

A Multi-Pronged Trailbuilding & Management Strategy



**Cleveland
Metroparks**

**Trails Division
Cleveland, Ohio**



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Cleveland's Trail Division at 10 Years Old



Ralph Protano

Trails Development Manager

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Crew Members

Erica Hirsch

Trails Signage & Volunteer Coordinator

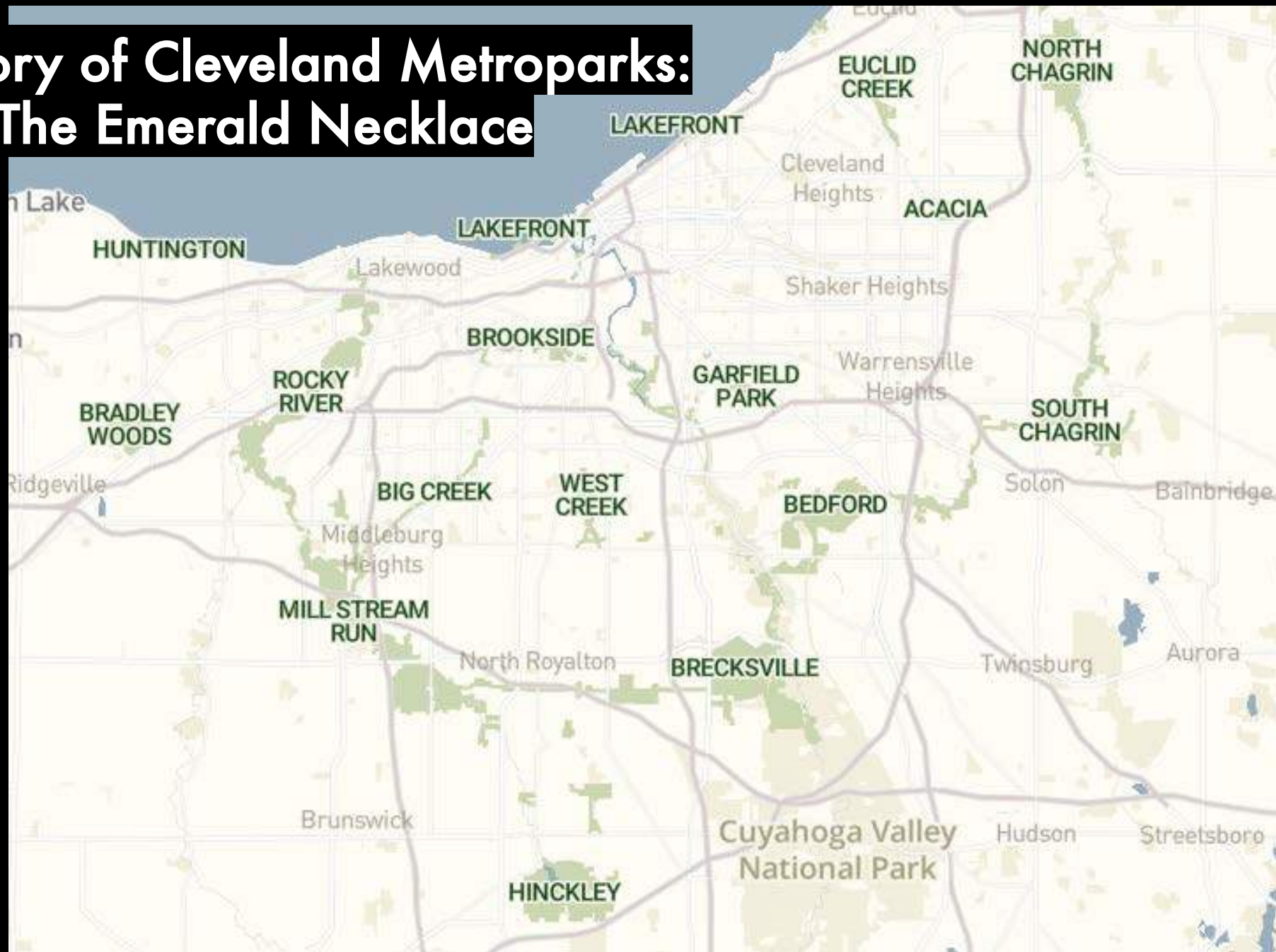
Jackson Wolf

Mountain Bike Trails Coordinator

Where We're From:
The Shores of Lake Erie-
Cleveland, Ohio



A History of Cleveland Metroparks: The Emerald Necklace



Metroparks Trail System in 2012 – Mostly Unchanged for Generations



Common Physical Impacts on Metroparks Trail Systems



Erosion & Imported Gravel
Deposited Into Water Sources



Significant Social Trail Impact



Erosion & Watershed Impact

Typical Context “Steep and Rooty”:

