

GATEWAY PHASE 2

U.S. Forest Service and the Mount Shasta Trails Association



Mt Shasta Trail Association

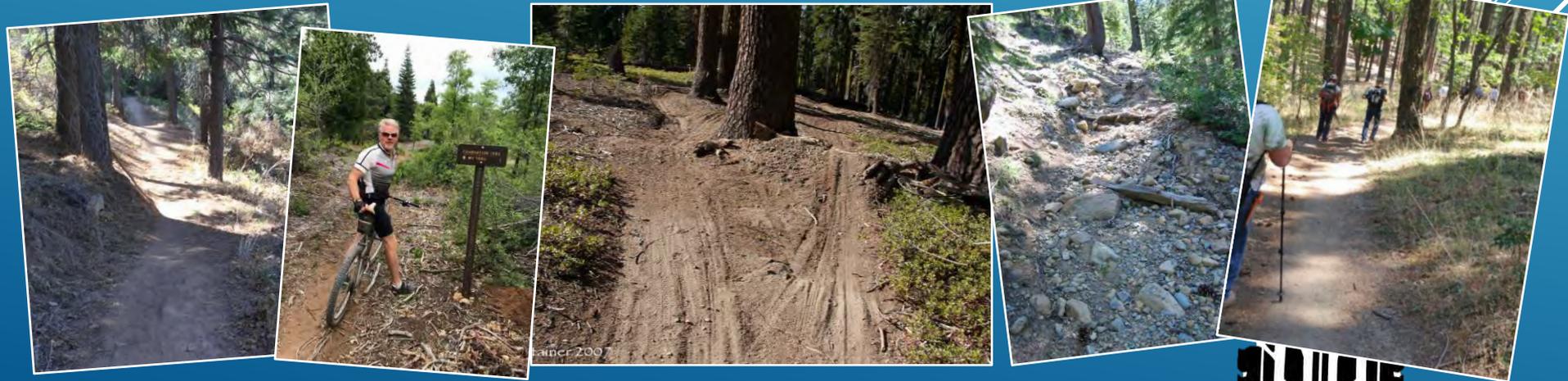


...inspire...create...conserve



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



Identify need for project

Develop proposal

Scoping/Public Input

Identify issues
develop alternatives

Effects Analysis

Notice for Comment on Environmental
Assessment/Public Input

Notice of Objection on draft
Decision Notice

Predecisional Administrative Review

Issue Decision Notice

Implementation

We are
here

NEPA PROCESS



PROJECT PROPOSAL

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.

