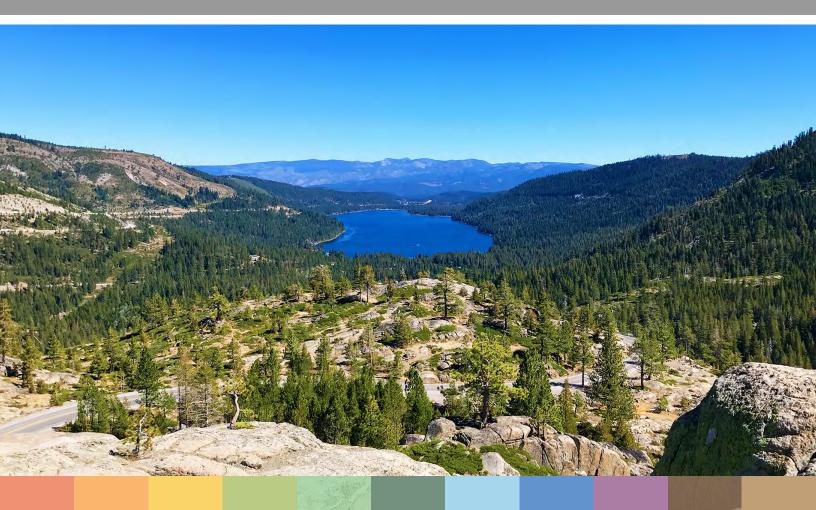


DONNER SUMMIT

PUBLIC USE, TRAILS, AND RECREATION FACILITIES PLAN

February 2024



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PREPARED BY:

DONNER SUMMIT ASSOCIATION

IN ASSOCIATION WITH:

STANTEC CONSULTING SERVICES





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TABLE OF CONTENTS

1.0	Introductio	on	1
	1.1 Purpo	ose & Scope	
	1.2 Goals	s and Objectives	
	1.3 Plann	ning Process	
	1.4 Planr	ning Basis	
2.0	Other Loca	al Plans	11
	2.1 Soda	ı Springs Area Plan	
	2.2 Place	er County Parks & Trails Master Plan	
	2.3 Truck	cee Trails & Bikeways Master Plan	
	2.4 Taho	e Donner Trails Master Plan	
	2.5 Roya	ll Gorge Public Outreach Process	
3.0	User Group	OS	19
	3.1 Sumn	ner User Groups	
	3.2 Winte	er User Groups	
4.0	Inventory		24
	4.1 Existir	ng Trailheads and Trail System	
	4.2 Existin	ng Recreation Facilities	
	4.3 Loca	l Amenities	
	4.4 Lodg	iing	
	4.5 Snow	/ Play Areas	
	4.6 Ski Ar	reas	
	4.7 Cross	S Country Skiing and Snowshoeing	
5.0	Planned Pr	rojects	52
6.0	Needs And	alysis	55
		ds Analysis Summary	
		ds and Gaps	

TABLE OF CONTENTS

7.0	Priority Projects	64
	7.1 Top Priority Projects	
8.0	Design Guidelines 8.1 Public Restrooms 8.2 Trail Connectivity and Variety 8.3 Trail Design 8.4 Stream Crossings 8.5 Drainage and Erosion Control 8.6 Wayfinding and Signage 8.7 Outdoor Gathering Area 8.8 Camping 8.9 Trailhead/ Parking 8.10 Winter Recreation: Snow Park 8.11 Accessibility	85
9.0	Operation and Maintenance 9.1 Operations and Maintenance Overview 9.2 Forest Service Maintenance Activities 9.3 Non-Forest Service Maintenance Activities	112
10.0	Implementation and Funding 10.1 Preliminary Opinion of Probable Cost 10.2 Phasing 10.3 Funding Sources	115
11.0	Works Cited	121
Appe	ndix A: Trail Classification Table ndix B: Stakeholder Meeting Notes ndix C: Survey Results Notes	123 125 131



Our Vision:

This **Donner Summit Public Use, Trails and Recreation Facilities Plan (Plan)** builds upon existing planning efforts to further the implementation of a locally and regionally expanded and connected trail network with associated facilities that provide recreational opportunities for a variety of users. The plan's vision includes:

- Enhancement of recreational opportunities, wayfinding, and facilities in response to the growing needs at Donner Summit
- Improving the quality of life and enhancement of the user experience while protecting the unique sense of place, rural character, and natural and historic resources at Donner Summit

The improvements proposed in this Plan will enrich the quality of recreational experiences on Donner Summit for both residents and visitors alike.



FIGURE 1.0: VIEW FROM CASTLE PEAK Source: Julia Warden

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

The purpose of this Donner Summit Association (DSA), Trails and Recreation Facilities Plan (Plan) is to develop a comprehensive guide for recreation improvements on Donner Summit (the Summit). This Plan provides a framework for near-term and long-term decision-making. It is a foundational document for public engagement, public agency, and non-government organization (NGO) meetings to guide conversations and project planning toward implementation. The Plan establishes initial concepts and guidance in the form of trail maps, wayfinding, and standards for future development.