- Erosion
- Soil Compaction
- Root Damage





**Typical Context – “Flat and Wet”:
Trampling, Vegetation Impacts, Soil Compaction**

Deciding to Address these Challenges: **Starting a Trails Division for Cleveland Metroparks in 2012**



Building an Understanding for Sustainable Natural Surface Trails



Introducing Sustainable Trail Techniques to Northeast Ohio Terrain Conditions



Strategies for Trail Management Success

1. Develop a Trail Management Philosophy that can be understood and agreed upon across your organization.
2. Establish Techniques for Trail Solutions that address your entire scope of issues.
 - *many problems are interdependent*
3. Diversify Crews to Maximize Productivity and Quality of Work.

Strategy #1:

“Develop a Trail Management Philosophy”

Foundational Philosophy (Your Belief System)

- Appreciate your terrain and users as two contrasting clients whose needs must be balanced in order to make effective management choices.

Physical Philosophy (Terrain)

- Understand the trail within the context of its environment.

Psychological Philosophy (Trail Users)

- Set realistic expectations for trail user behavior and enforcement.

Practical Philosophy (Getting Stuff Done)

- Cultivate a more harmonious trail system by making sensible trailwork decisions that balance terrain sensitivity and trail user desires.

Defining Trail Sustainability:

A trail that:

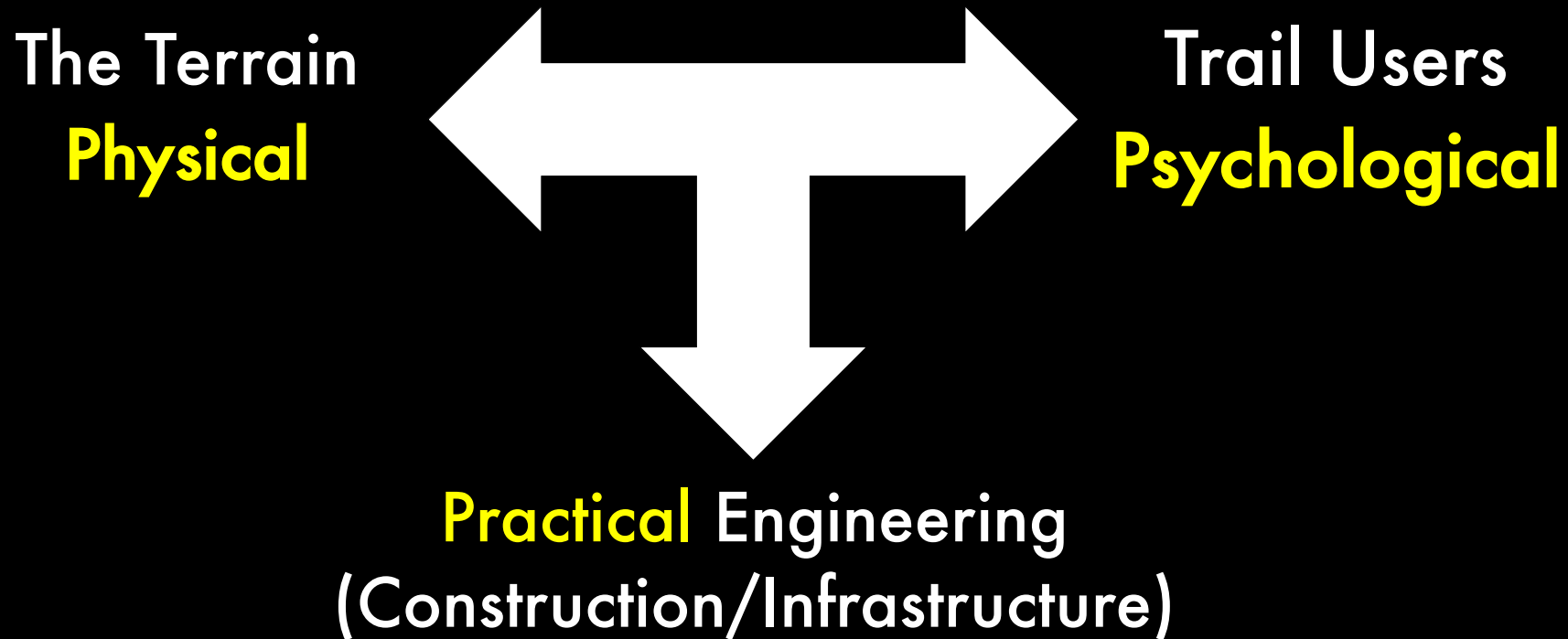
- conforms to its environment
physical
- accommodates its intended use
psychological
- minimizes annual and cyclic maintenance
practical