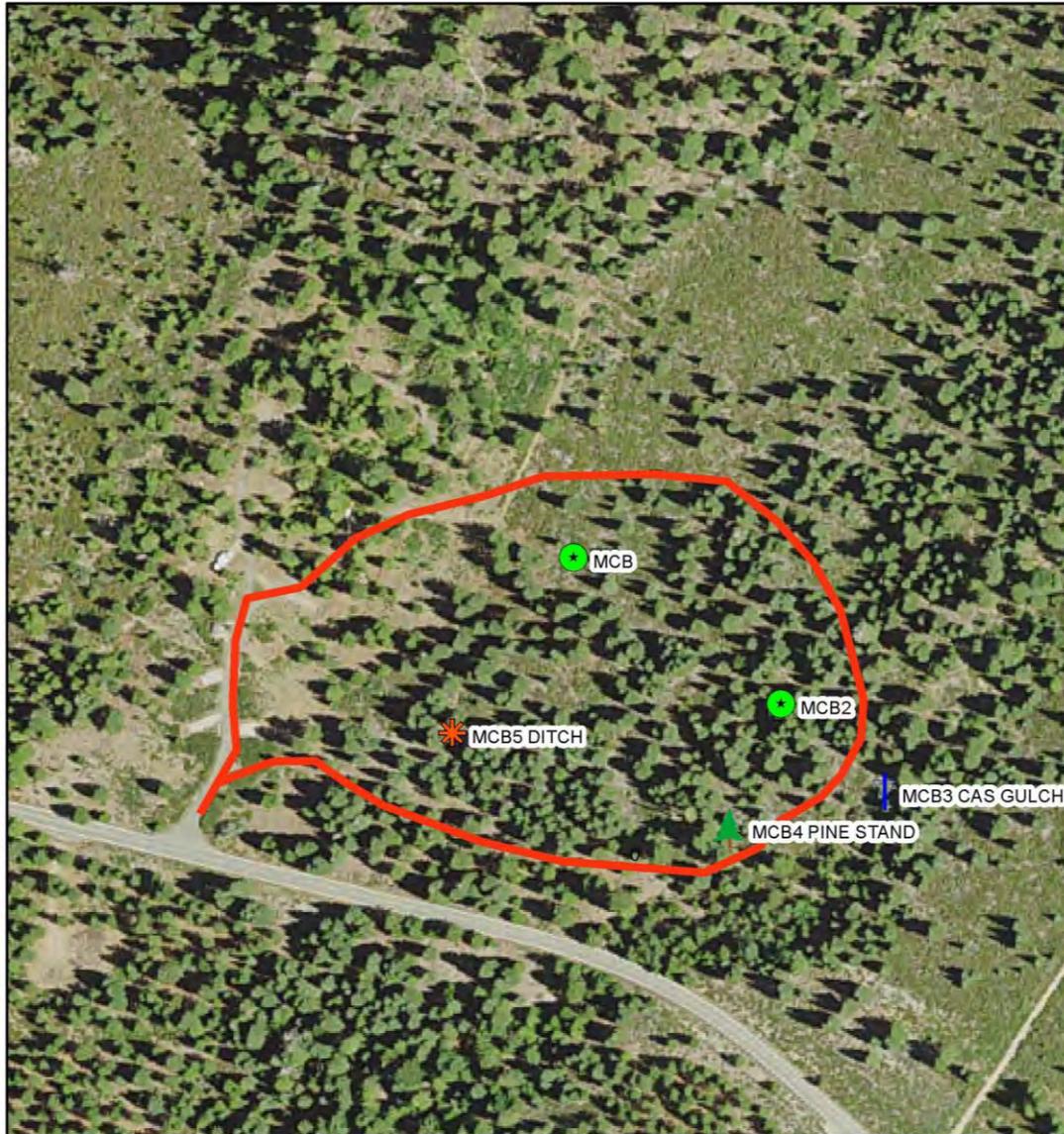
Proposed Action

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



MCBRIDE SPRINGS CAMPGROUND EXPANSION PROPOSAL



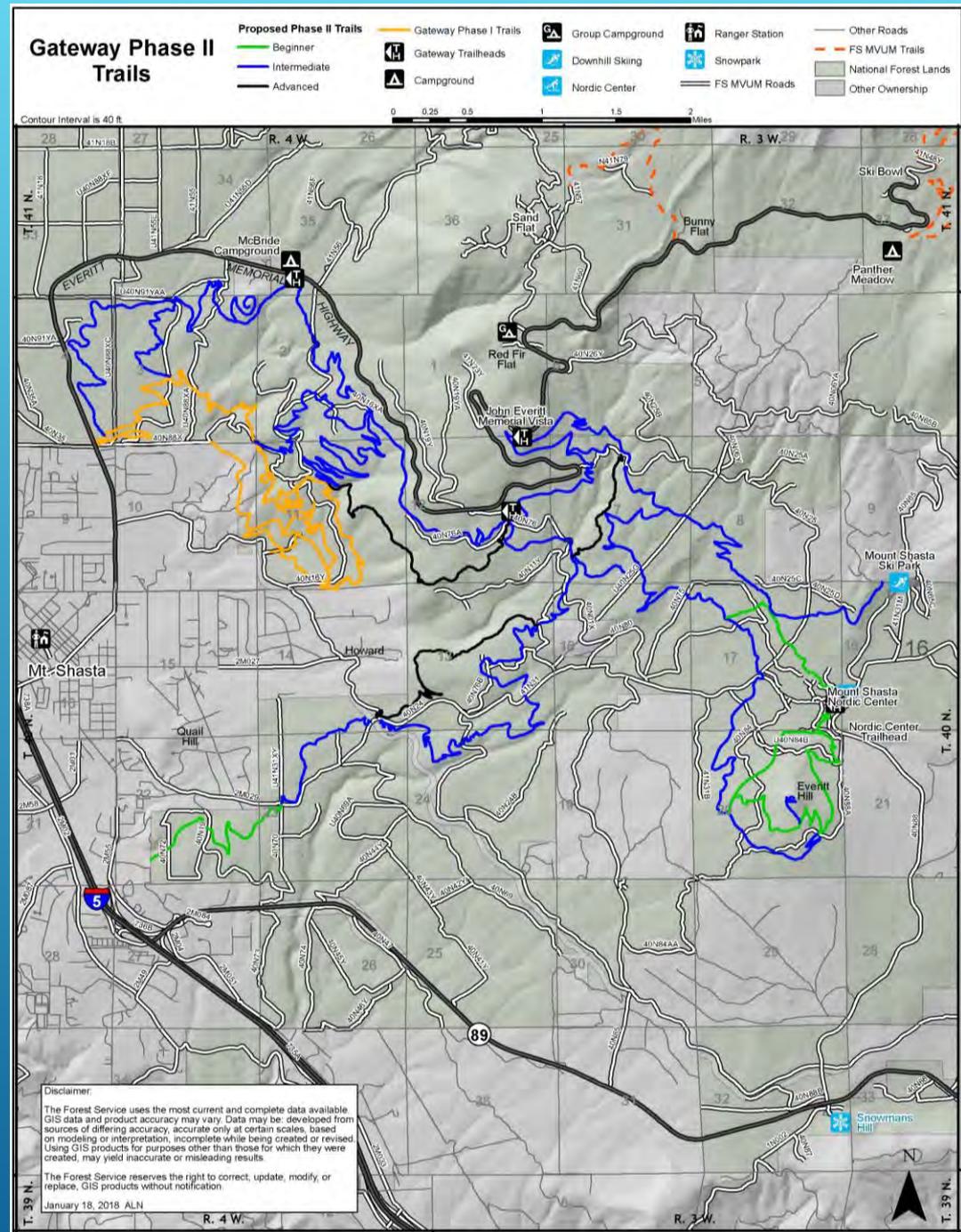
0 0.025 0.05 0.1 Miles

- 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

- ANALYSIS AREA
- MCB
- MCB2
- ┆ CASCADE GULCH
- ▲ LARGE PINE STAND
- ✱ IRRIGATION DITCH

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)





Gateway Phase 2 _____ Trail System Planning & Design

Presented by: Andrew Pellkofer

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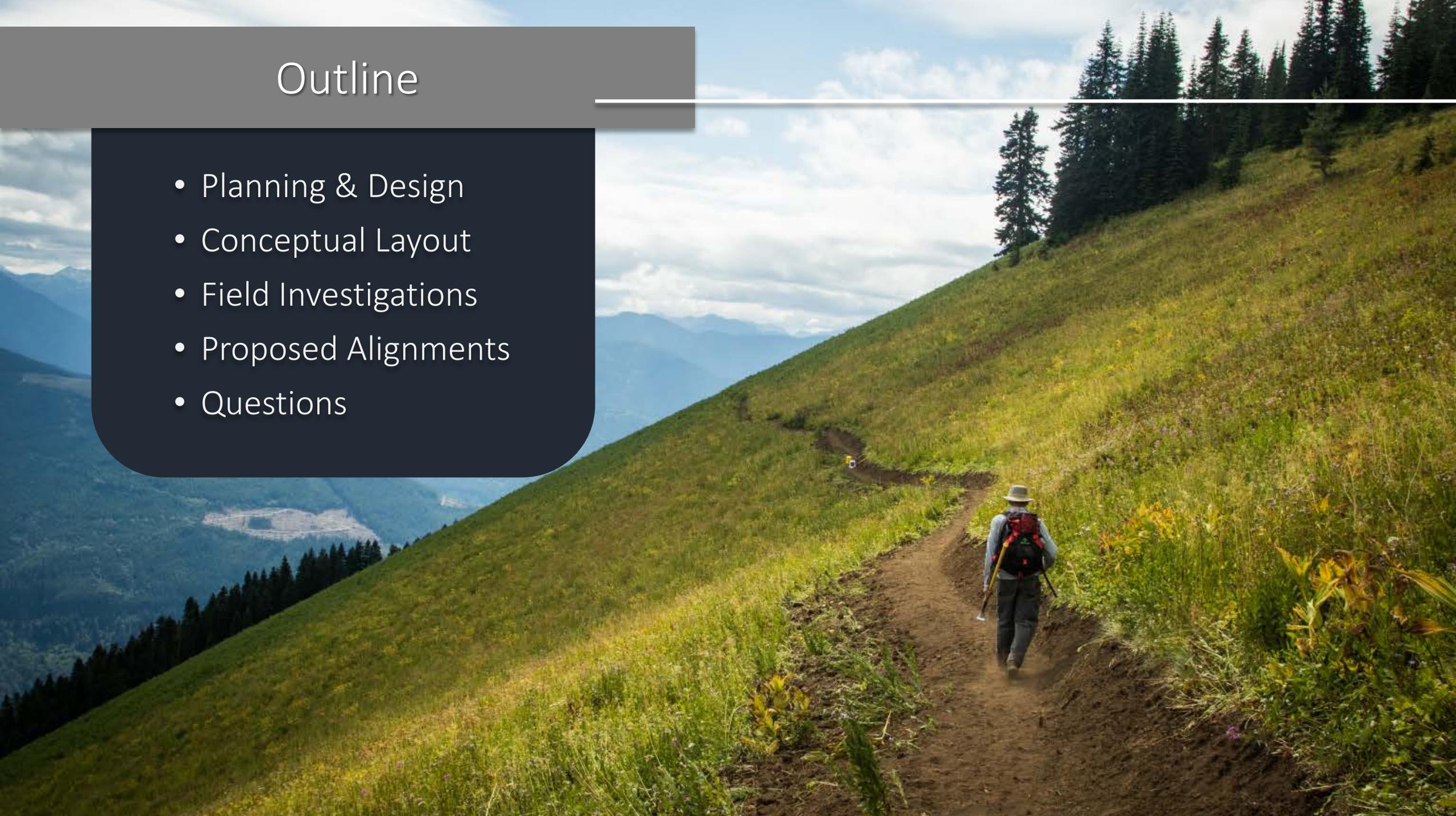
Introduction

