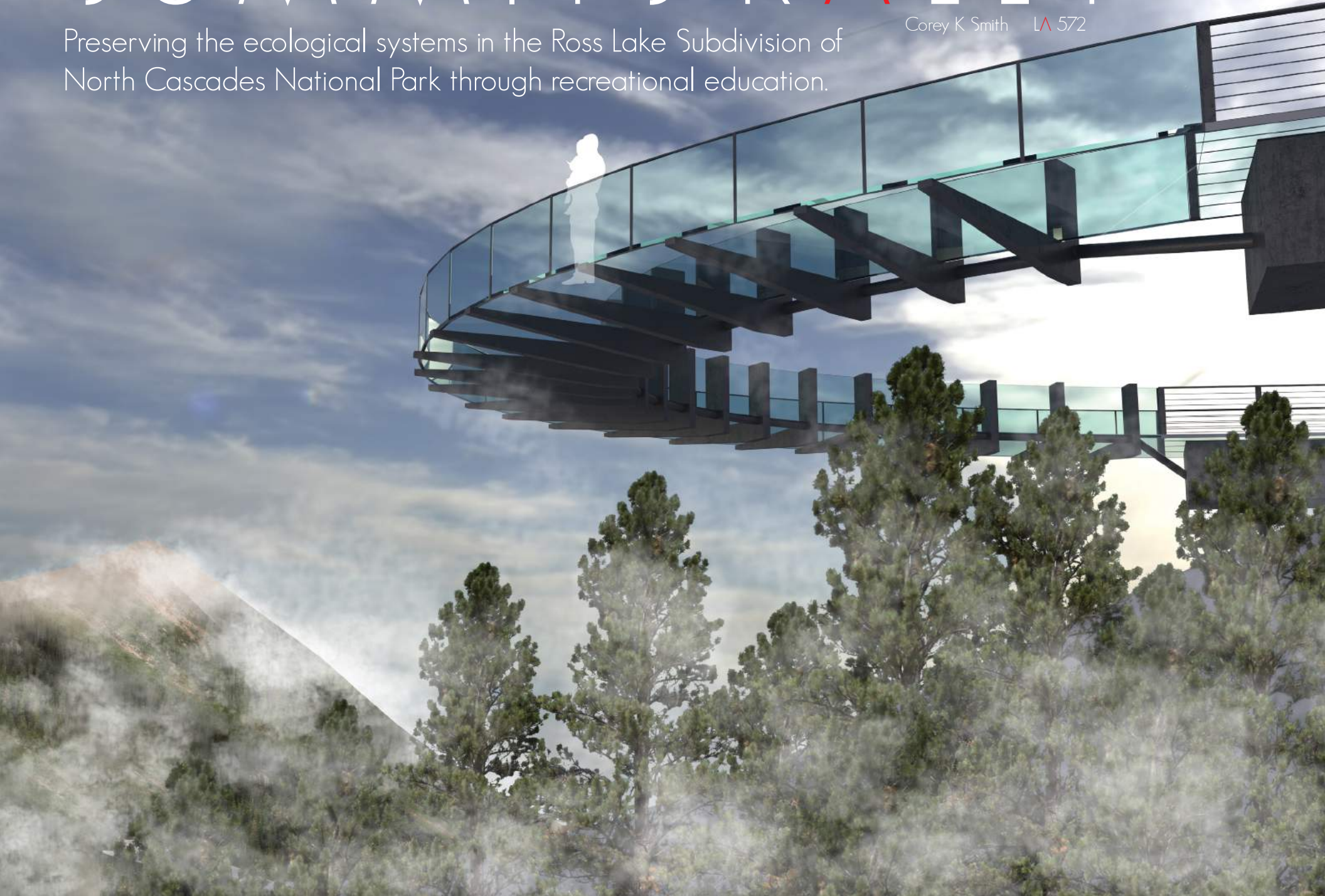


# SUMMIT'S RALLY

Preserving the ecological systems in the Ross Lake Subdivision of  
North Cascades National Park through recreational education.

Corey K Smith LA 572





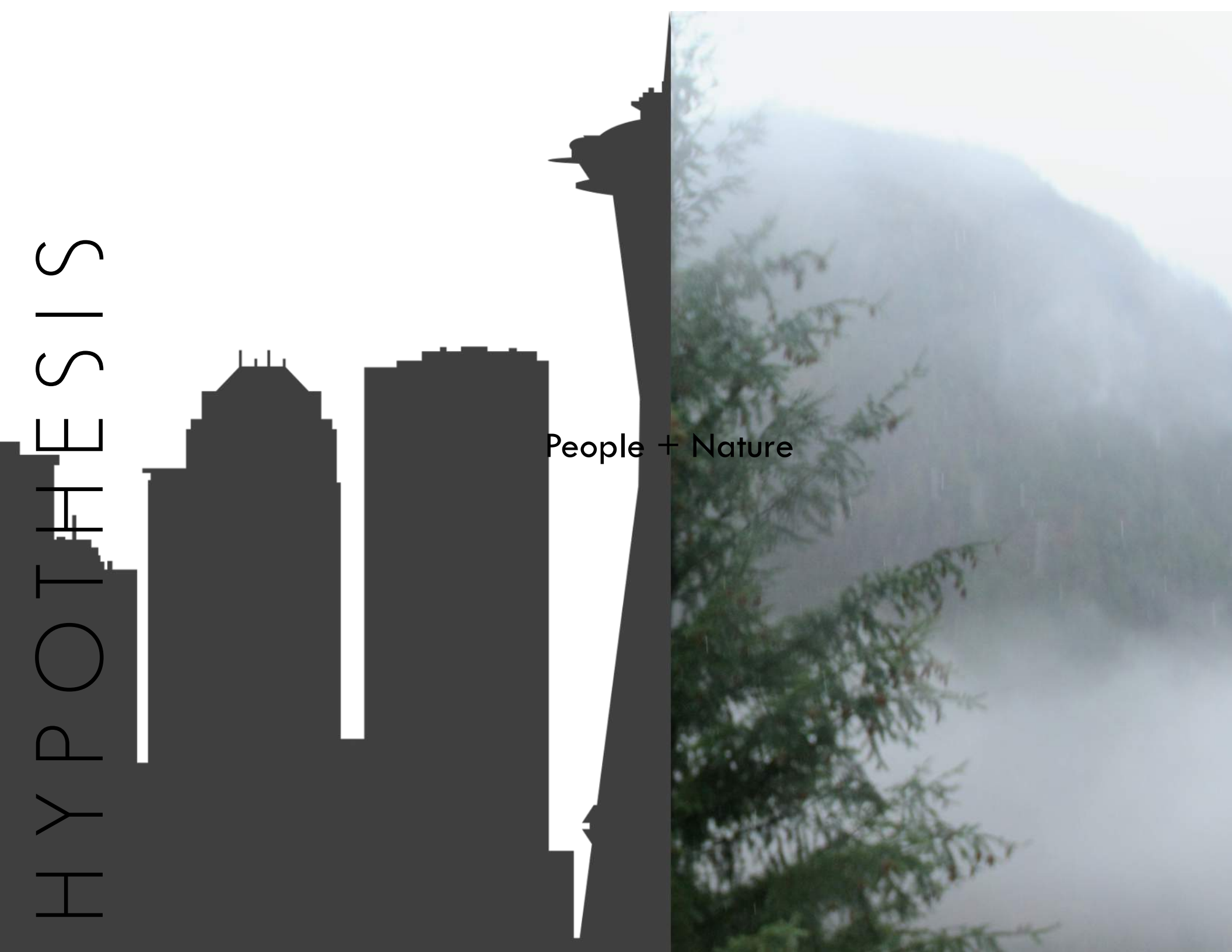


SUMMIT'S RALLY



# HYPOTHESIS

People + Nature





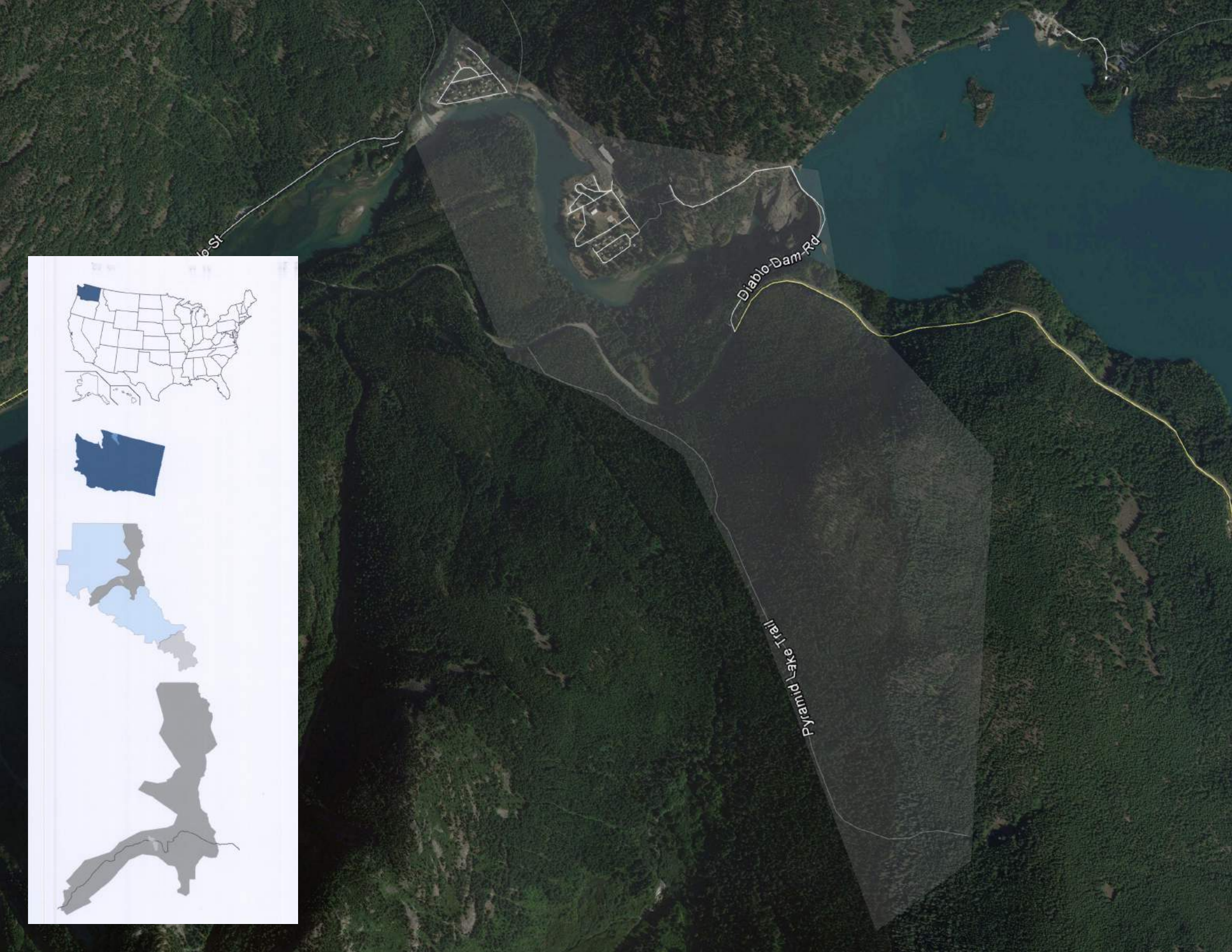
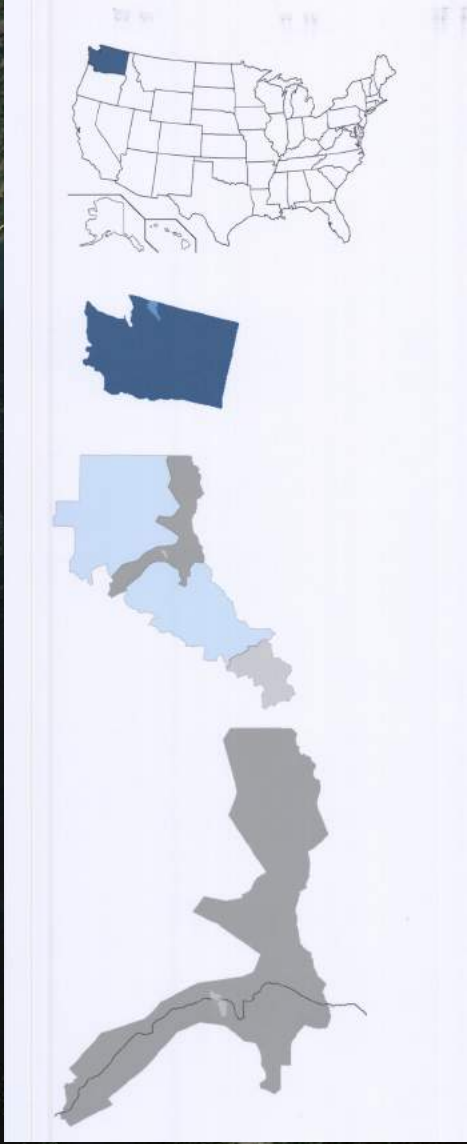
“Let’s allow controlled, intelligent development in our national parks, lest they crumble within their own embalment.”