A photograph of a forest path. In the foreground, a large, dark puddle reflects the surrounding trees and sky. The path is made of dirt and fallen leaves, leading into the distance. The trees are tall and thin, with bare branches, suggesting a late autumn or winter setting. The overall scene is quiet and natural.

Is it good for the people and the environment?

“Develop a Trail Management Philosophy” **Foundational Philosophy**

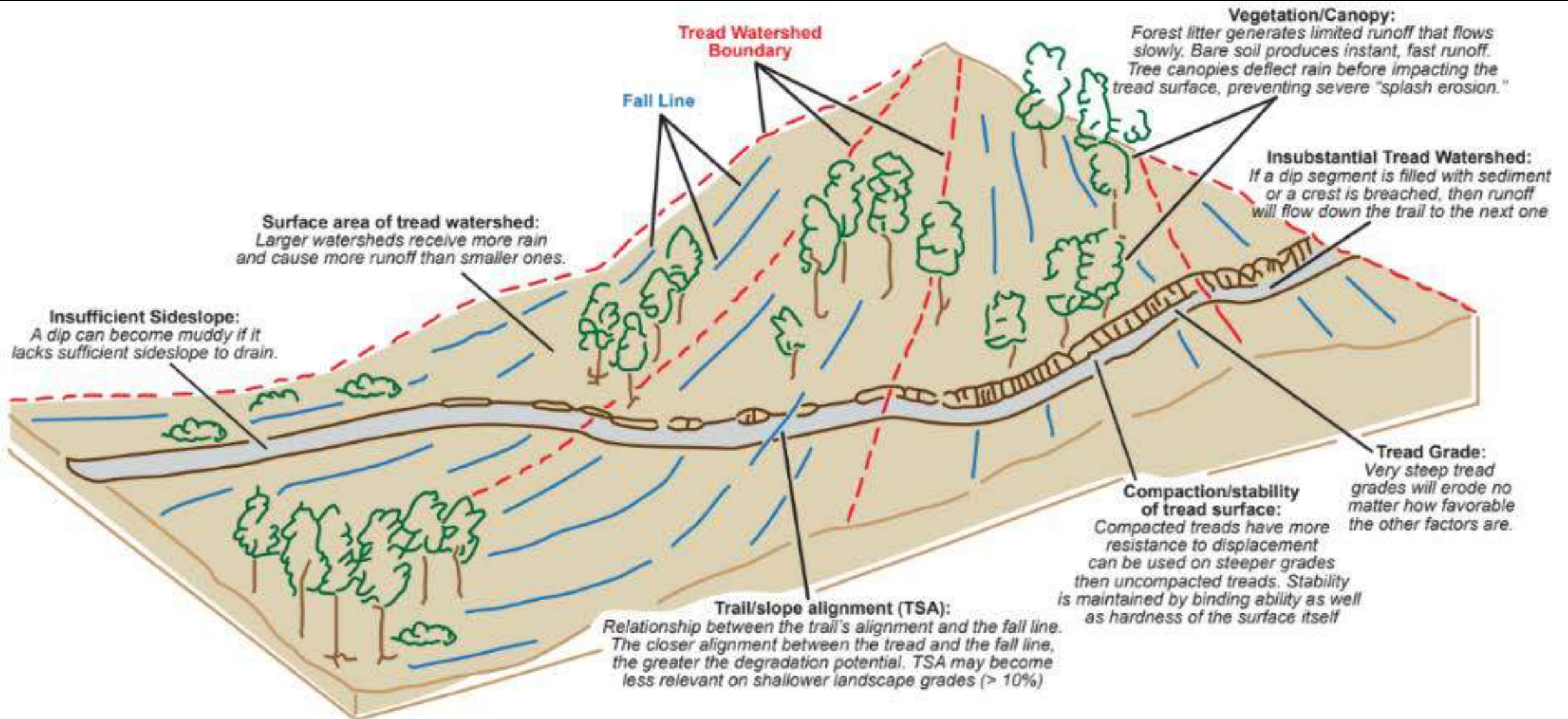
*Understand your key stakeholders
to better grasp the scope of work.*