- 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



Sustainability

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

Environmental

Protect resources

*Soils
Wildlife
Streams
Vegetation*

Social

Meet desired user outcomes

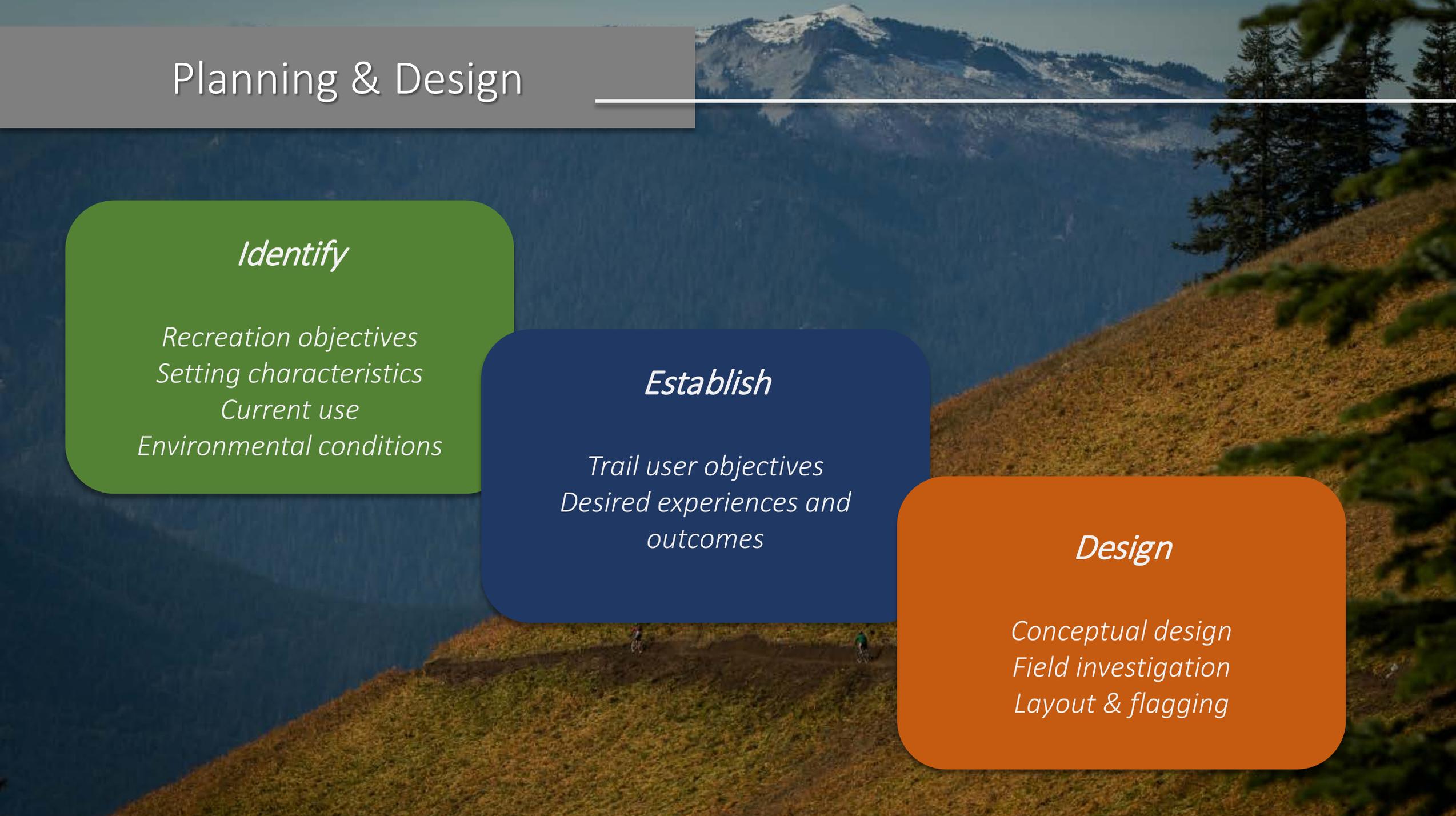
*Capacity
Current use
Unmet experiences*

Economic

Minimize long-term costs

*Construction
Maintenance
Quality = Value*

Planning & Design

The background of the slide is a scenic photograph of a mountain landscape. In the foreground, a grassy hillside slopes down towards the left, with a dirt trail winding across it. Two hikers are visible on the trail. The middle ground shows a dense forest of evergreen trees covering a valley. In the background, a range of mountains is visible under a clear sky, with some peaks covered in snow. The overall lighting suggests a bright, sunny day.