-Nicholas Boles, parks senior advocate



# SITE HISTORY

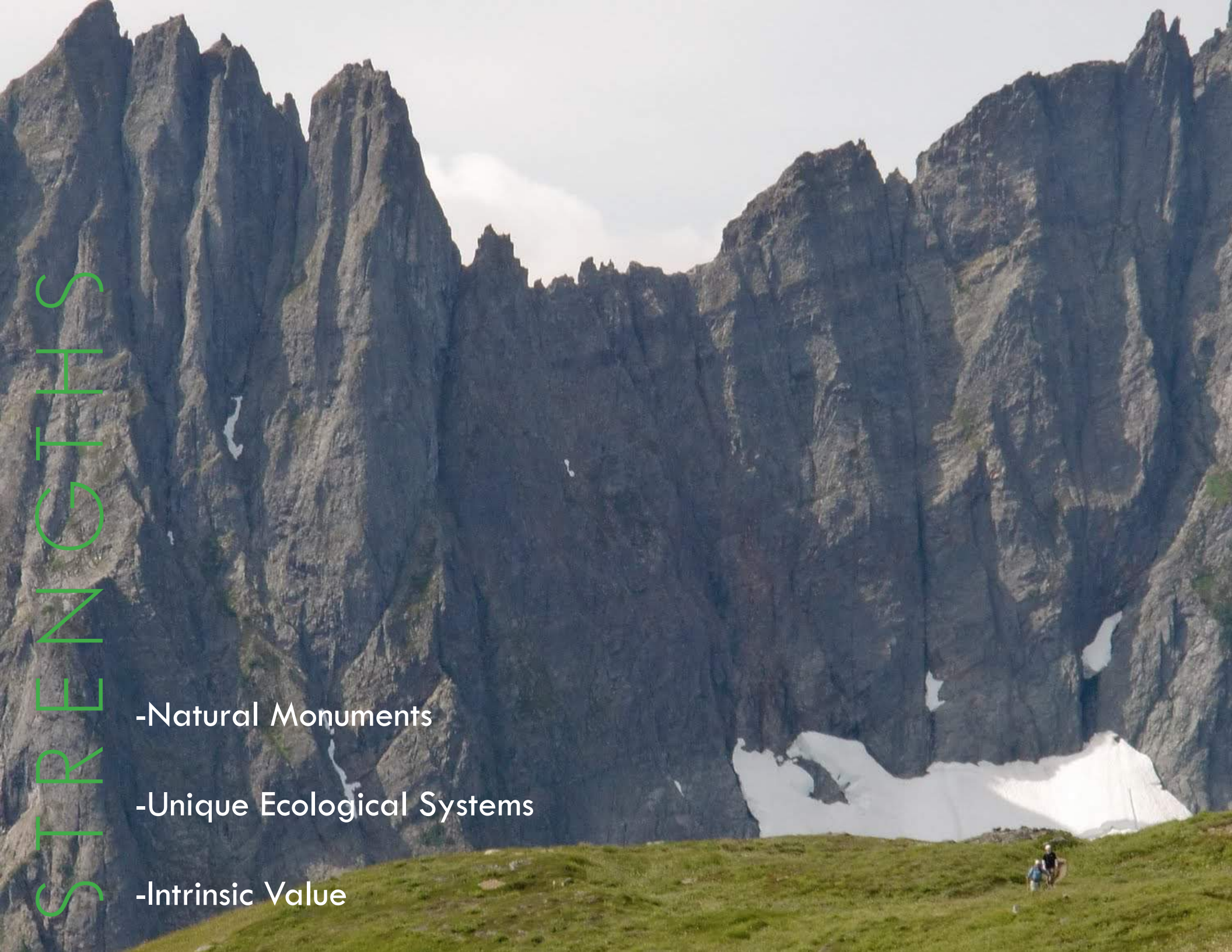






# STRENGTHS

- Natural Monuments
- Unique Ecological Systems
- Intrinsic Value





WEAKNESSES



- Wayfinding
- Limited Destinations
- Winter Closures
- Transboundary Logging
- Lowest NPS Visitor Rate

# OBJECTIVES

- Sustain environmental systems.
- Create awareness.
- Low-impact destination(s).

# TYPOTOLOGIES

Primary: Environmental Planning

Secondary: Parks and Open Spaces

Emphasis: Eco-Tourism



RESEARCH



# LEGALITY

-Typical approval plan

-Partner approval plan

-Projected challenges

# ADAPTIVE CHALLENGES

- Expectations
- Communication
- Partners

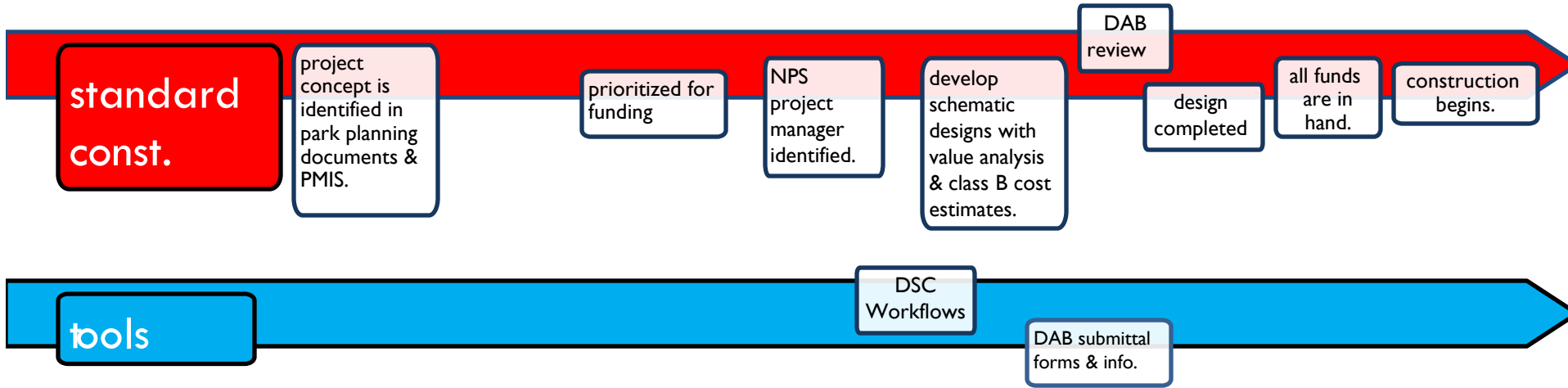
# TECHNICAL CHALLENGES

-Authorities

-Policies

-Presentations

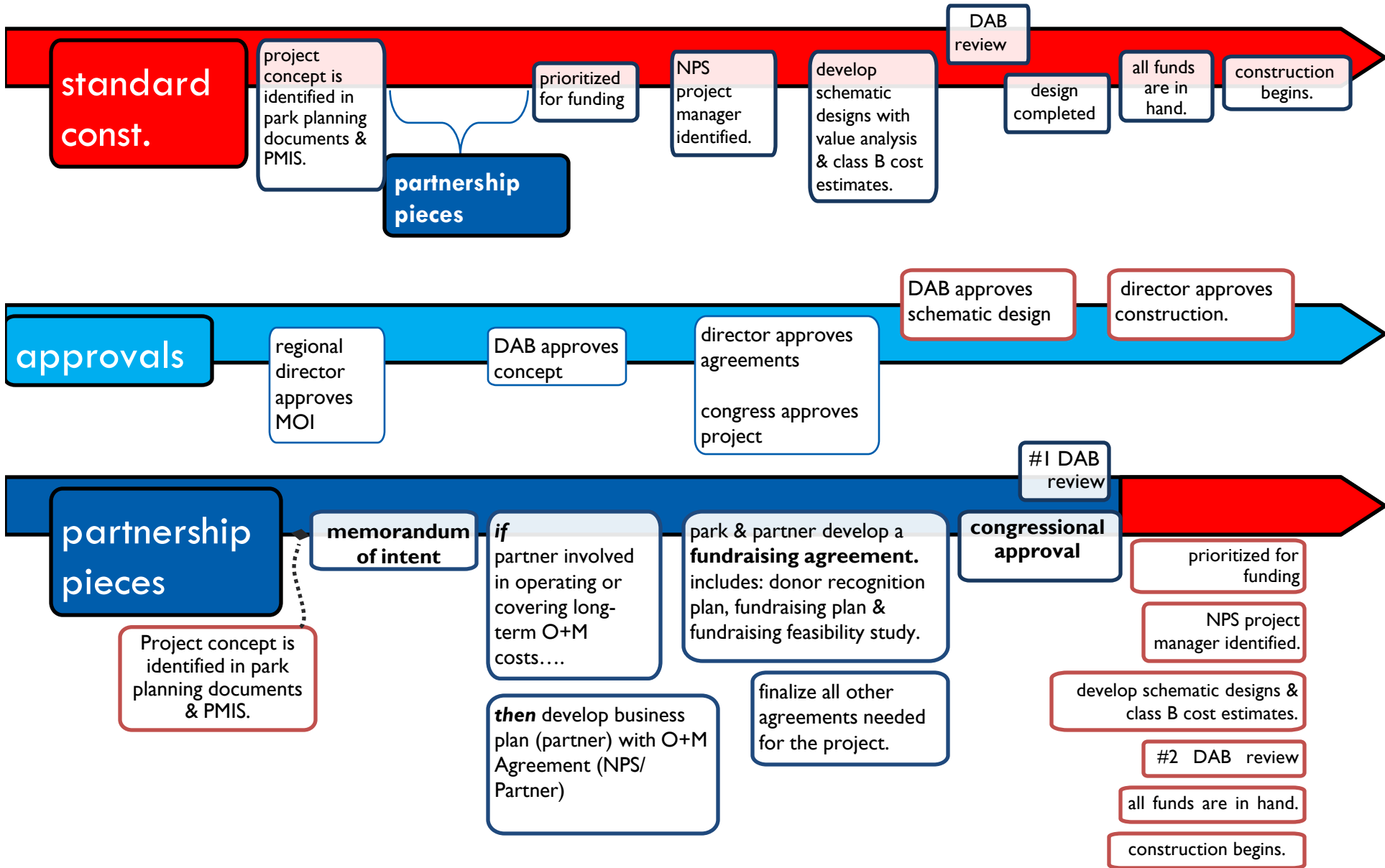
# APPROVAL



- Value analysis to determine park/visitor needs
- Director advisory board review <\$1 million
- Projects can be set in complete phases



