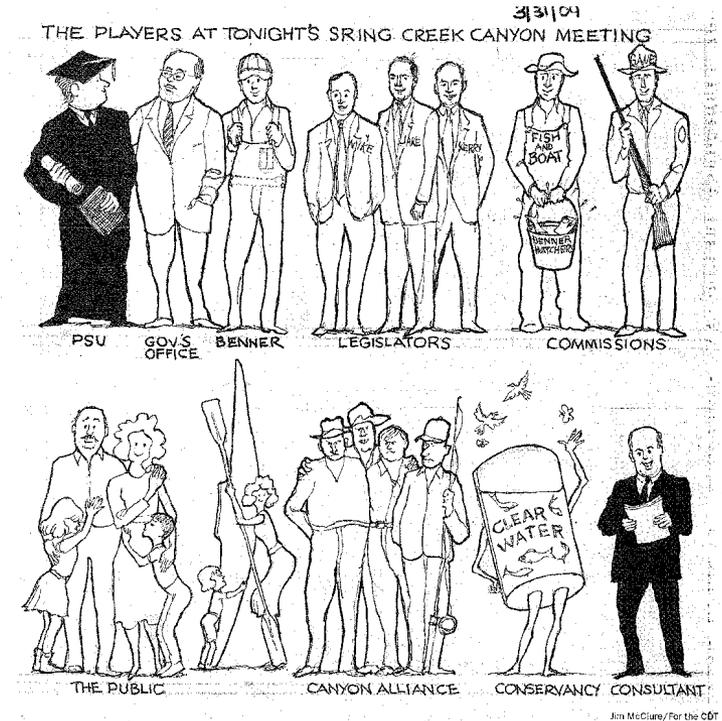


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MASTER PLAN/MANAGEMENT PLAN REFLECTIONS

- Articulating the plan's real versus perceived intention
- Including all groups needed to reach implementable solutions
- Acknowledging larger political context
- Communicating as much as you can
- Watching for terms that participating groups may define differently
- Anticipate how the plan will need to be woven into other "agreements"
- Focus enough time and attention on building the foundation to implement the Plan



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ZONING OVERLAY BOUNDARIES



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The intent of the Spring Creek Canyon Conservation Overlay is to:

- Complement the stated Intent of the Township's Conservation District;
- Minimize site disturbance in order to promote conservation and restoration of native plant communities and promote suitable buffers in proximity to critical habitat areas;
- Preserve cultural and historical resources;
- Safeguard groundwater infiltration and protect surface and groundwater quality conditions for local and regional residents;
- Provide educational opportunities that are based on sustainable resource management;
- Protect the economic value and importance of Spring Creek to the community and the Centre Region; and
- Balance passive recreation opportunities with site capacity and sensitive environments.

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ORDINANCE PROVISIONS

- suitable uses for primary zone
- disturbance analysis
- restoration formulation
- identification of natural features
- forestry canopy plan
- LEED bonus
- Phase I Cultural Resource Assessment required
- stormwater control strategies beyond otherwise required

	Sensitive Existing Conditions	Gross Lot/ Site Area (acres)		Permitted Disturbance Ratio		Net Disturbable Area (acres)
<i>Line 1</i>	All floodplains (existing undisturbed), wetlands, and hydric soils	_____	x	0.0	=	_____ 0.0
<i>Line 2</i>	All floodplains (existing [previous] disturbed)	_____	x	0.5	=	_____ 0.0
<i>Line 3</i>	All waterbodies and natural drainageways/streams	_____	x	0.0	=	_____ 0.0
<i>Line 4</i>	All springs and vernal pools (including 100 ft buffer)	_____	x	0.0	=	_____ 0.0
<i>Line 5</i>	Carbonate Geology	_____	x	0.1	=	_____ 0.0
<i>Line 6</i>	Slopes \geq 10%	_____	x	0.05	=	_____ 0.0
<i>Line 7</i>	Riparian buffers (existing undisturbed)	_____	x	0.05	=	_____ 0.0
<i>Line 8</i>	Riparian buffers (existing [previous] disturbed)	_____	x	0.2	=	_____ 0.0
<i>Line 9</i>	Slopes 0% to 9%	_____	x	0.8	=	_____ 0.0
<i>Line 10</i>	<i>Sum of Lines 1+2+3+4+5+6+7+8+9</i>	_____ 0.0				_____ 0.0

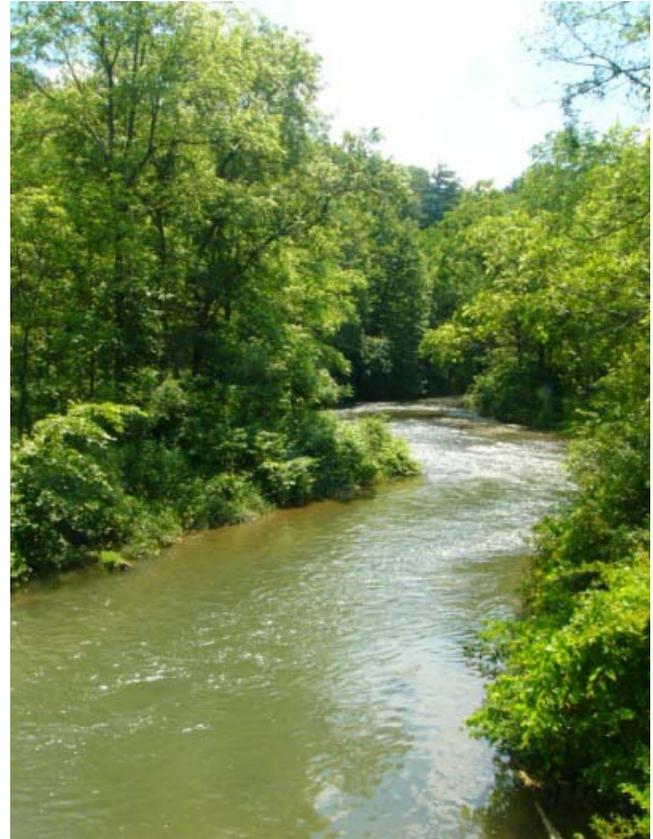
(Total Net Disturbable Area)

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ORDINANCE REFLECTIONS

- Articulating the plan's real versus perceived intention
- Ordinance Adoption Process
- Use of overlay zoning
- Use of consultant to develop ordinance
- Want to adopt before land transfers
- Lessons learned
 - landowner engagement inadequate
 - no public education efforts
 - dealing with State entities



SPRING CREEK CANYON

A Master and Management Plan

“Everybody needs beauty as well as bread; places to play in and pray in, where nature may heal and give strength to body and soul.”

- John Muir