"Develop a Trail Management Philosophy" **Foundational Philosophy**

What Can the Ground Accommodate?

Dividing by Tread Watershed



"Develop a Trail Management Philosophy" Physical Philosophy

UNREALISTIC TRAIL MANAGEMENT EXPECTATIONS



Drain trails poorly and
not expect users to widen them.



Expect trail restoration compliance
without proactively managing the site.



Expect users not to take
shortcuts whenever available.



Prohibit mtbing
without providing local
alternative options.



Try to keep people out of places
they are going to go to anyway.

"Develop a Trail Management Philosophy" Psychological Philosophy

PRIMARY FOCUSES AT CLEVELAND METROPARKS FOR IMPROVING TRAIL SYSTEM

Improve Existing Trail, Restoration & Wayfinding Conditions Prioritizing High Use



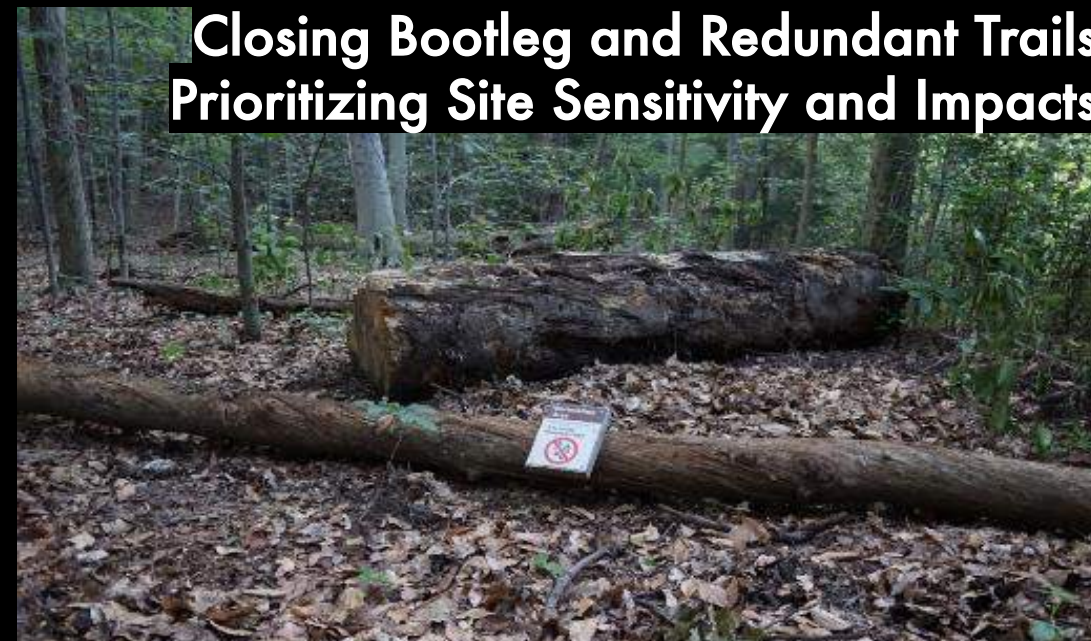
Permit People Access to highly desired locations using sustainable design



Accommodate Trail Use Types that can be managed sustainably



Closing Bootleg and Redundant Trails Prioritizing Site Sensitivity and Impacts



"Develop a Trail Management Philosophy" **Practical Philosophy**

Strategy #2: **“Establish Techniques for Trail Solutions”**

- 1. Different Solutions for Dynamic Contexts**
- 2. Use Best Available Talent to Solve Critical Trail Issues.**
- 3. Develop a Focused Restoration and Decommissioning Plan**
- 4. Design Trail Signage as a Critical Communications Tool**
- 5. Organize Volunteers to Monitor Systems**

Picking a Solution that Fits the Site.