Identify

*Recreation objectives
Setting characteristics
Current use
Environmental conditions*

Establish

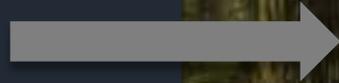
*Trail user objectives
Desired experiences and
outcomes*

Design

*Conceptual design
Field investigation
Layout & flagging*

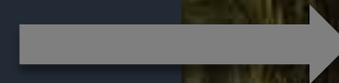
Planning & Design

Recreation Objectives



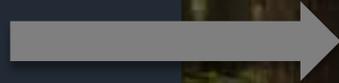
*Multi-Use
Emphasis on Mountain Biking
Stacked Loops
Connectivity*

Setting Characteristics



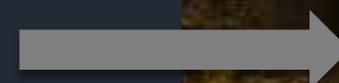
*Rural
Front country
Middle country*

Current Use



Non-motorized

Environmental
Conditions



*Pine plantations & mixed conifer forests
Volcanic soils
Variable topography
Entrenched streams*

Planning & Design

Trail Users

Mountain Biking

Hiking

Trail Running

Equestrian

Trail User Objectives

*Nature
Escape
Solitude
Challenge*

*Risk
Fun
Play
Exercise*

*Variety
Connectivity
Socializing
Efficiency*

Experiences & Outcomes

*Developing skills and abilities
Enjoying nature
Reducing stress*

*Restored mind
Greater sense of adventure
Improved physical fitness*

Terms & Standards

 **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

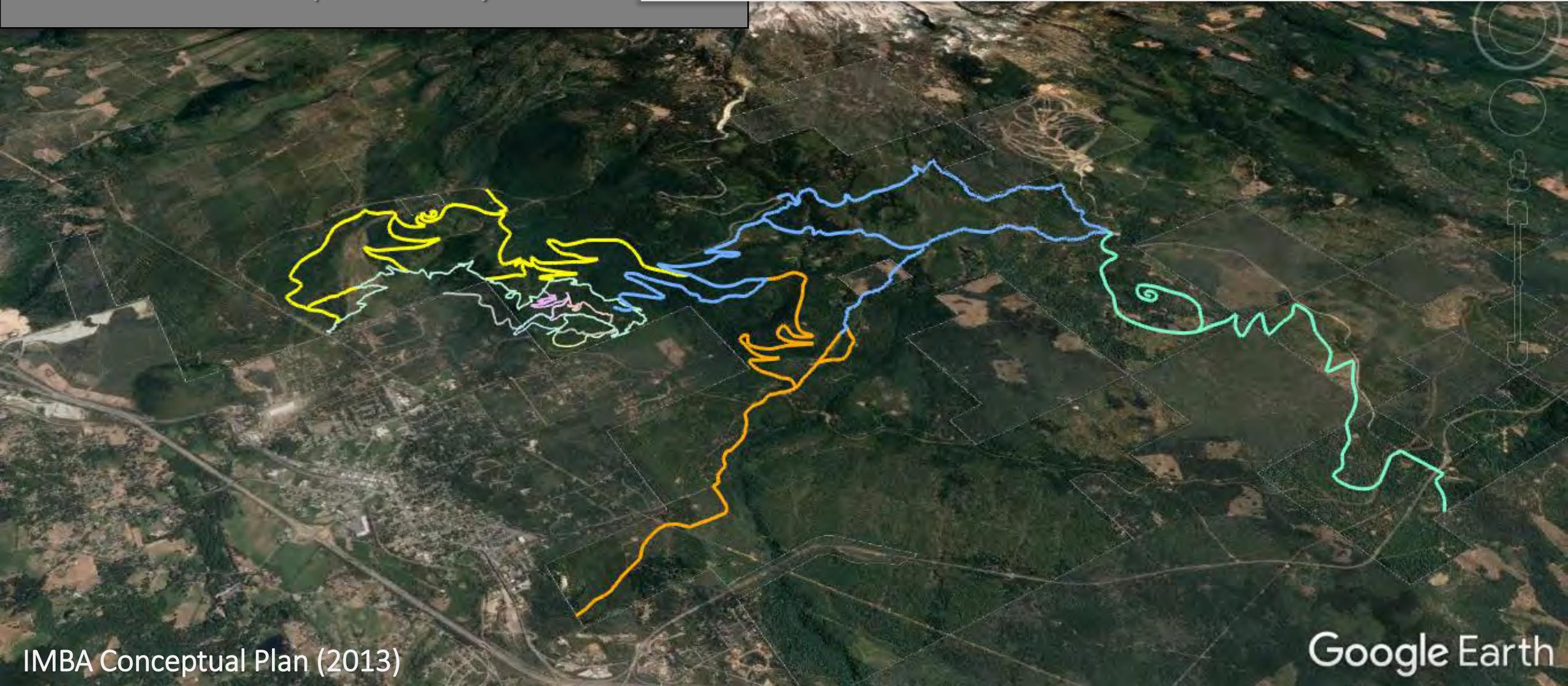
IMBA Trail Design Standards and Ratings



Trail Difficulty Rating System

	Easiest White Circle	Easy Green Circle	More Difficult Blue Square	Very Difficult Black Diamond	Extremely Difficult Dbl. Black Diamond
Trail Width	72" or more	36" or more	24" or more	12" or more	6" or more
Tread Surface	Hardened or surfaced	Firm and stable	Mostly stable with some variability	Widely variable	Widely variable and unpredictable
Average Trail Grade	Less than 5%	5% or less	10% or less	15% or less	20% or more
Maximum Trail Grade	Max 10%	Max 15%	Max 15% or greater	Max 15% or greater	Max 15% or greater
Natural Obstacles and Technical Trail Features (TTF)	None	Unavoidable obstacles 2" tall or less Avoidable obstacles may be present Unavoidable bridges 36" or wider	Unavoidable obstacles 8" tall or less Avoidable obstacles may be present Unavoidable bridges 24" or wider TTF's 2' high or less, width of deck is greater than 1/2 the height	Unavoidable obstacles 15" tall or less Avoidable obstacles may be present May include loose rocks Unavoidable bridges 24" or wider TTF's 4' high or less, width of deck is less than 1/2 the height Short sections may exceed criteria	Unavoidable obstacles 15" tall or greater Avoidable obstacles may be present May include loose rocks Unavoidable bridges 24" or narrower TTF's 4' high or greater, width of deck is unpredictable Many sections may exceed criteria

Conceptual Layout



IMBA Conceptual Plan (2013)

Google Earth

Field Investigation



Funky layout

Will stream crossings work here?