# PARTNERSHIPS



# INVOLVEMENT

-Partners

-Park staff

-Central admin. office

-Director advisory board

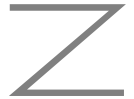
-Ministry of interior



-Park/forest



-Admin



-Visitors



Projected Use:



Peak Season (May-October): 100-120/Day (120x184) 22,080



(November-April): 40-60/Day (60x181) 10,860



**Total Projection:  $\approx 32,940$**

CODES



P  
A  
R  
K  
I  
N  
G  
9  
.2  
.4

Admin: 1 spot/1 employee (2 spots)

Dining: 1 spot/300 square feet for patrons, 1 spot/2 employees. (10 Spots)

Handicap: 51-75 Spots = (3 Spots)

Lodging: 1 Spot/300 square feet for patrons, 1 spot/2 employees. (8 Spots)

Park: 1 spot/4 employees. (6 Spots)

Rec Office: 1 Spot/300 square feet for patrons, 1 spot/4 employees. (8 Spots)

Services: 1 spot/300 square feet for patrons, 1 spot/4 employees. (6 Spots)

Visitor Center: 1 spot/300 square feet for patrons, 1 spot/2 employees. (20 Spots)

**Total: 60 Parking Stalls + Overflow Area**

“Trails will be permitted within wilderness when they are determined to be necessary for resource protection and/or for **providing for visitor use for the purposes of wilderness**. The identification and inventory of the wilderness trail system will be included as an integral part of the wilderness management plan or other appropriate planning document.

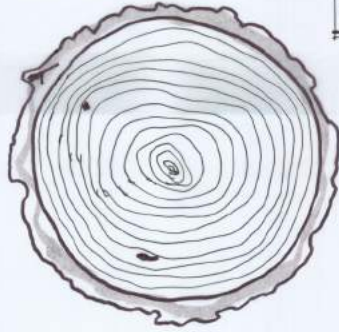
Trails will be maintained at levels and conditions identified within the approved wilderness management plan or other planning document.

Trail maintenance structures (such as water bars, gabions) may be provided, under minimum requirement protocols, where they are essential for resource preservation or where significant safety hazards exist during normal use periods. Historic and/or prehistoric trails will be administered in keeping with approved cultural resource and wilderness management plan requirements.”

LOGGING

# TYPES

## LOGGING ENCROACHMENT



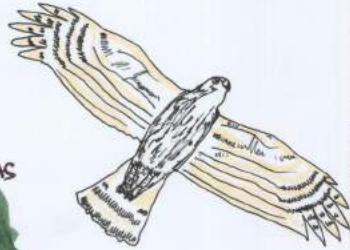
### SHARP SHIN HAWK

-YEAR-ROUND RANGE IN NOCA

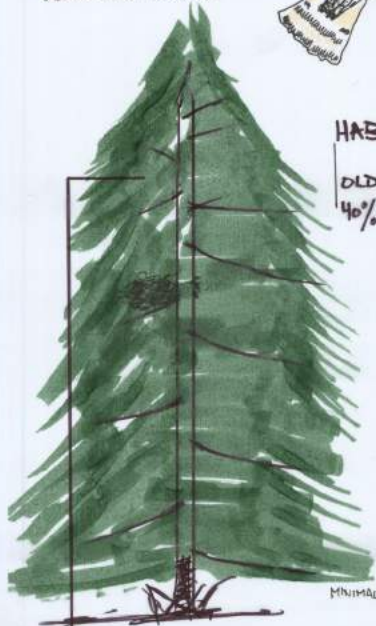
#### MIGRATION

SPRING: MONTANE ZONE, HABITAT

WINTER: RIPARIAN AREAS, SOUTHWEST



INDEFINITE  
NESTING AREAS



#### HABITAT

OLD GROWTH  
40% CANOPY COVER

PREFERS CLEAR  
PROXIMITY TO CLEARINGS

MINIMAL UNDERGROWTH DENSITY

NESTS 20'-50'

### SELECTIVE 27%

- PROS
- CREASES USE
- FOREST REMAINS RESISTANCE TO PESTS + DISEASE
- CONS
- TRIMMING FOREST CAN LEAD TO FIRES + OTHER DAMAGE