"Establish Techniques for Trail Solutions" **Different Solution for Dynamic Contexts**

Same Structural Principles, Different User Expectations.

A photograph of a narrow, hand-cut dirt trail winding through a forest. The trail is uneven and appears to be a simple cut through the forest floor. The surrounding trees are tall and thin, with green foliage. The ground is covered in brown leaves and mulch.

Hand Bench Cut

A photograph of a wider, more finished trail winding through a forest. The trail is made of a light-colored material, possibly gravel or sand, and is bordered by a low, dark mulch edge. The surrounding trees are tall and thin, with some autumn-colored foliage. The ground is covered in brown leaves and mulch.

Machine-Built Improved

“Establish Techniques for Trail Solutions”

Different Solution for Dynamic Contexts

Thoughtful trail structures can shape people's perceptions of nature.



BEFORE



AFTER

"Establish Techniques for Trail Solutions" Use Best Available Talent to Solve Critical Trail Issues.



“Establish Techniques for Trail Solutions” **Use Best Available Talent to Solve Critical Trail Issues**

Completing meaningful restoration work that facilitates revegetation & clearly defines the site helps build increased support from trail users.



***“Establish Techniques for Trail Solutions”* Develop a Focused Restoration and Decommissioning Plan**

Combine Resources to Meet the Challenge of the Site

(In-House, Volunteers, Urban Youth Corps, Management)



“Establish Techniques for Trail Solutions” **Develop a Focused Restoration and Decommissioning Plan**

Sound Trail Signage Supports Users While Communicating Management Intentions.



"Establish Techniques for Trail Solutions" **Design Trail Signage as a Critical Communications Tool**

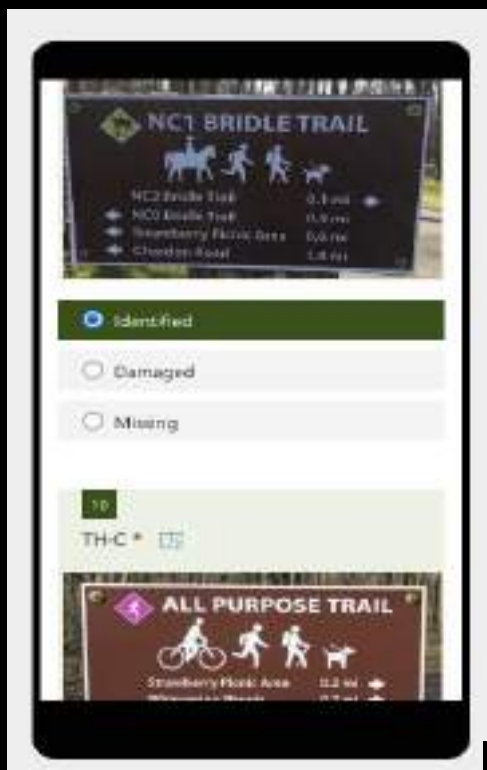


"Establish Techniques for Trail Solutions" Design Trail Signage as a Critical Communications Tool

NC1

North Chagrin Reservation

Inventorying Signs & Markers for Long-Term Management.



"Establish Techniques for Trail Solutions"

Design Trail Signage as a Critical Communications Tool + Organize Volunteers to Monitor Systems

Managing Mountain Bike Trail Closures



Tweets

Tweets & replies

Media

Likes



Trail Conditions @CMPmtb · 1d

Bedford is open and in great shape after yesterday's work crew cleared the trail of leaves, 10/18/20



Trail Conditions @CMPmtb · 2d

The CMP Trail Crew teamed up with our volunteers today and just finished a complete pass of Bedford Singletrack, clearing leaves off the trails. Come out and ride while it's prime— 10/17/20