More funky layout

Very steep.
Buildable?

What's going on with loop?

Goes through private property?

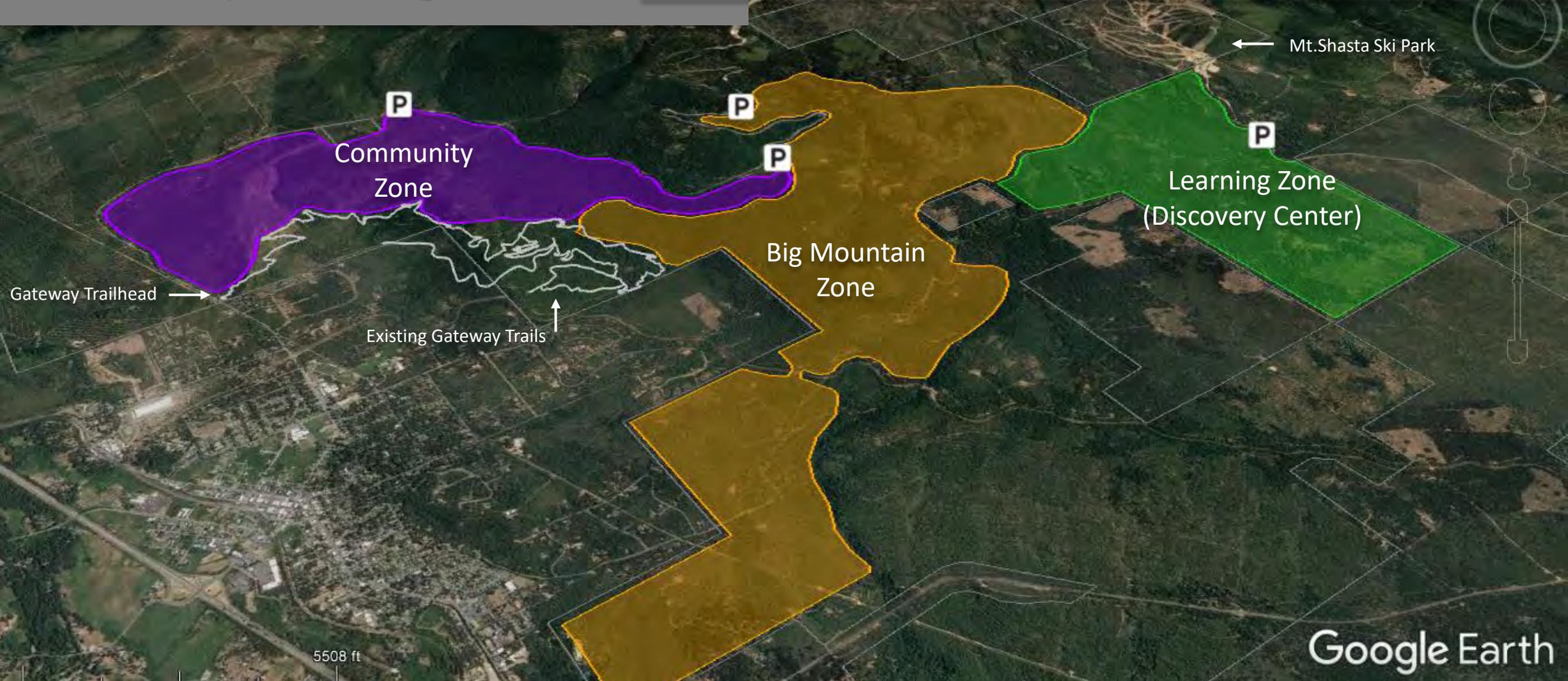
Field Investigation



Field Investigation



Proposed Alignments



Mt. Shasta Ski Park

P

Community Zone

P

P

Big Mountain Zone

P

Learning Zone (Discovery Center)