### SHELTER WOOD 1%

- PROS
- CLOSE PARTICIPATION
- HIGH HEIGHT
- CONS
- LONG TERM WALK PRADIS



### CLEAR CUT 72%

- PROS
- INCREASES UNDER FLOW
- REMOVES ELEGANT
- ALYON TREES
- CONS
- NOT SUSTAINABLE



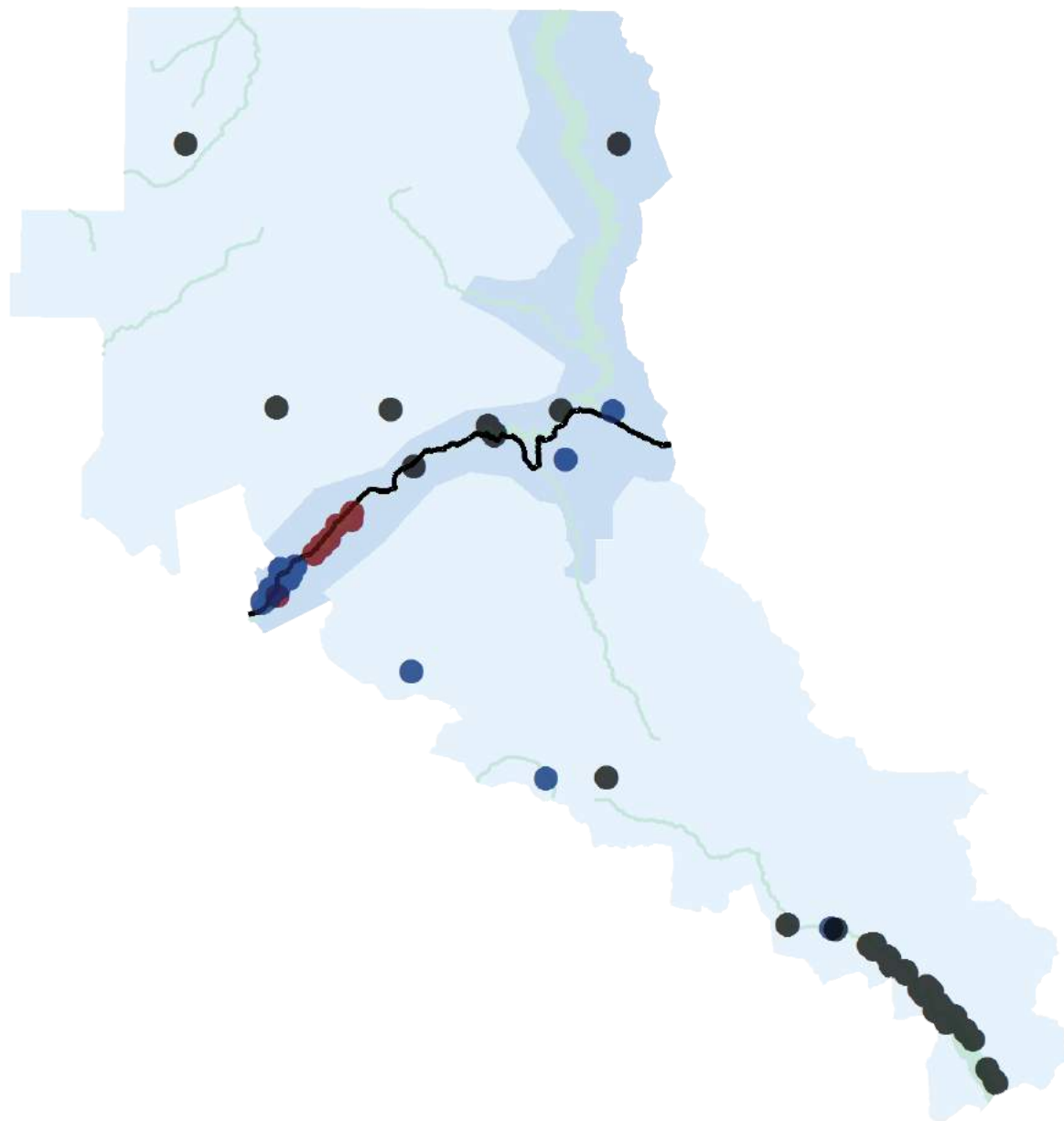


# NOCAC/C/C

1900s-30s ●

30s-60s ●

60s-Present ●

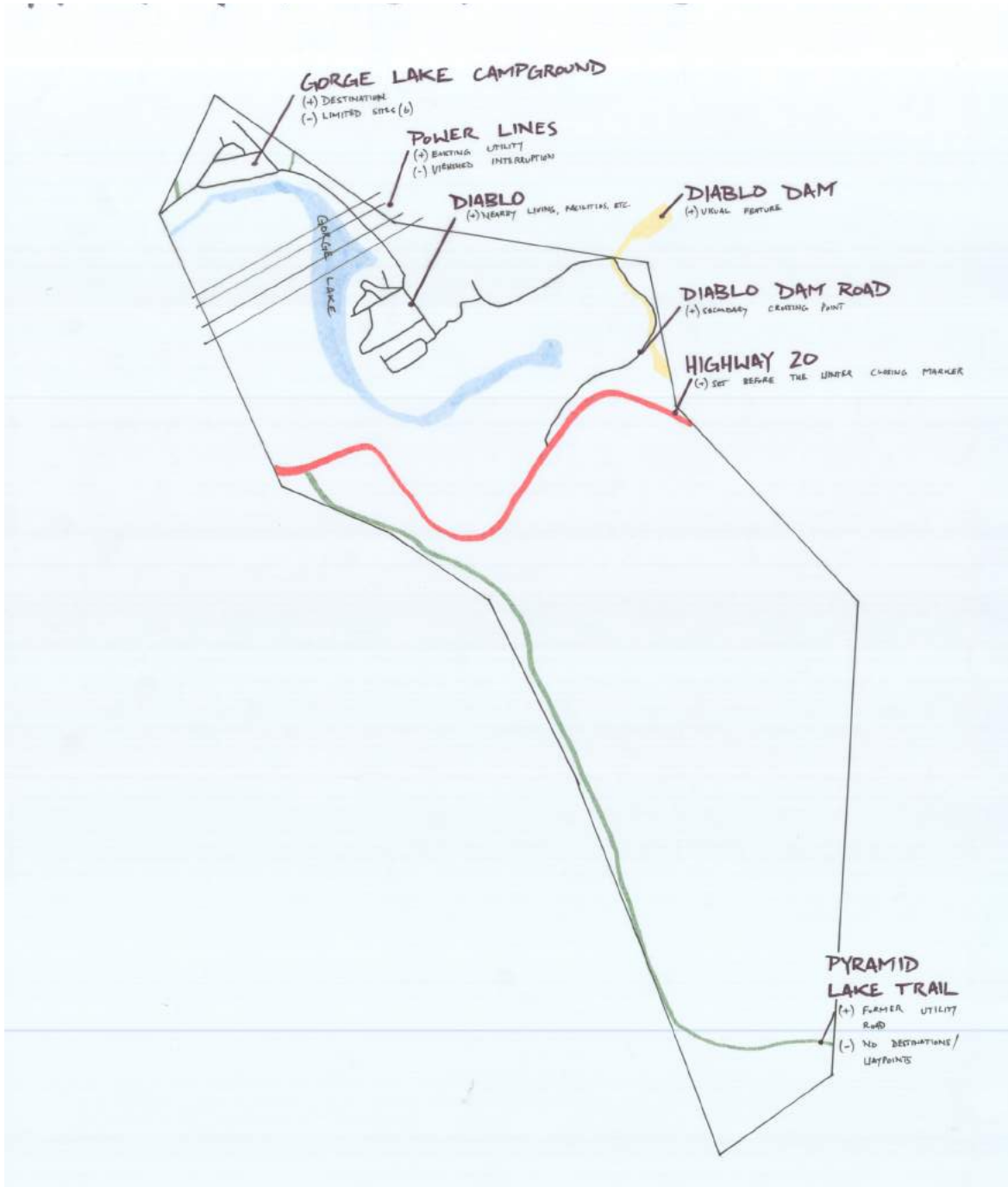




INVENTORY



# INFRASTRUCTURE



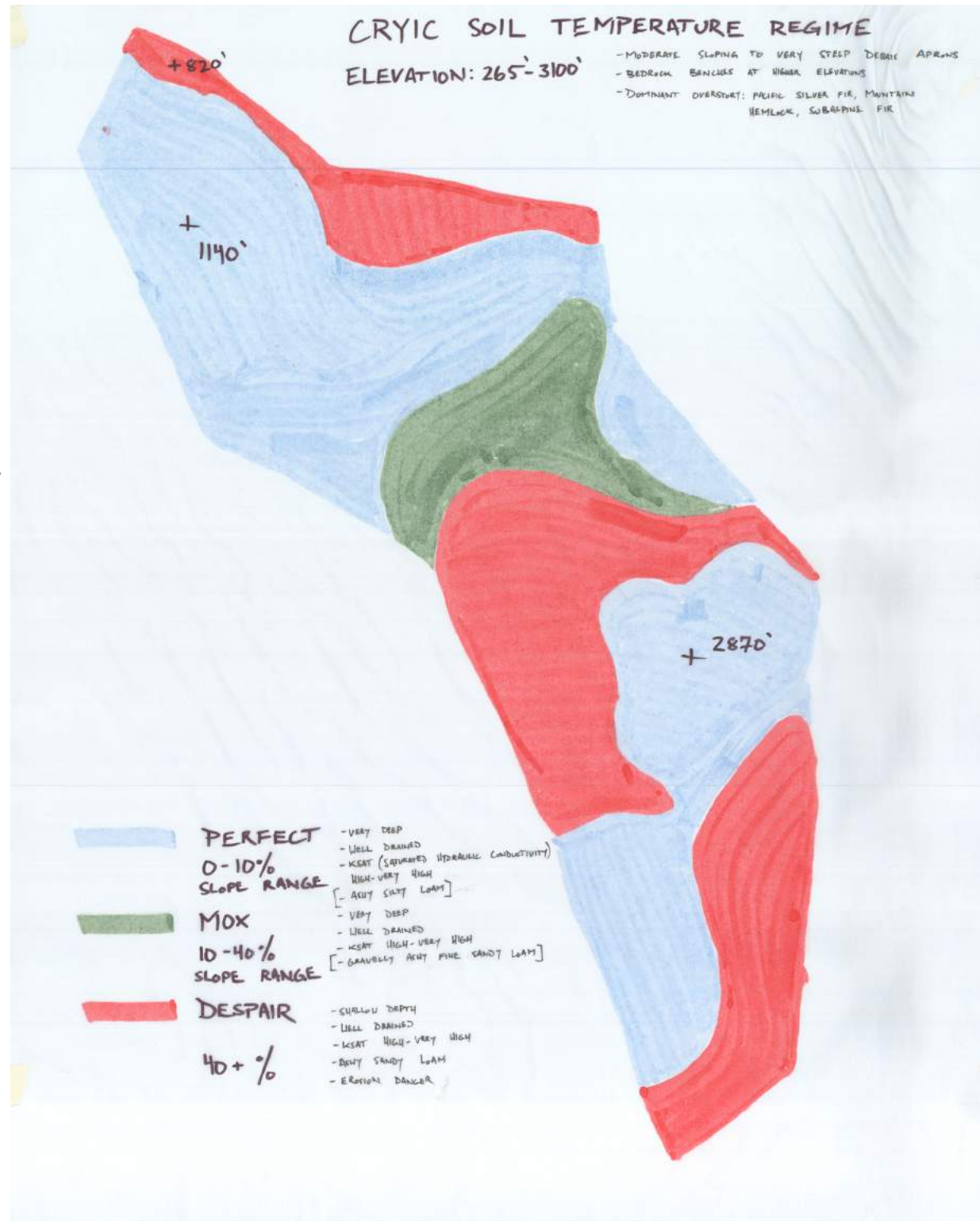


# SOILS

despair soils  
depth: shallow  
drainage class: well drained  
texture of surface layer: ashy  
sandy loam  
slope range: 40+

mox soils  
depth: very deep  
drainage class: well drained  
texture of surface layer: gravelly  
ashy fine sandy loam  
slope range: 10% to 40%

perfect soils  
depth: very deep  
drainage class: well drained  
texture of surface layer: ashy  
silty loam  
slope range: 0% to 10%





# RAZING AREAS

-≈3,000 acres/2015

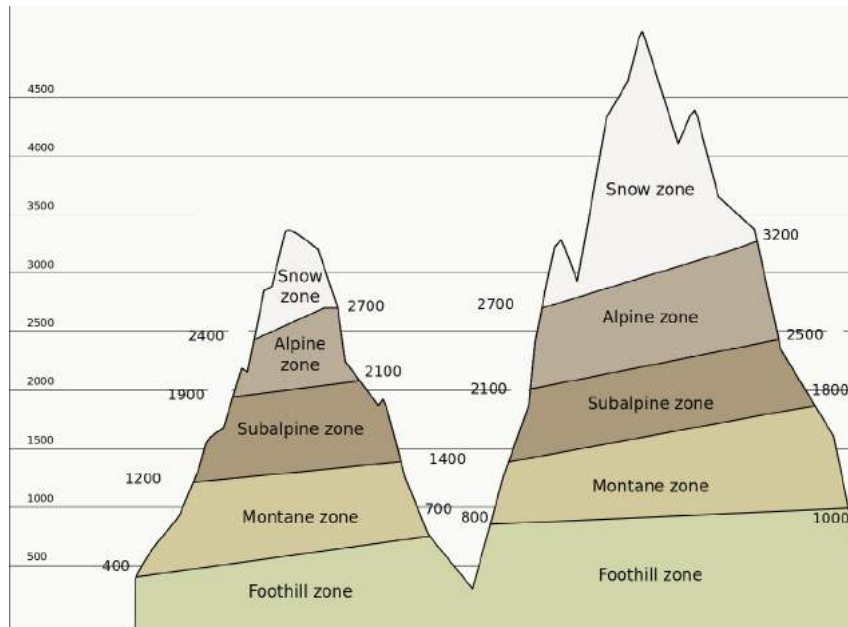
-≈200 acres/site 1930





# ELEVATION ZONES

- 0-1 200: Lowland Foothills: Riparian zone, mountain base.
- 1 200-2600: Montane: Coniferous forest.
- 2600-4600: Sub-Alpine: Highest vegetated zone, patchy, grasses protected from winds.
- 5000-5200: Alpine: Zone between tree line and snow.
- 5200+: Nival: Snow, hardy plants that survive in silica soil.