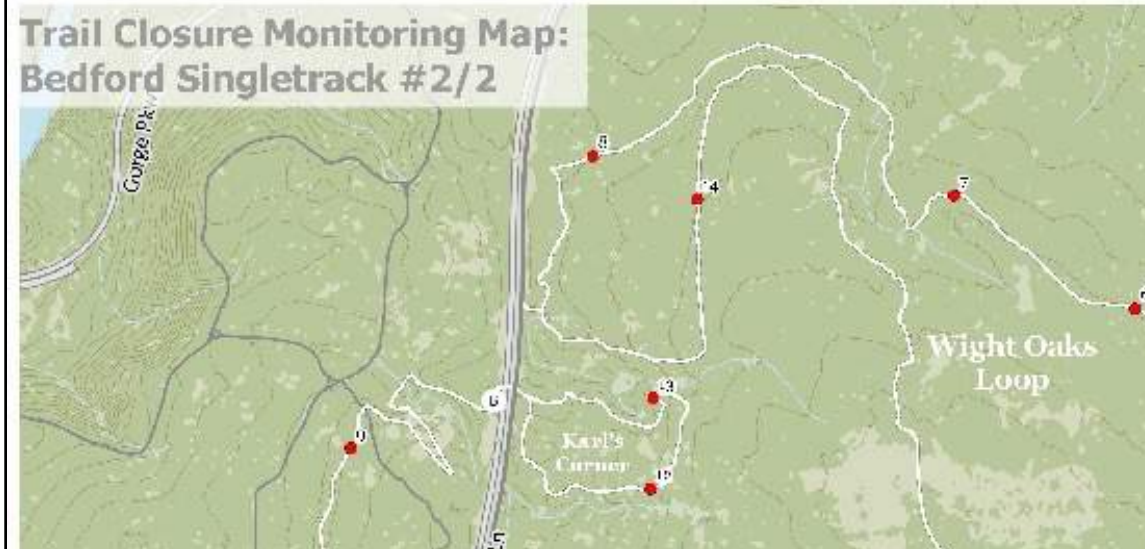
Trail Conditions @CMPmtb · 2d

Royalview is open 10/17. Should be a great day to ride after the trail crew cleared the leaves off the trails yesterday.