Gateway Trailhead

Existing Gateway Trails

5508 ft

Google Earth

Proposed Alignments

Community Zone

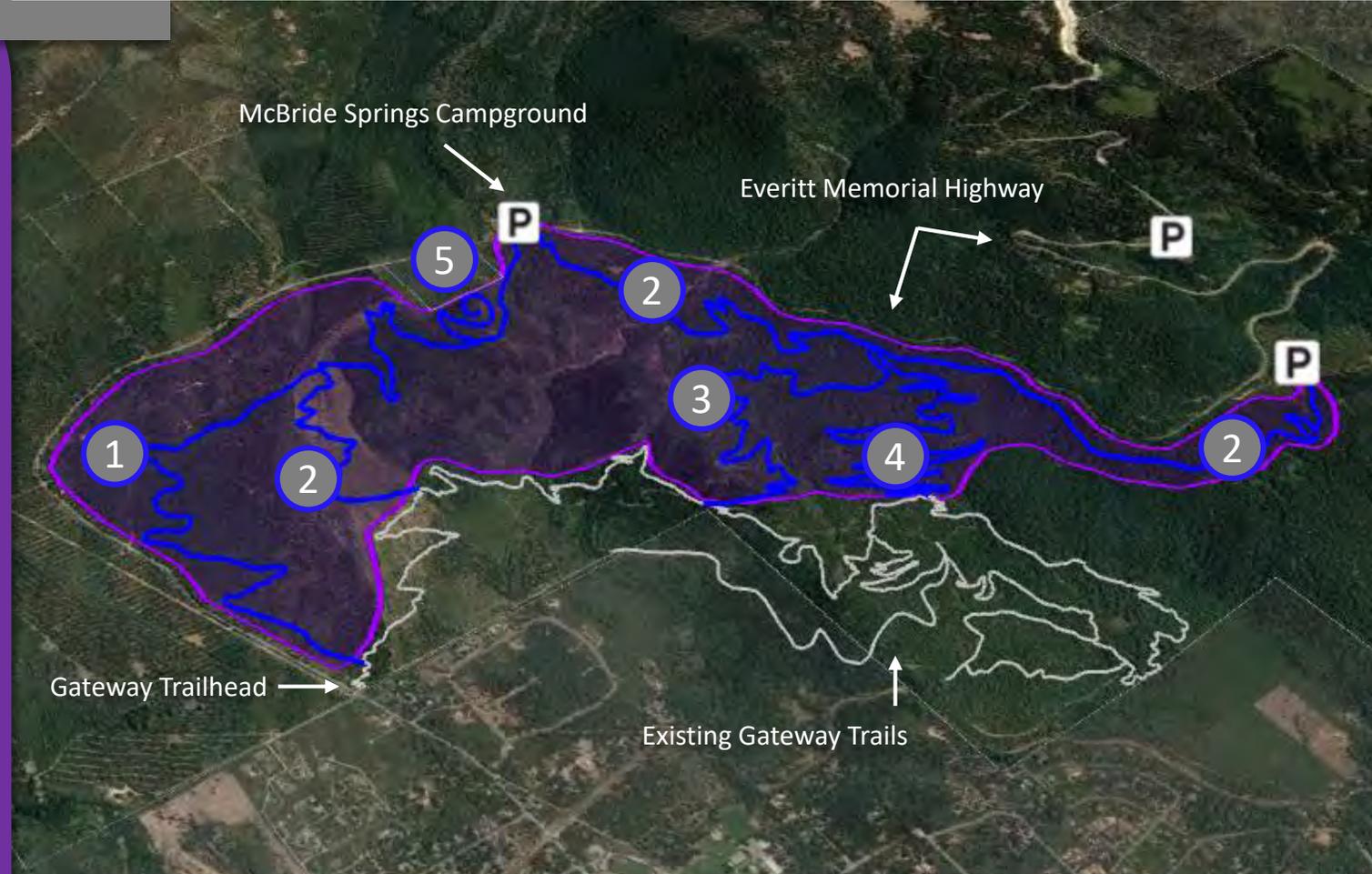
5 Trails

- 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.



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

Proposed Alignments

Learning Zone (Discovery Center)

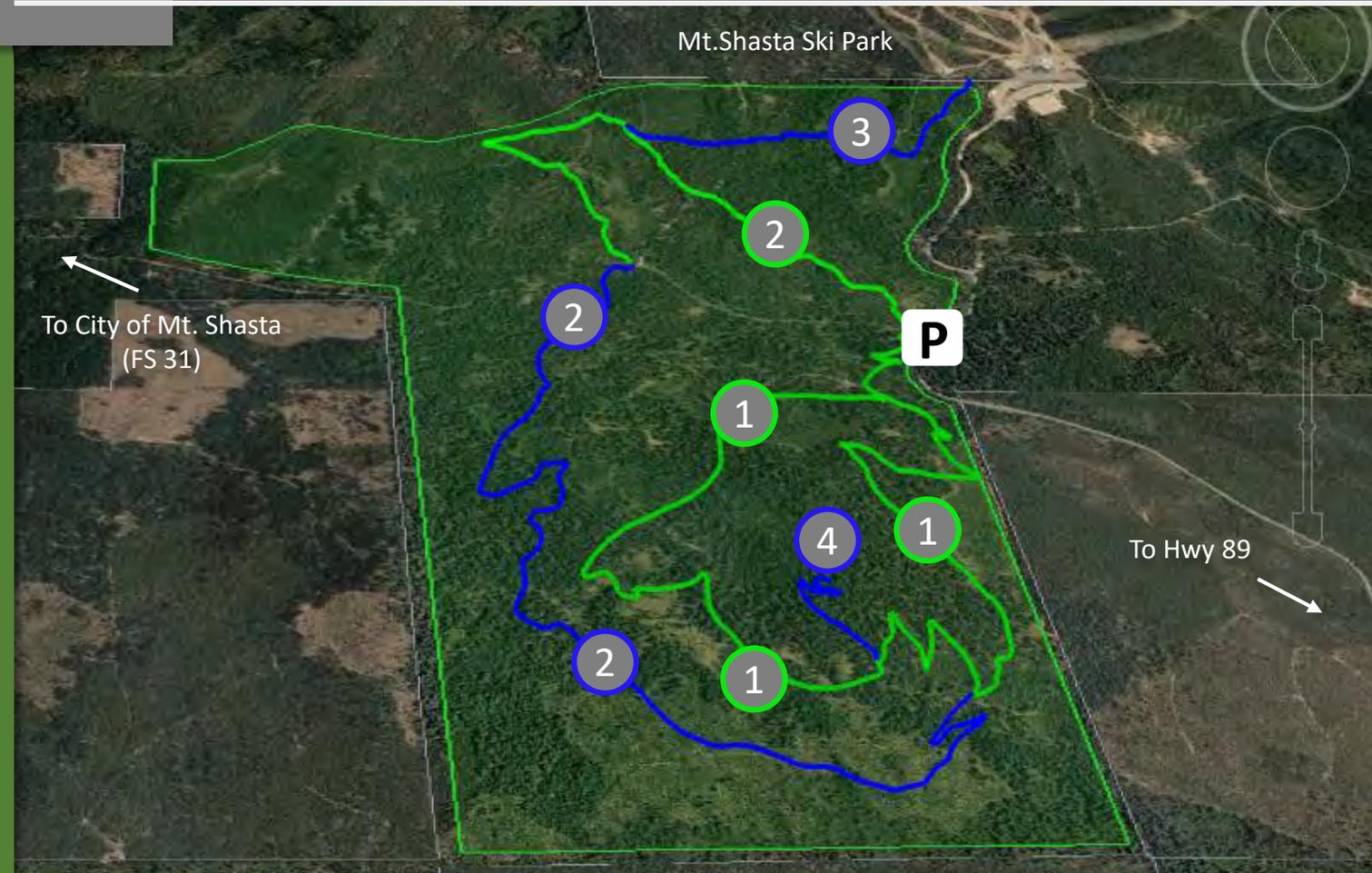
4 Trails

- 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.