# ELEVATION ECOLOGICAL

-0-2500: western hemlock ecoregion

Canopy

-western hemlock

-douglas fir

-western red cedar

-red alder

Floor

-salal

-hazel

-salmonberry

-oregon grape

-2000-4300: silver ecoregion

Canopy

-pacific silver fir

-noble fir

-douglas fir

-alaska yellow cedar

Floor

-vine maple

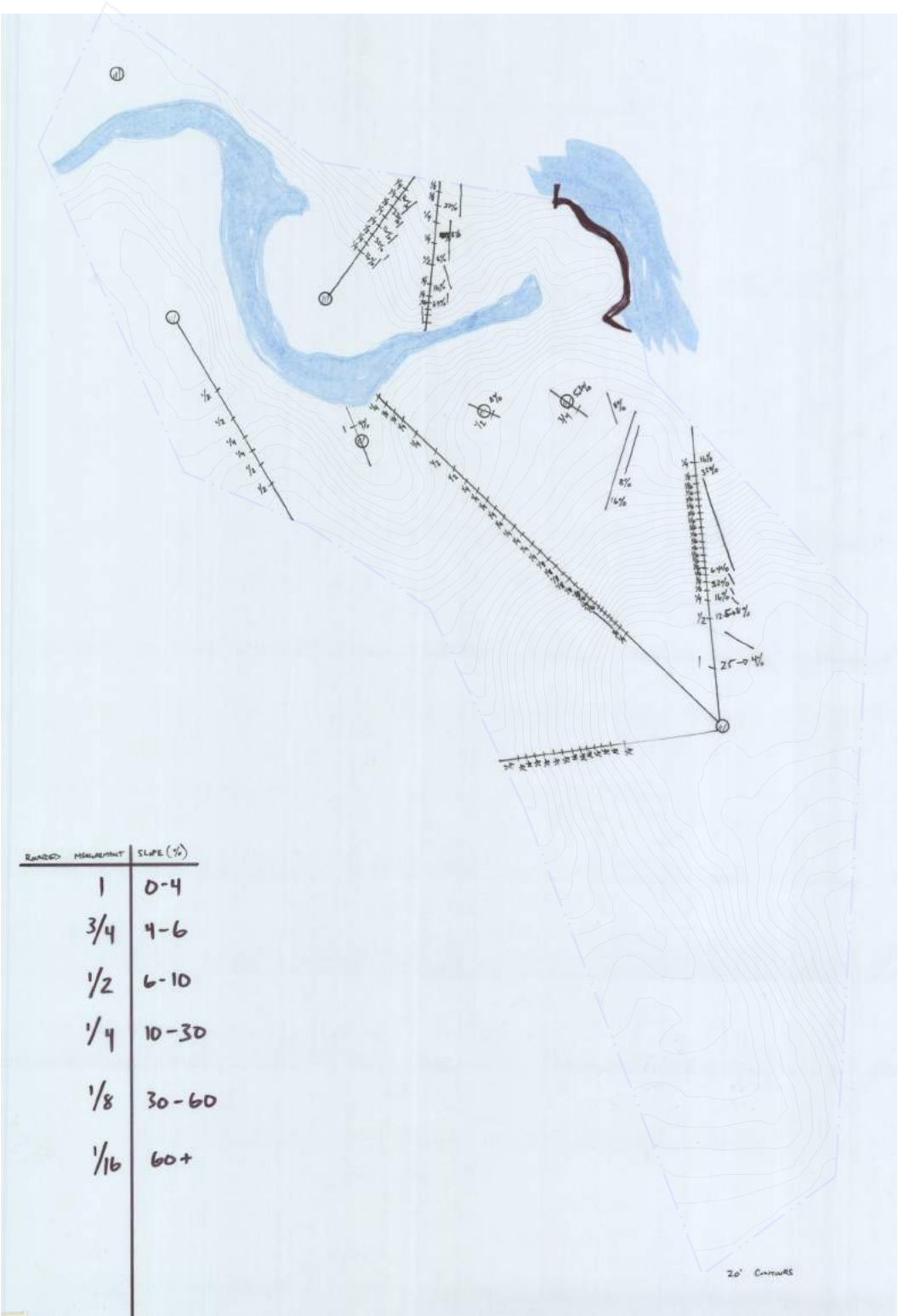
-salal

-mountain huckleberry

-devil's club



# SLOPE



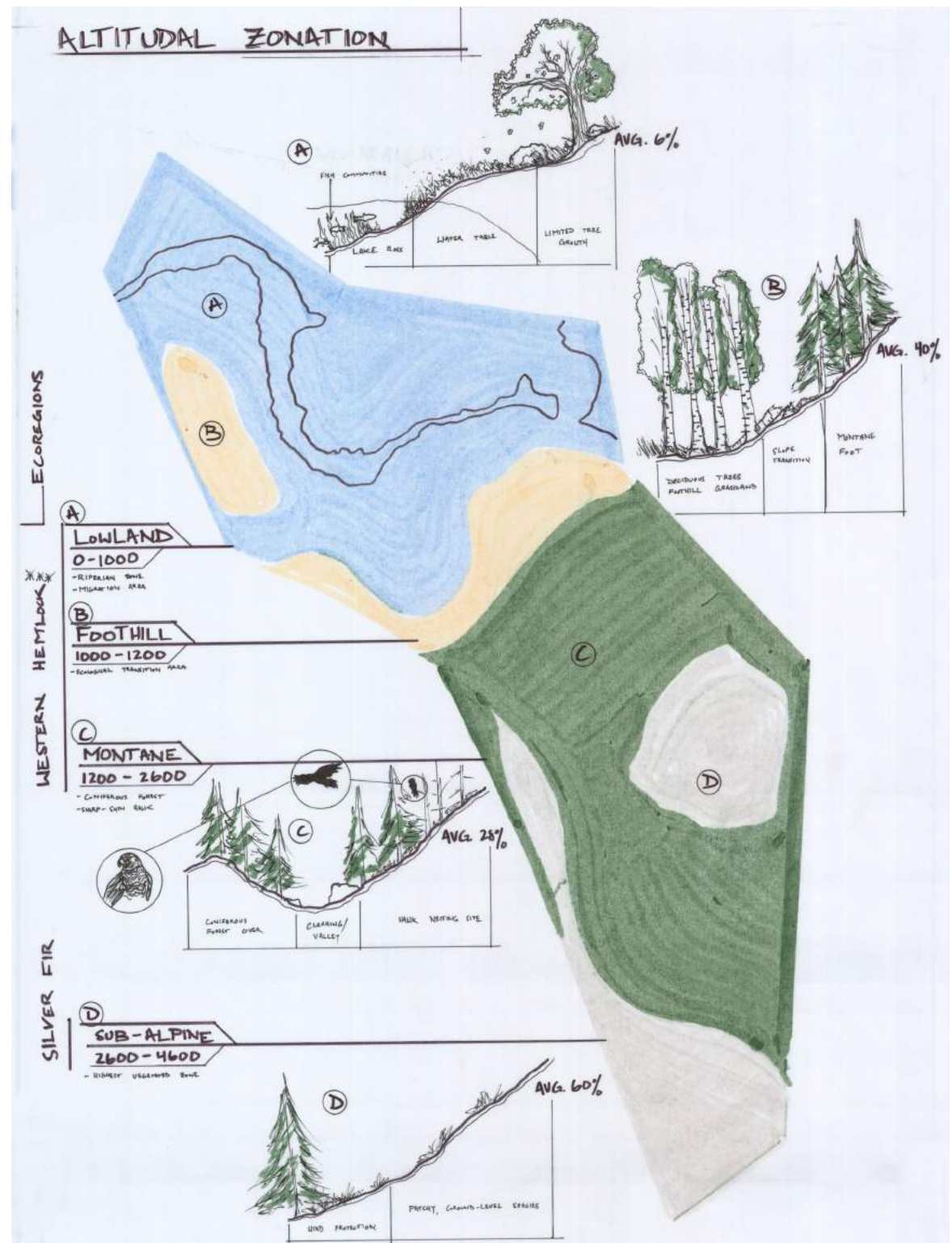


# SLOPE FACE

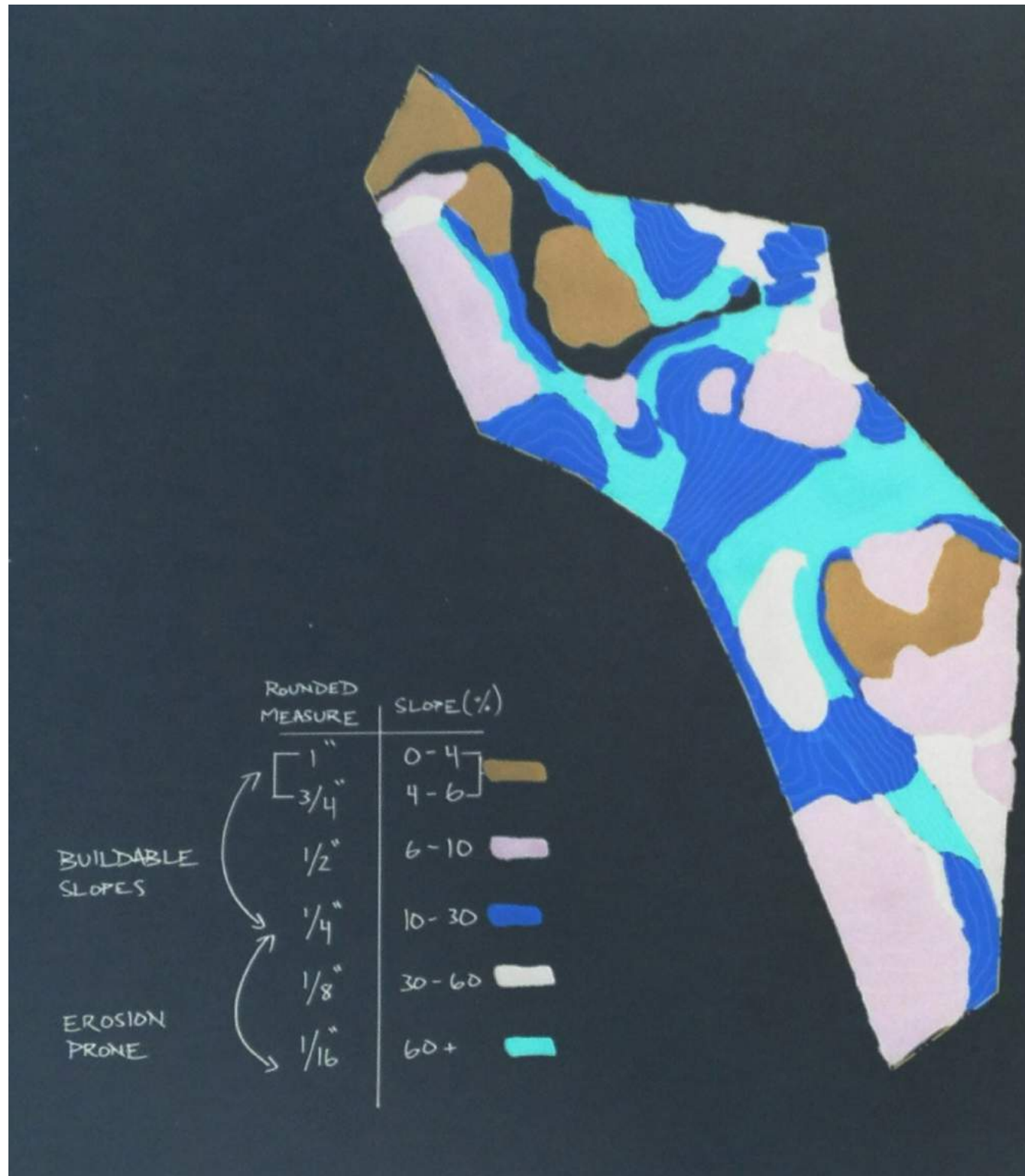


ANALYSIS

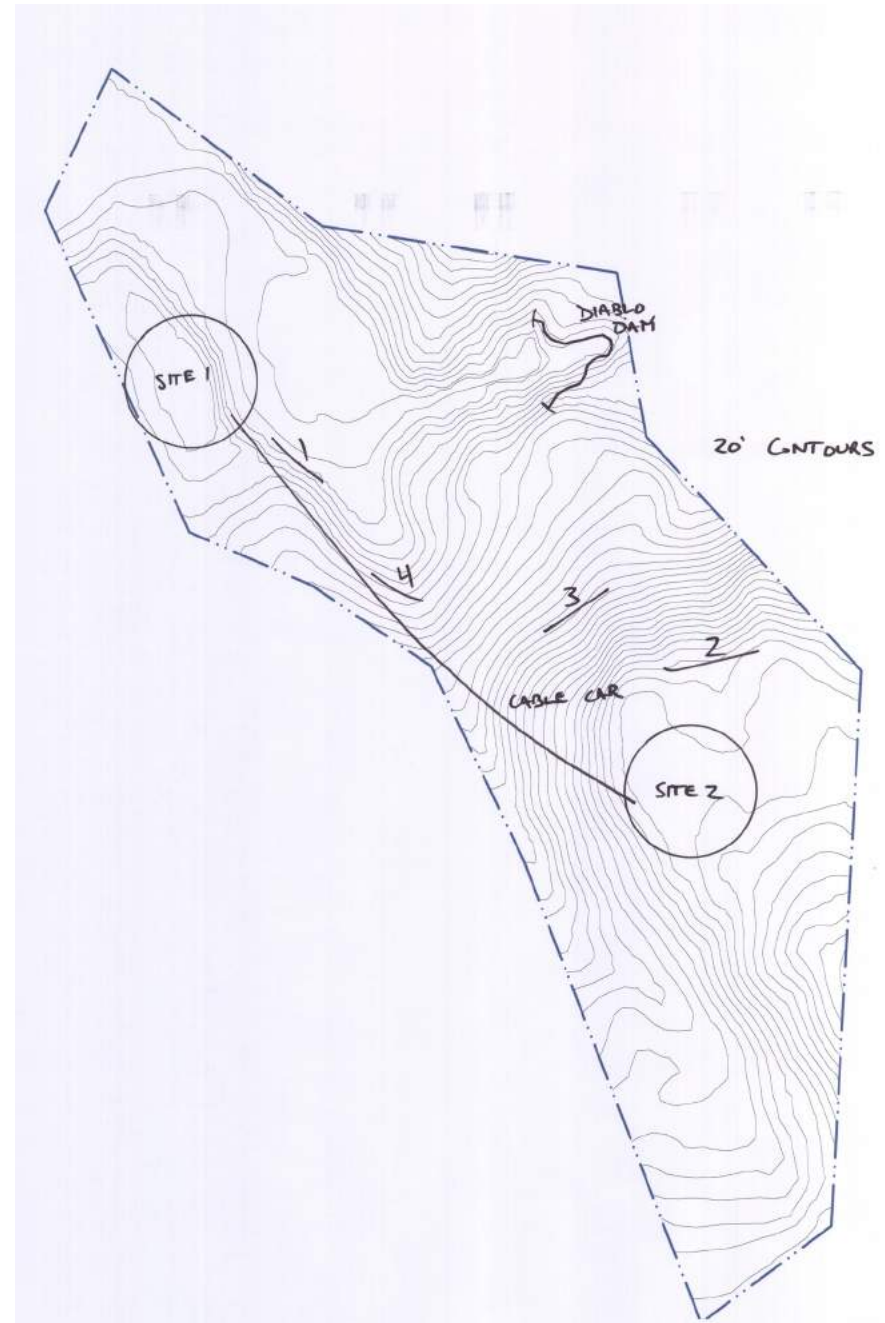
Altitudinal Zonation +  
 Elevation Ecology + Razing  
 Zones + Slope Analysis =  
 Ecological Character Systems