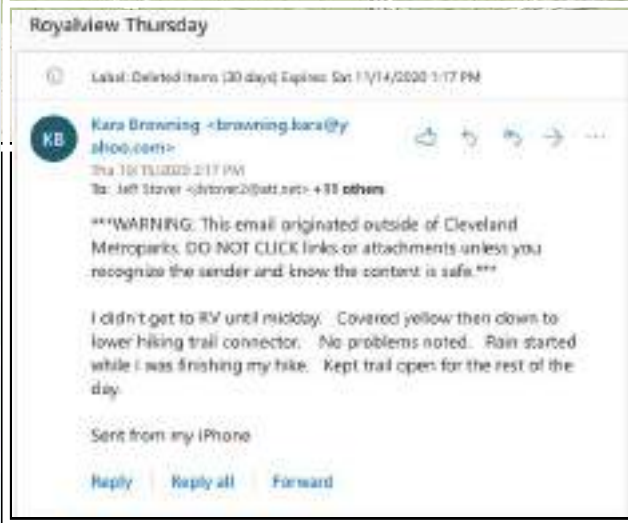
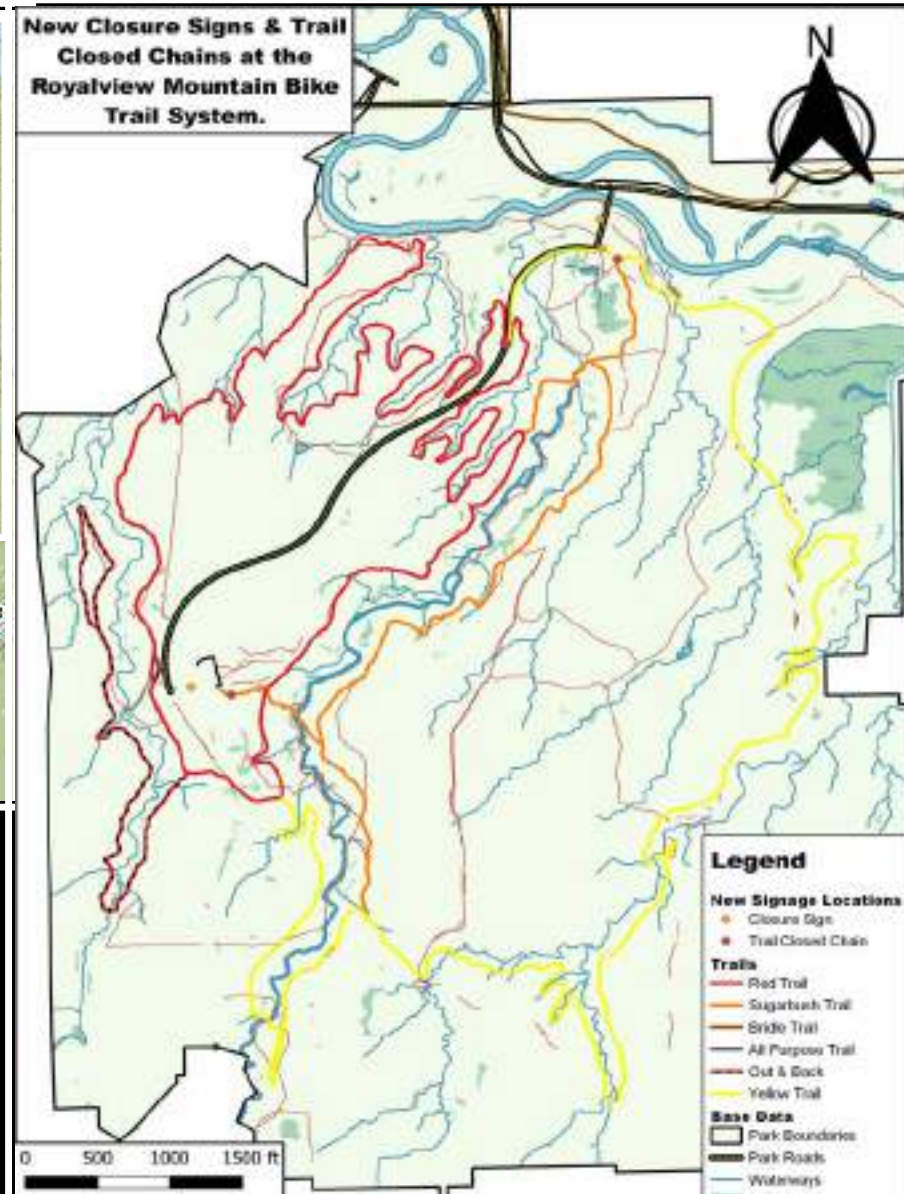
"Establish Techniques for Trail Solutions" **Organize Volunteers to Monitor Systems**