1 Everitt Hill Loop Trail: 3.73 mi., Beginner

2 Nordic View Loop Trail: 4.35 mi., Beginner & Intermediate

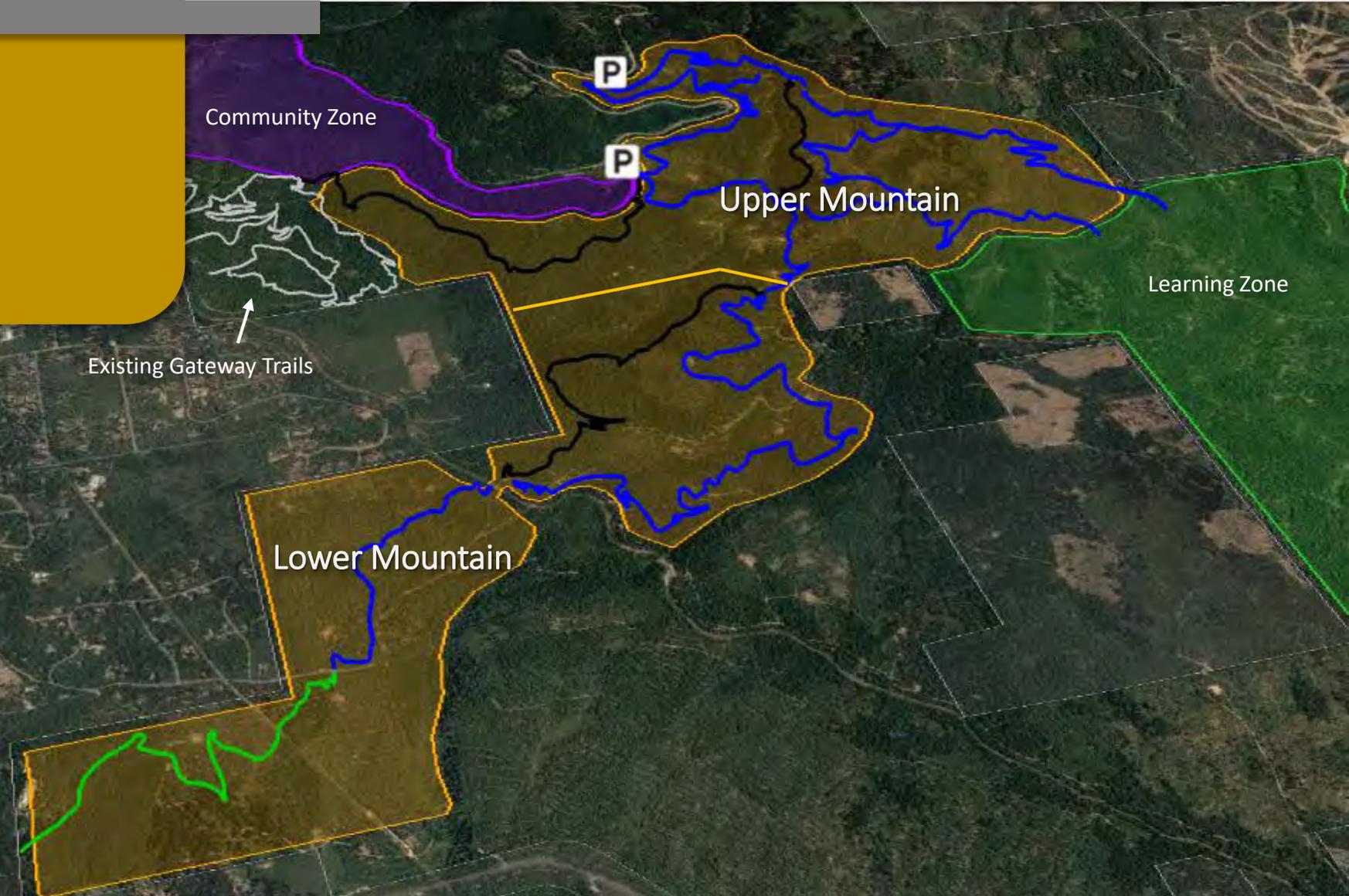
3 Ski Park Connector Trail: 1.04 mi., Intermediate

4 Everitt Hill Summit Trail: 0.36 mi., Intermediate

Proposed Alignments

Big Mountain Zone(s)

- Upper Mountain: 12.9 miles
- Lower Mountain: 9.13 miles



Proposed Alignments

Big Mountain Zone (Upper Mountain)