Elevation Ecology + Soil  
Composition + Slope  
Analysis = **Stability Metric**



Ecological Character Systems  
+ Stability Metric  
= Project Sites





# PROGRAM

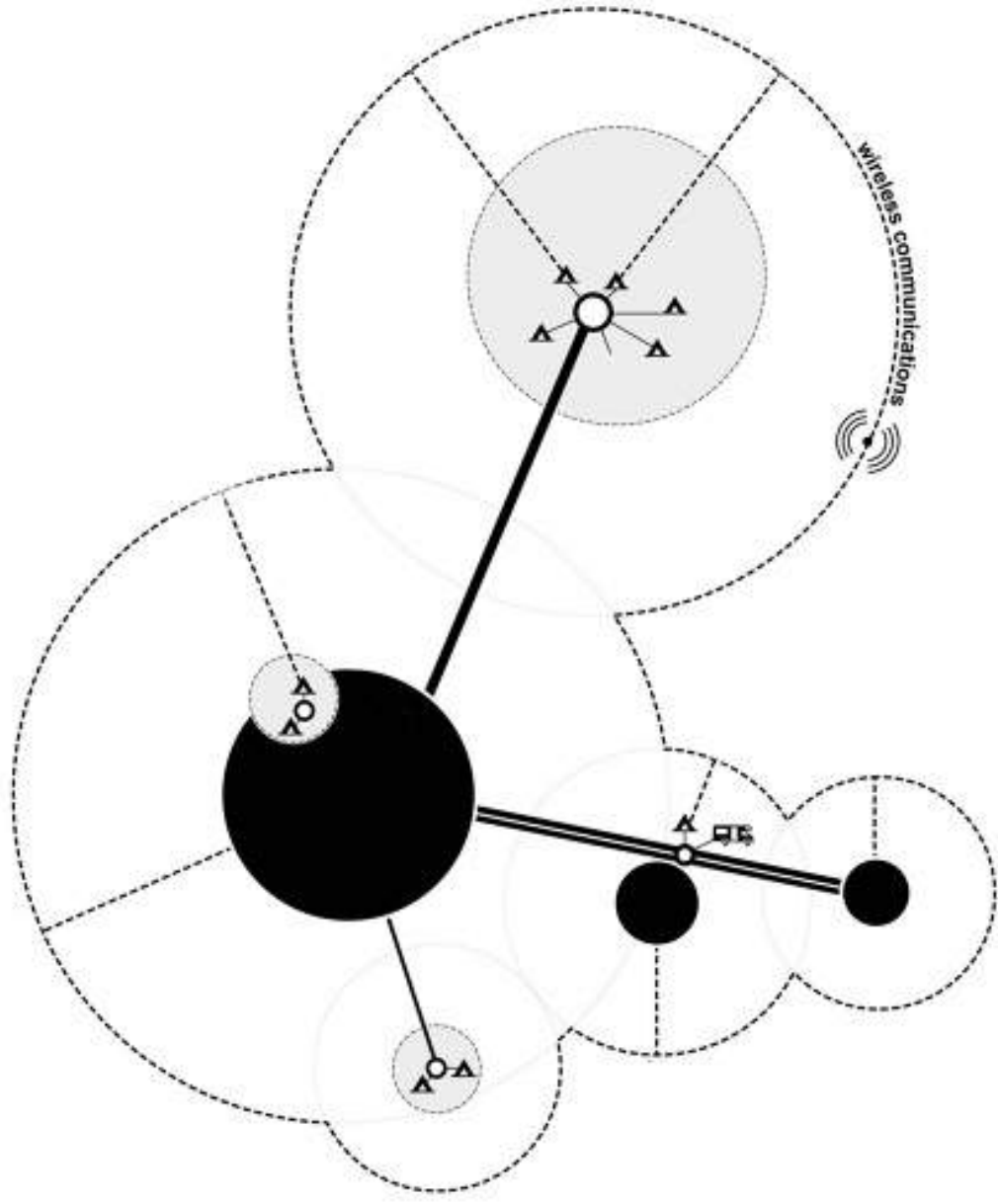
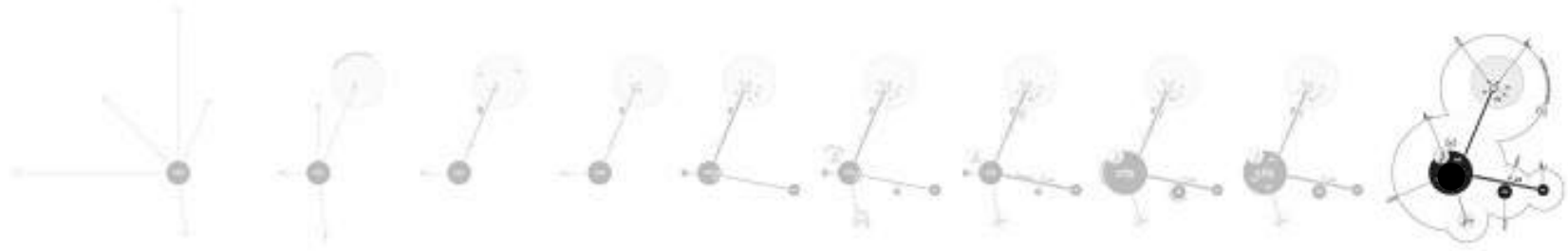
## Recreation

	Jasper	Oak Creek	Rak Al Jais	Sandia	Table Mountain
Backpacking	●	×	×	×	×
Cable Car/Tram	×	×	●	●	●
Camping	●	●	×	×	×
Caving	×	×	×	×	●
CC Skiing	×	×	×	●	×
Downhill Ski/Snowboarding	●	×	×	●	×
Equine	●	●	●	●	×
Ferry	●	×	×	×	×
Fishing	●	●	×	×	×
Hiking/Trails	●	●	●	●	●
Kayaking	●	×	×	×	×
Mountain Biking	●	●	×	×	●
Natural Water Slide	×	●	×	×	×
Paragliding	×	×	●	×	×
Picnic Area	●	●	×	●	●
Rafting	●	×	×	×	×
Rock Climbing	×	×	×	×	●
Swimming	×	●	×	×	×

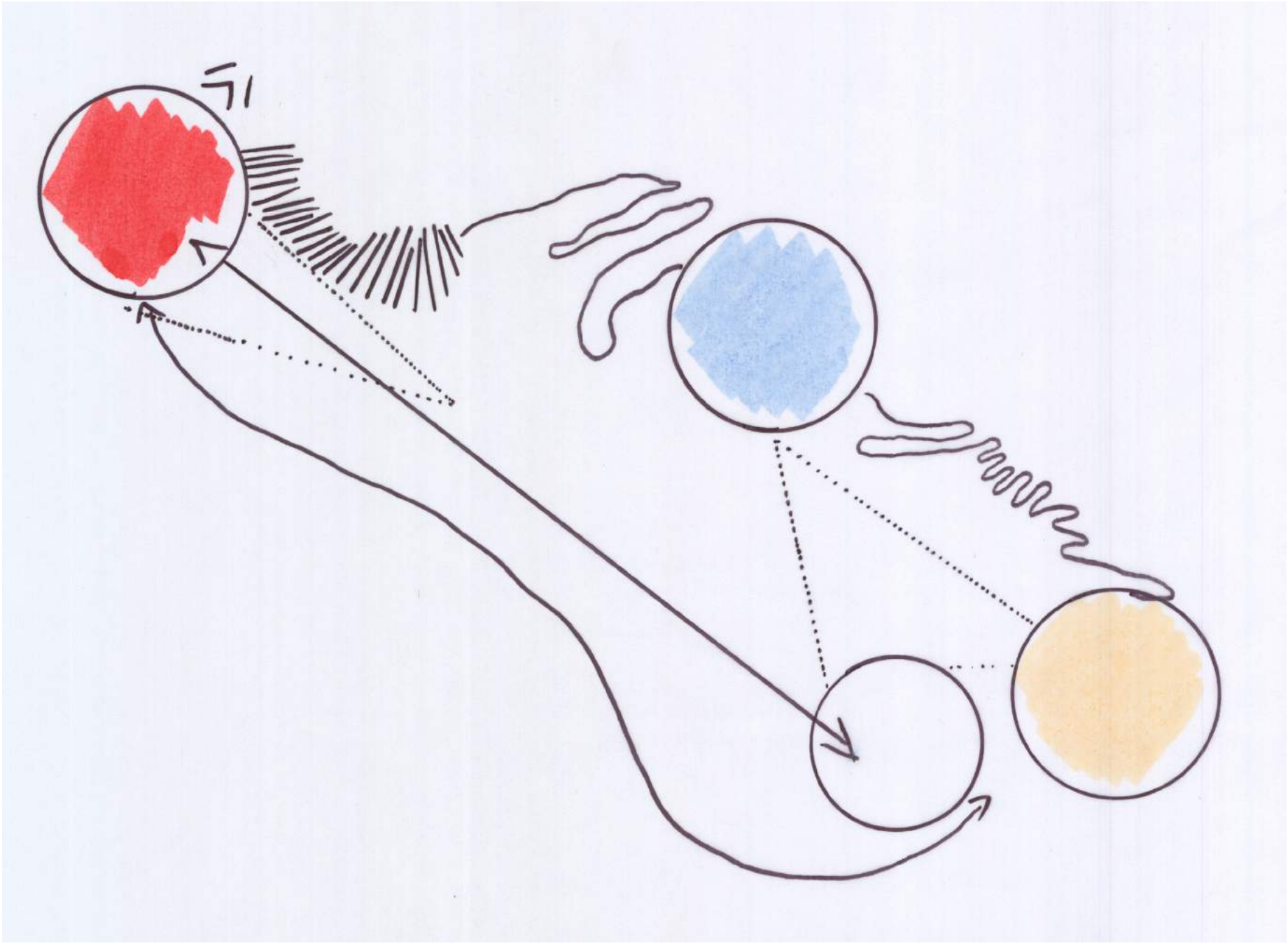
## Amenities/Facilities

	Jasper	Oak Creek	Rak Al Jais	Sandia	Table Mountain
Visitor/Learning Center	●	×	●	×	●
Natural Observatory	×	×	●	×	×
Tram Reception Hubs	●	×	●	●	●
Restaurant/Dining	●	×	●	●	●
Gift Shop	●	×	●	●	●
Parking	×	×	●	●	●
Boat Launch	●	×	×	×	×
Lodging	●	×	●	●	●
Overlook/Skywalk	●	×	●	×	×
Signage/Wayfinding	●	●	×	×	×
Equipment Rental	●	×	×	●	×
Restrooms	●	●	●	●	●
Utility Roads/Trails	●	●	●	●	●