Implementing and Sustaining a Trail Monitoring Program.

Trail Closure Monitoring Map:
Bedford Singletrack #2/2



New Closure Signs & Trail
Closed Chains at the
Royalview Mountain Bike
Trail System.



“Establish Techniques for Trail Solutions” - Organize Volunteers to Monitor Systems

Trail Strategy #3:

“Diversify Crews to Maximize Productivity and Quality”

- 1. Technical In-House Trail Crew and Fabrication**
- 2. Professional Trailbuilding Contractors**
- 3. In-House Seasonal Trail Crews**
- 4. Group Volunteer Trailwork**
- 5. National Conservation Corps Crews**
- 6. Urban High-School Corps**



"Diversify Crews to Maximize Productivity and Quality" **Technical In-House Trail Crew**



"Diversify Crews to Maximize Productivity and Quality" Technical In-House Trail Crew

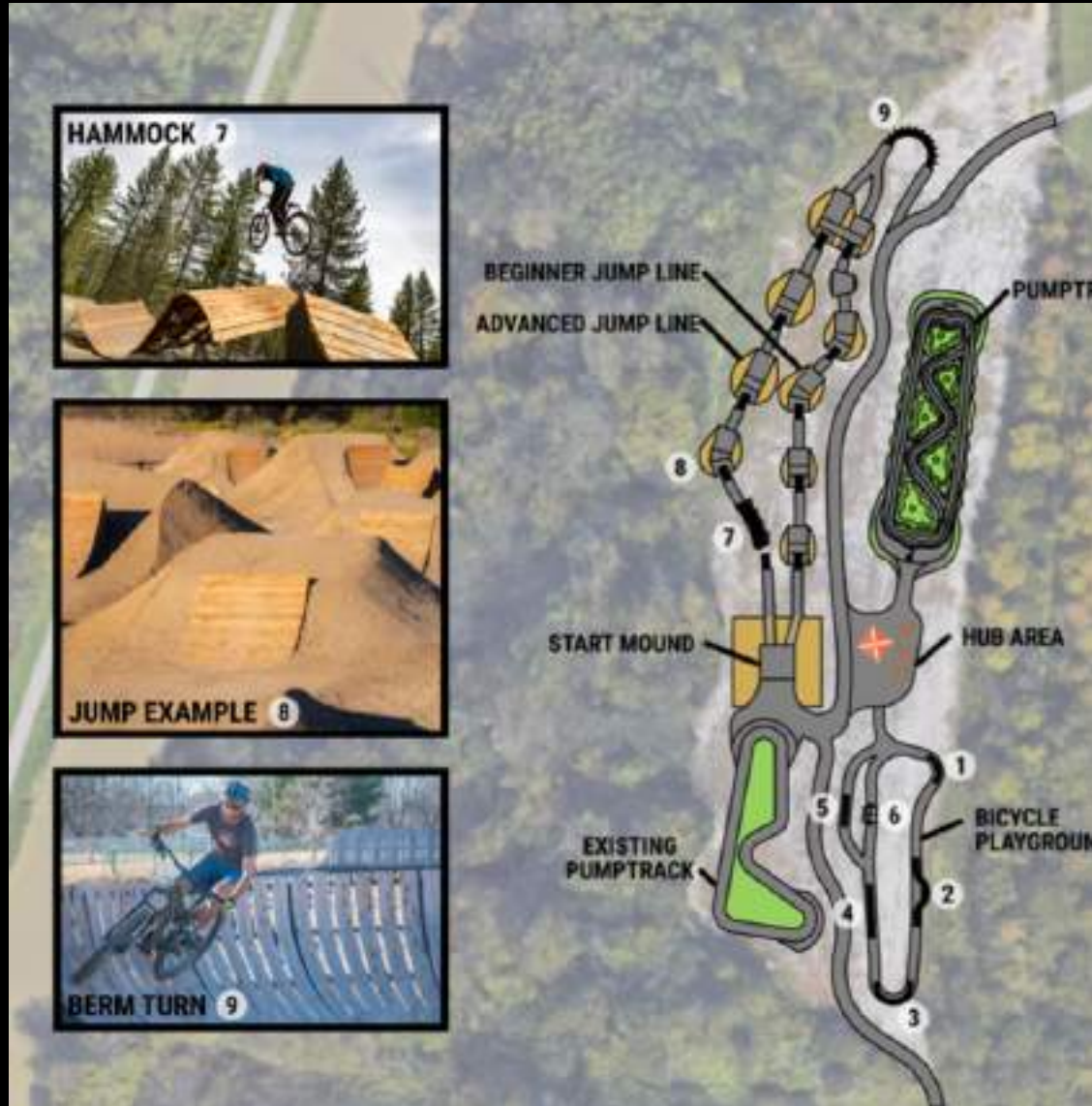


“Diversify Crews to Maximize Productivity and Quality” **Technical In-House Trail Crew Fabrication**



“Diversify Crews to Maximize Productivity and Quality”
Technical In-House Crew & Professional Trailbuilding Contractors

BIKE PARK MASTER PLAN & CONSTRUCTION



“Diversify Crews to Maximize Productivity and Quality” Professional Trailbuilding Contractors



“Diversify Crews to Maximize Productivity and Quality” **In-House Seasonal Trail Crews**

Good Design and Enthusiastic Volunteers can be an inexpensive way to drastically improve trail issues and increase capacity.



"Diversify Crews to Maximize Productivity and Quality" Group Volunteer Trailwork



"Diversify Crews to Maximize Productivity and Quality" **Group Volunteer Trailwork**

The Value of Hand Trail Construction



"Diversify Crews to Maximize Productivity and Quality" In-House Seasonal Trail Crews, Volunteers, Conservation Corps



"Diversify Crews to Maximize Productivity and Quality" **Conservation Corps**



"Diversify Crews to Maximize Productivity and Quality" **Urban Youth Corps**

Strategies for Successful Trail Management

1. *Develop a Philosophy*

- **Foundational**
 - *Physical (Terrain)*
 - *Psychological (Trail Users)*
- *Practical Engineering*

2. *Establish Techniques*

- Different Solutions for Dynamic Contexts
- Use Best Available Talent to Solve Critical Trail Issues.
- Develop a Focused Restoration and Decommissioning Plan
- Trail Signage as a Critical Communication Tool
- Use Volunteers to Monitor Systems

3. *Diversify Crews*

- Technical In-House
- PTBA Contractors
- In-House Seasonal
- Volunteer Labor
- Conservation Crops
- Urban Youth Corps

Thank You & Happy Trails



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Cleveland, Ohio**

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