PROJECT DEVELOPMENT

• **Brief history**
  - Gateway Phase 1
  - IMBA conceptual plan
  - BikeShasta: concert series
  - USFS & MSTA partnered to complete the NEPA analysis

• MSTA is funding a consultant company to complete Environmental Assessment
  -- surveys required for various resources
  -- writing the resource technical reports

• Forest Service is reviewing stages of NEPA and serving in technical capacity
NEPA PROCESS

1. Identify need for project
2. Develop proposal
3. Scoping/Public Input
4. Identify issues and develop alternatives
5. Effects Analysis
6. Notice for Comment on Environmental Assessment/Public Input
7. Notice of Objection on draft Decision Notice
8. Predecisional Administrative Review
9. Issue Decision Notice
10. Implementation

We are here
The purpose of this project is to increase non-motorized recreational opportunities for hiking, trail running, mountain biking and equestrian use around the City of Mt. Shasta by expanding the existing Gateway Trail system.

**Proposed Action**

This Proposed Action is intended to meet the need for additional non-motorized recreation in the greater Mt. Shasta area. The Proposed Action has four components:

1. Expansion of the McBride Springs Campground
2. Construction of a network of multi-use, non-motorized trails
3. Construction of additional trailheads
4. Decommissioning of unauthorized, user-created trails
• Construct an additional camping loop
• Approximately 10 - 12 additional sites
  ✓ Tent pad
  ✓ Picnic table
  ✓ Fire ring
  ✓ Food locker
• Concerns with white fir will be mitigated with removal of trees
NON-MOTORIZED TRAIL EXPANSION PROPOSAL

1. Construction of approximately 45 additional miles of sustainable multi-use, non-motorized trails that vary in degree of difficulty
   ✓ Connect to the existing Gateway trail system
   ✓ Connect to the Mt. Shasta Ski Park

2. Development of 4 trailheads (2 are existing recreation sites)
Introduction

• Andrew Pellkofer
• Owner/Principal at TRAIL Laboratories
• B.S. Environmental Management & Protection – Cal Poly
• M.A. Parks & Recreation Administration – Chico State
• USGS, BLM, American Rivers, WA State Dept. of Ecology, Weyerhaeuser, Evergreen Mountain Bike Alliance
Outline

• Planning & Design
• Conceptual Layout
• Field Investigations
• Proposed Alignments
• Questions
What is a sustainable trail?

A trail is considered sustainable when it allows users to enjoy an area with minimal impact to natural and cultural resources, requires only modest maintenance, and aligns with desired user experiences.
Planning & Design

**Identify**
- Recreation objectives
- Setting characteristics
- Current use
- Environmental conditions

**Establish**
- Trail user objectives
- Desired experiences and outcomes

**Design**
- Conceptual design
- Field investigation
- Layout & flagging
Planning & Design

Recreation Objectives
- Multi-Use
- Emphasis on Mountain Biking
- Stacked Loops
- Connectivity

Setting Characteristics
- Rural
- Front country
- Middle country

Current Use
- Non-motorized

Environmental Conditions
- Pine plantations & mixed conifer forests
- Volcanic soils
- Variable topography
- Entrenched streams
### Trail Users

- Mountain Biking
- Hiking
- Trail Running
- Equestrian

### Trail User Objectives

- **Nature**
- **Risk**
- **Variety**
- **Escape**
- **Fun**
- **Connectivity**
- **Solitude**
- **Play**
- **Socializing**
- **Challenge**
- **Exercise**
- **Efficiency**

### Experiences & Outcomes

- Developing skills and abilities
- Restored mind
- Enjoying nature
- Greater sense of adventure
- Reducing stress
- Improved physical fitness
**Multi-Use Trail:** Allow two or more distinct user groups

**Preferred Use:** Allow two or more user groups, but are designed to primarily accommodate the experiences of one of the users

**Single Use:** Allow only one user group. Designed to offer targeted user experiences.

*color denotes trail difficulty based on IMBA color coding (next slide)*

**USFS Trail Class Design Standards**

**Trail Class 2:** Moderately Developed

- Continuous and discernable tread, but narrow and rough
- Single lane with constructed minor allowances for passing
- Obstacles may be common, substantial and intended to provide increased challenge
- Structures of limited size, scale and quantity, typically constructed of native materials
- Natural fords
- Route identification signing limited to junctions, and where needed
- An overall feeling of natural and unmodified trail*

*Not applicable to all trails*
Terms & Standards

IMBA Trail Design Standards and Ratings

Management Controls

In addition to influencing the experience, trail features can be integrated into the trail planning and design process to function as a tool to achieve a variety of management objectives, including resource protection. For example, constructing a backslope that is built into the prevailing slope allows soil to stabilize and vegetation to grow. This reduces erosion and minimizes soil-related trail loss. It also allows the trail to be more visible, which is important to enhance the following illustrated management tools. These tools can help trail managers identify features that serve the dual purpose of providing for a desired user experience while simultaneously achieving important management objectives.