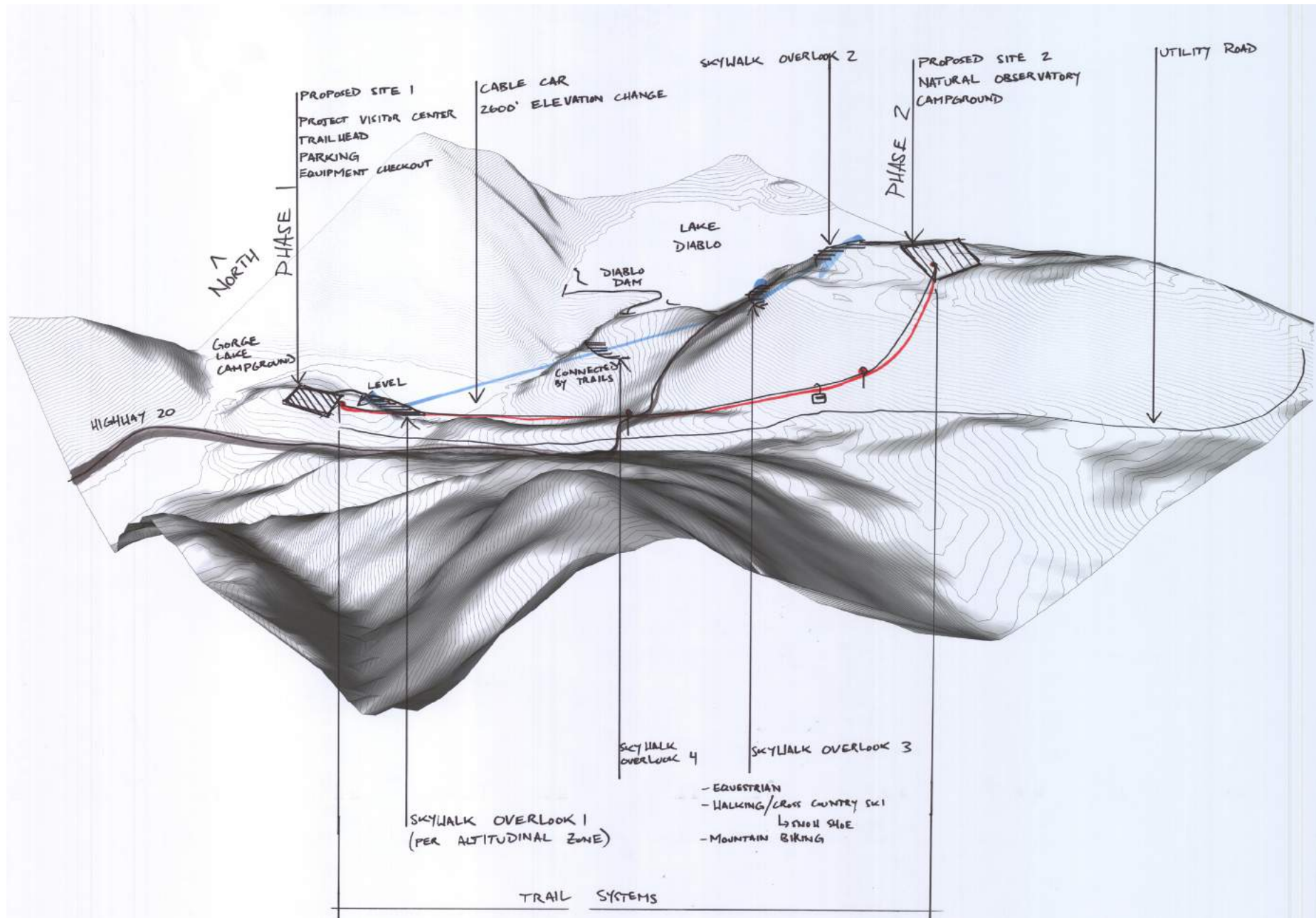
# PROCESS



# DEVELOPMENT



# VISION



STAFFING

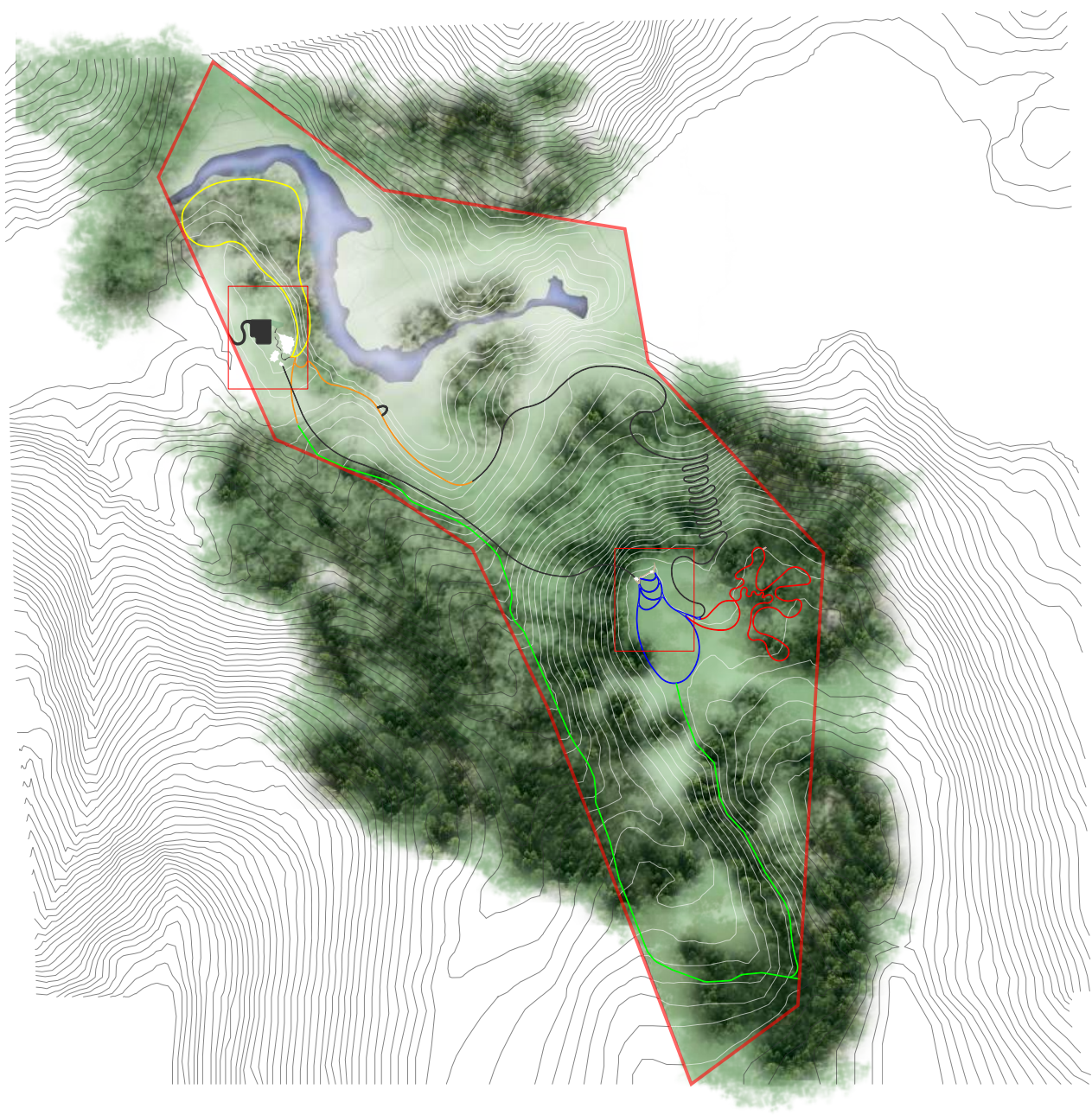
- ACC Operation: 4
- Admin: 2
- Custodial: 2
- Housekeeping: 4
- Kitchen: 6
- Maintenance/Engineers: 4
- Rangers: 8
- Scientists: 2
- Service: 8

Total: ≈40-60

DESIGN



# MASTER PLAN



APPROACH

DECOMPRESSION

RECEPTION

ORIENTATION

INTERPRETATION

TRANSFORMATION

PLANNING

# BASE SITE



B  
A  
S  
E  
S  
I  
T  
E

**Visitor Center** 1 Story, 13,865 ft<sup>2</sup>

Admin: 600 ft<sup>2</sup>

Education: 6,000 ft<sup>2</sup>

Facilities: 430 ft<sup>2</sup>

Gift Shop: 800 ft<sup>2</sup>

Rec Office: 5,000 ft<sup>2</sup>

Utility: 1,035 ft<sup>2</sup>

**Lodge** 2 Stories, 9,510 ft<sup>2</sup>

Admin: 380 ft<sup>2</sup>

Dining: 2,000 ft<sup>2</sup>

Facilities: 200 ft<sup>2</sup>

Lodging: 6400 ft<sup>2</sup> (20 320 ft<sup>2</sup> rooms)

Utility: 530 ft<sup>2</sup>

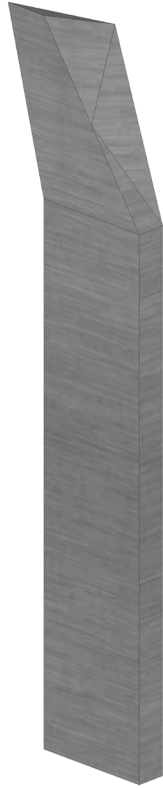
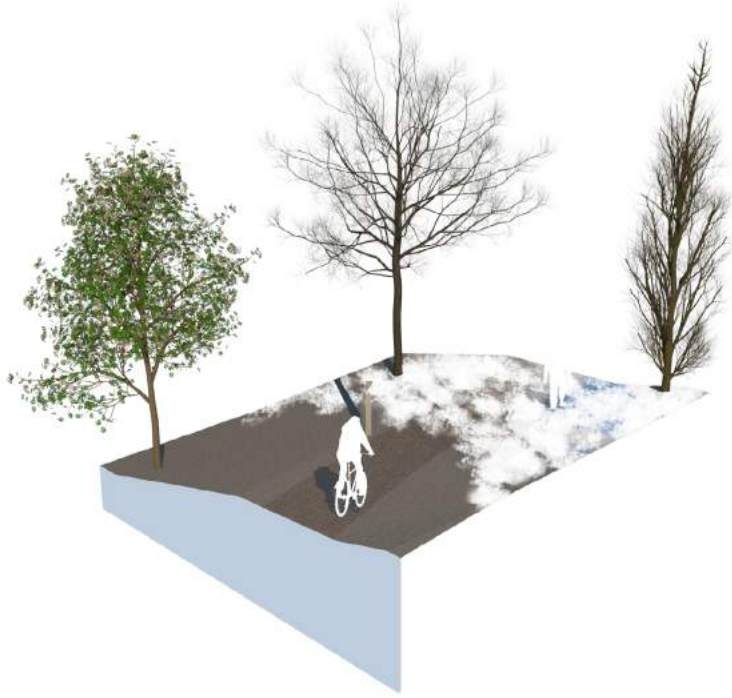
**ACC Hub** (x2) 2 Stories, 2,210 ft<sup>2</sup>