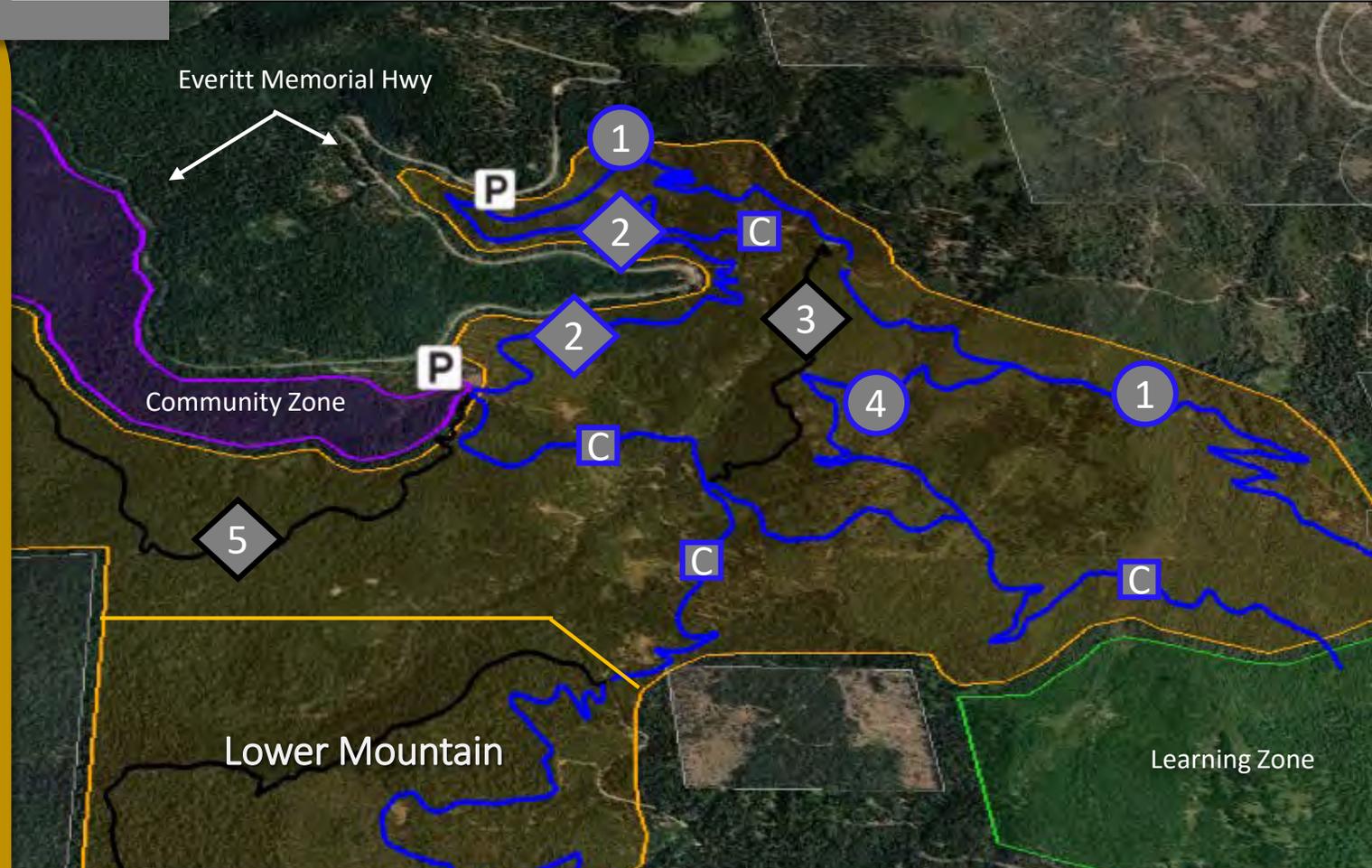
5 Trails / 4 Connectors

- 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
- Fun
- Escape
- Challenge
- Risk
- 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.



- ① Wagon Camp Trail: 3.56 mi., Intermediate
- ② Vortex Trail: 2.11 mi., Intermediate
- ③ Pyroclasim Trail: 1.00 mi., Advanced

- ④ Portal Dust Trail: 1.86 mi., Intermediate
- ⑤ Purple Pyramid Trail: 2.24 mi., Advanced
- ⓐ Connector Trails: 3.13 mi., Intermediate

Proposed Alignments

Big Mountain Zone (Lower Mountain)

4 Trails

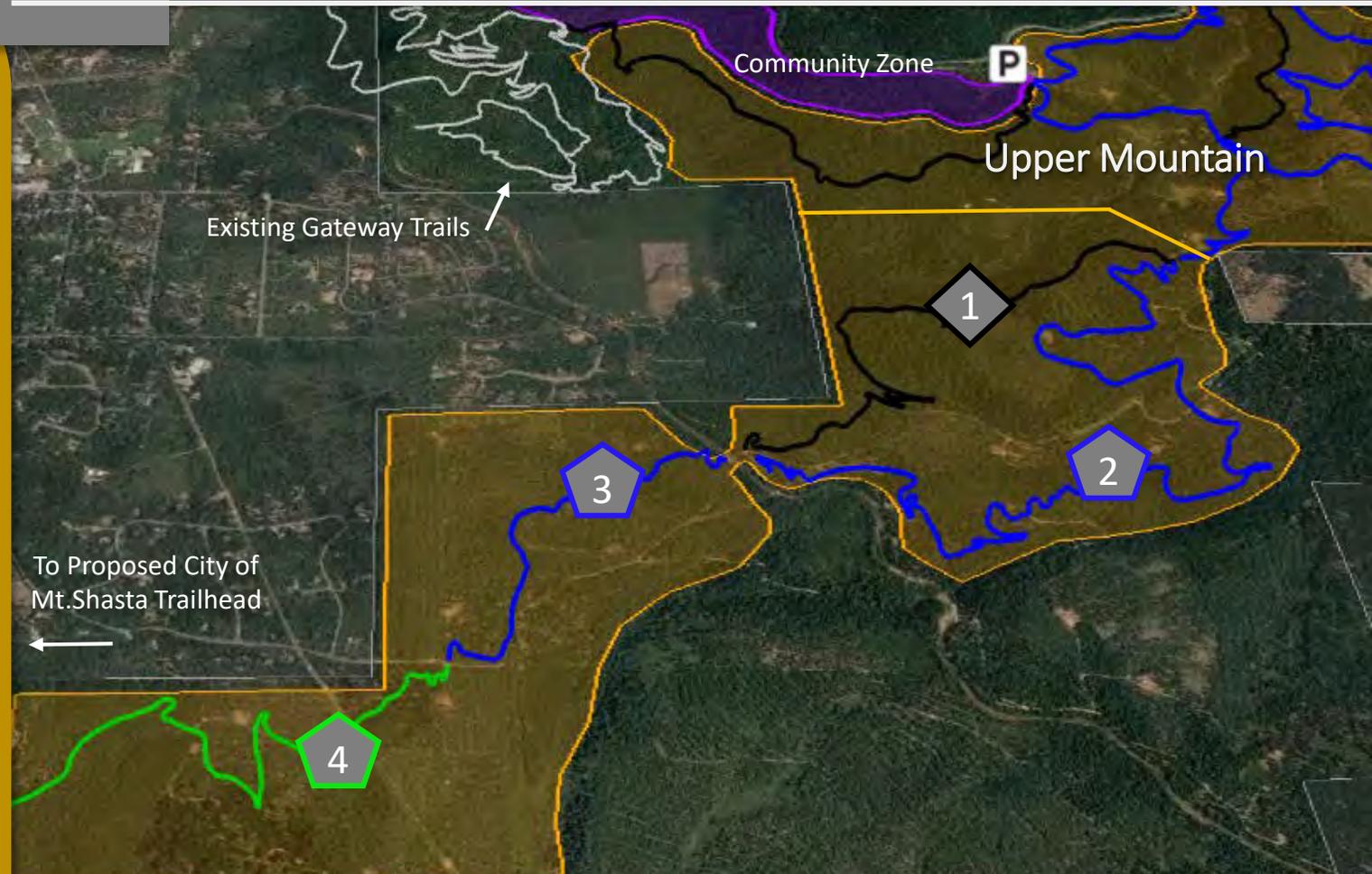
- Preferred Use: 3 trails / 6.94 miles
- Single Use: 1 trail / 2.19 miles
(MTB Downhill Trail)

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



Upper Bear Springs Trail: 2.19 mi., Advanced



Tarp Trail: 4.06 mi., Intermediate



Middle Bear Springs Trail: 1.19 mi., Intermediate



Lower Bear Springs Trail: 1.69 mi., Beginner

Questions