<table>
<thead>
<tr>
<th>Trail Difficulty Rating System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easiest</td>
</tr>
<tr>
<td>Trail Width</td>
</tr>
<tr>
<td>White Circle</td>
</tr>
<tr>
<td>72° or more</td>
</tr>
<tr>
<td>Hardened or surfaced</td>
</tr>
<tr>
<td>Average</td>
</tr>
<tr>
<td>Trail Grade</td>
</tr>
<tr>
<td>Less than 5%</td>
</tr>
<tr>
<td>3° or less</td>
</tr>
<tr>
<td>20% or more</td>
</tr>
</tbody>
</table>

BACKSLOPE
PREVAILING SLOPE TO BACKSLOPE RATIO. FOR SLOPES > 20°, VARY BASED ON SOIL AND VEGETATION, SHOULD APPROXIMATE A NATURAL ANGLE OF REPOSE.
IMBA Conceptual Plan (2013)
Field Investigation

- Funky layout
- Will stream crossings work here?
- More funky layout
- Goes through private property?
- Very steep. Buildable?
- What’s going on with loop?

IMBA Conceptual Plan (2013)
Field Investigation
Proposed Alignments

Big Mountain Zone

Learning Zone (Discovery Center)

Community Zone

Mt. Shasta Ski Park

Gateway Trailhead

Existing Gateway Trails

Google Earth
Community Zone

5 Trails
- Shared Use: 4 trails / 12.82 miles
- Single Use: 1 trail / 2.17 miles (MTB flow trail)

Design Objectives
- Fun
- Exercise
- Variety
- Socializing
- Connectivity

Narrative: Close to town and easy to access, the Community Zone is designed to build upon the existing Gateway network and create more opportunities to quickly get out and enjoy the forest. It also offers great access and a wide variety of trail experiences for campers at McBride Springs CG.

Proposed Alignments

1) MTB Flow Trail: 2.17 mi., Intermediate
2) EMH Trail: 6.75 mi., Intermediate
3) KC Trail: 2.08 mi., Intermediate
4) Unknown Trail: 3.35 mi., Intermediate
5) Mornings Star Knoll Trail: 0.64 mi., Intermediate
Learning Zone (Discovery Center)

4 Trails
- Shared Use: 9.48 miles

Design Objectives
- Nature
- Fun
- Adventure
- Exercise
- Challenge
- Connectivity

Narrative: With a trailhead at the Nordic Center, a short connection to the Mt. Shasta Ski Park, and mellow, rolling terrain with fantastic views all around, the Learning Zone is ideal for those new to trails. A series of loops allow users to begin easy, and add mileage if they feel up to the challenge. Ideal for families, children, and those new to trail based recreation.
Big Mountain Zone(s)
- Upper Mountain: 12.9 miles
- Lower Mountain: 9.13 miles
Big Mountain Zone (Upper Mountain)

5 Trails / 4 Connectors
- Shared Use: 2 trails / 5.42 miles
- Shared Use Connectors: 3.13 miles
- Single Use: 3 trails / 5.35 miles

(MTB Downhill and Flow Trails)

Design Objectives
- Nature
- Escape
- Risk
- Fun
- Challenge
- Variety

Narrative: Designed to provide a variety of trail experiences, but with an emphasis on mountain biking, the upper area of this zone is anchored at the Vista Point Trailhead along Everitt Memorial Highway. Functioning as a drop point for shuttle mountain biking, users can descend into the Community Zone, the south end of town, or the Learning Zone via an assortment of routes ranging from blue level flow trails, to black and double black diamond level DH trails. There are also multi-use connector trails throughout this zone, as well as a multi-use trail from the Vista Point.

Proposed Alignments
- Wagon Camp Trail: 3.56 mi., Intermediate
- Vortex Trail: 2.11 mi., Intermediate
- Pyroclasim Trail: 1.00 mi., Advanced
- Portal Dust Trail: 1.86 mi., Intermediate
- Purple Pyramid Trail: 2.24 mi., Advanced
- Connector Trails: 3.13 mi., Intermediate
Big Mountain Zone (Lower Mountain)

4 Trails
- Preferred Use: 3 trails / 6.94 miles
- Single Use: 1 trail / 2.19 miles
  (MTB Downhill Trail)

Design Objectives
- Fun
- Play
- Risk
- Challenge
- Exercise

Narrative: With a proposed trailhead along South Mount Shasta Blvd., this area offers users a quick way to enjoy a fun, playful, and potentially challenging trail experience. Designed as a preferred use zone, and commonly known as a lollipop loop, this design offers users an out-and-back experience with several options for the trip back down the mountain, or they can keep climbing and head deep into the upper area of the Big Mountain zone.

*City of Mt. Shasta Trailhead is not part of USFS project proposal

Proposed Alignments:

1. Upper Bear Springs Trail: 2.19 mi., Advanced
2. Tarp Trail: 4.06 mi., Intermediate
3. Middle Bear Springs Trail: 1.19 mi., Intermediate
4. Lower Bear Springs Trail: 1.69 mi., Beginner
Questions

Shared Use Trails: 30.85 miles
Preferred Use Trails: 6.94 miles
Single-Use Trails: 9.71 miles