# PARKING

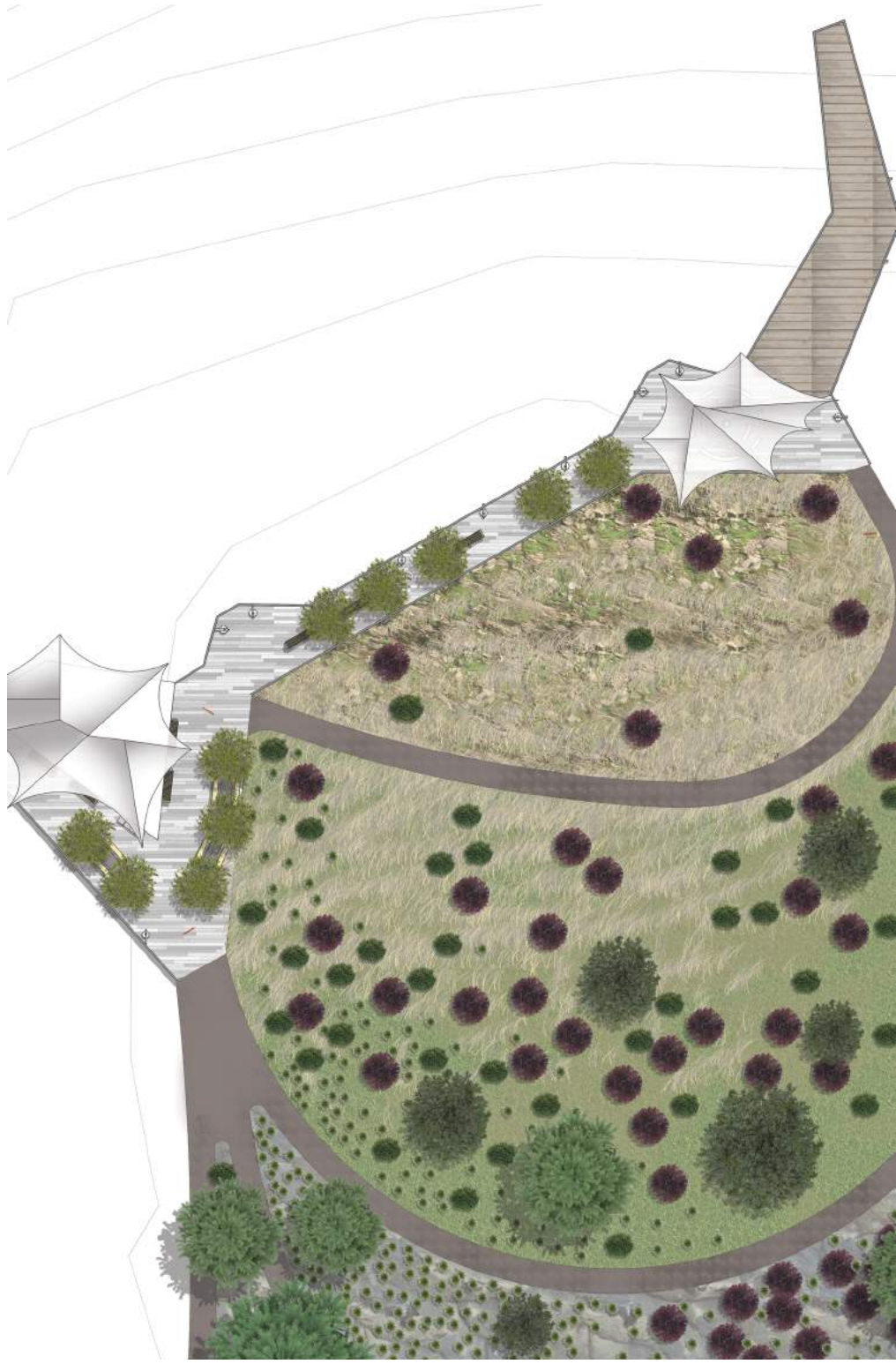


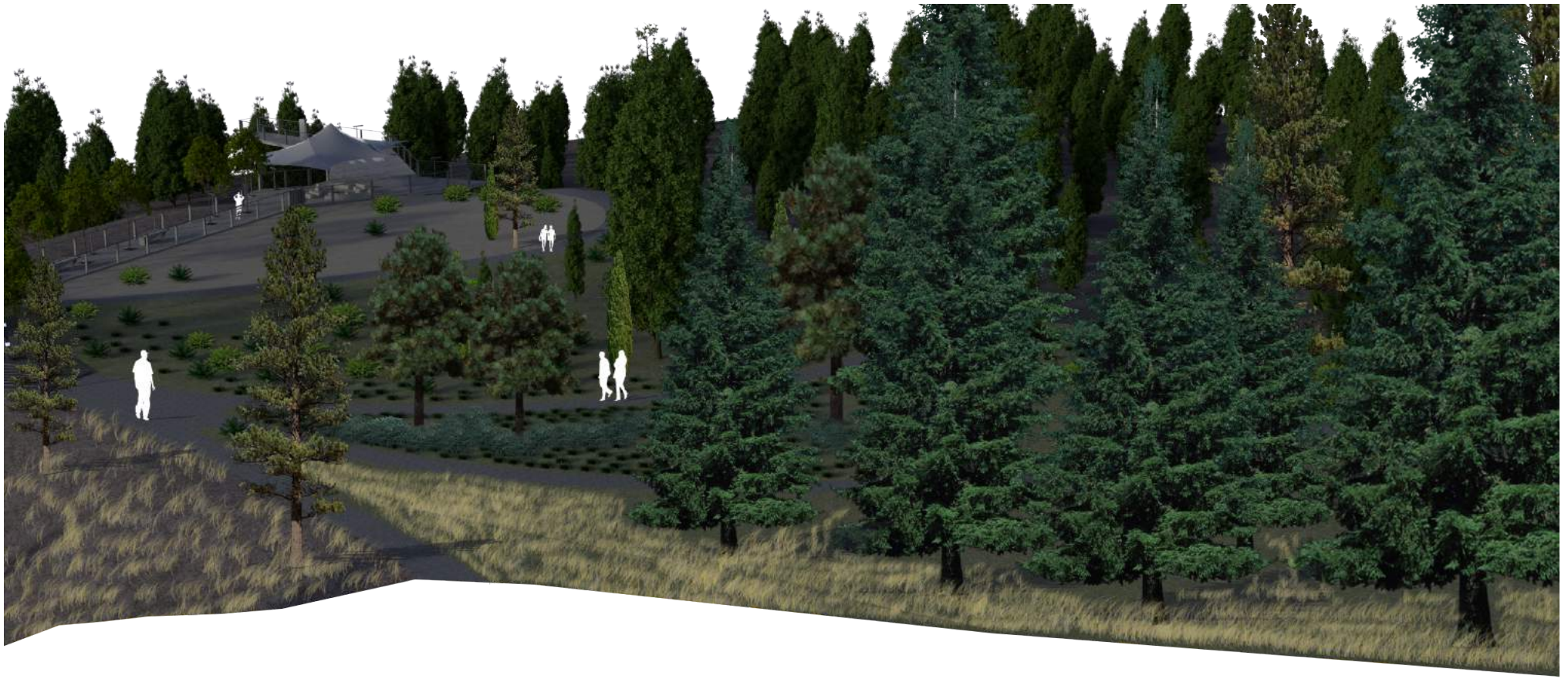
# C DETAILS





# SUMMIT SITE



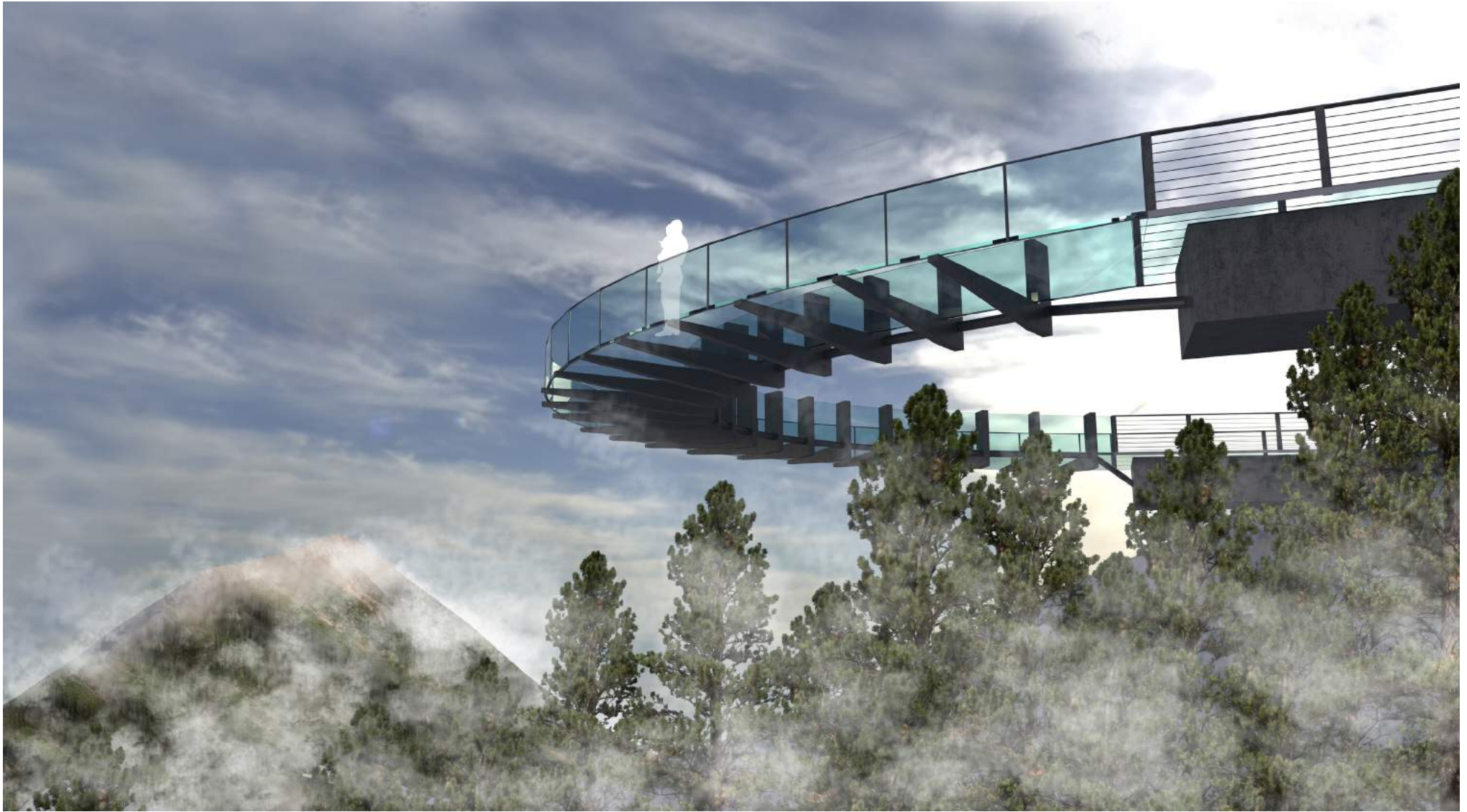




















### Summit's Rally

Preserving the ecological systems of The Ross Lake Rec. Area and the North Cascades National Park through recreational education.

Primary Design Typology: Environmental Planning  
Secondary Design Typology: Parks and Open Spaces

Emphasis: Eco-Tourism

Project Goals/Objectives  
Environment  
Education

- To sustain, ameliorate, and advocate dynamic environmental systems.
- To educate visitors and spread awareness of present transboundary logging encroachment.
- To create a low-impact destination that will attract more visitors without sacrificing the soul of the park.

COMMENTS+QUESTIONS