The intent is to create a living document that is updated periodically. It does not attempt to solve all issues associated with recreation on Donner Summit; rather it builds upon existing planning efforts and provides guidelines for future recreation planning and development in the area in a way that preserves it's rural and alpine character, while protecting natural resources, and highlighting the need for fire safety.

1.2 GOALS AND OBJECTIVES

The following goals were developed through stakeholder input via public meetings and user surveys. Directed outreach with key landowners and NGOs was also conducted between 2019 and 2021. Additionally, a draft Plan was presented and comments solicited via the Summit Summit III in August 2021, with follow-up coordination with interested parties through 2022 and early 2023. The list below is not ordered by priority; each of the goals were determined to be important to achieve a sustainable recreation vision for Donner Summit.



FIGURE 1.1: JUDAH LOOP Source: Julia Warden

Goal 1: Develop a multi-use trail system that promotes tourism, manages recreation uses and protects the environment through signage and wayfinding.

- **1.1 Support the local economy.** Develop a recreational network that will provide sustainable year-round economic support for a vibrant community of residents and visitors.
- **1.2 Establish wayfinding standards.** Develop wayfinding standards to be implemented throughout the trail system and on the Summit. The standards recommended generally follow Forest Service guidelines and Truckee Donner Land Trust monuments and signage precedent.
- **1.3 Establish and implement wayfinding program.** Establish and implement wayfinding throughout the trail system, in the Summit area, and along primary roadways to alleviate confusion for users. Trail names should be posted at all trail intersections.
- **1.4 Post trail usage etiquette.** Post proper trail etiquette at all trailheads. Etiquette signage should, at a minimum, include equestrian, hiker, and biker yield signs; yield to uphill traffic; leave no trace; and communicate when passing.
- 1.5 Provide educational information at trailhead kiosks. Trailheads should have educational material, including trail maps, ways to conserve natural and cultural resources, wildfire prevention and preparedness suggestions, hiking safety best practices, seasonal attractions, and volunteer opportunity information. Materials should also include maps clearly identifying private property and other "prohibited access" areas.
- 1.6 Provide regulatory information at trailheads. Trailhead area signage should be highly visible and must clearly communicate regulatory restrictions on parking and access including applicable penalties.
 - **A. Parking.** Clearly show where parking is allowed and prohibited including durations and seasonal variability.
 - **B.** Access. Post appropriate signage where no trespassing, private property, and/or "Right to Pass..." (Section 1008, Civil Code) restrictions apply.
 - **C. Applicable Penalties.** Where applicable, cite codes, ordinances, and penalties that govern usage restrictions.
- 1.7 Expand interpretive signage program. Build upon existing interpretive signage around the Summit to expand awareness and appreciation for the unique cultural and environmental significance of Donner Summit.

Goal 2: Provide supporting recreational facilities

- **2.1 Install public restrooms.** Provide public restrooms at all heavily used trailheads and activity areas. Amenities such as drinking fountains and water bottle fillers are recommended. Identify funding sources and implement partnerships for long-term maintenance.
- **2.2 Provide adequate parking.** Provide adequate parking at all trailheads including horse trailer parking and hitches for equestrians, where appropriate.
- **2.3 Picnic and Day Use Areas.** Explore options for day use areas that could provide spaces for picnics and shaded seating.
- **2.4 Snow play area.** Explore options for additional snow play areas.
- **2.5 Provide adequate trash receptacles.** Install trash receptacles, including dog waste stations, at major trailheads.
- **2.6 Campground.** Explore options for a campground on Donner Summit.

Goal 3: Develop a well-connected trail system that provides opportunities for a range of users and abilities.

- 3.1 Develop a trail system that accommodates varied activities. The trail system should be broad in its attraction to user groups such as equestrians, runners, hikers, mountain bikers, winter users, etc. Specific trail features and design philosophy should maximize user enjoyment, particularly for less-advanced user groups. This can be done by means of grade variations and safe trail tread for runners, flow for mountain bikers, a minimum of "drudgery climb moments" for walkers and hikers, and other design features.
- 3.2 Develop a well-connected trail system. The trail system should include localized trail connections via stacked loops and branching trunk line trails. The Donner Summit trail system should also connect regionally to the Truckee trail system and to the western foothills.
- 3.3 Plan for a range of trail difficulty-levels. The trail system should provide options for a range of ability levels, from beginner and Americans with Disabilities Act (ADA) -compliant trails through advanced level trails, using specific trail designations and taking into account access, grade, length of hike, elevation gain and loss, and interesting destinations that reward all abilities.

Goal 4: Develop a sustainable and maintainable trail system

- 4.1 Develop and maintain trails to minimize erosion. Use trail guidelines and standards—as defined in this plan and consistent with the US Forest Service Trails Handbook (FSH 2309.18) and Specifications for Construction and Maintenance of Trails (EM-7720-10) and with California Parks and Recreation specifications (California State Parks 2019)—for appropriate trail grades, reverse grading and switchbacks to reduce erosion and washouts, and to minimize the need for maintenance.
- **4.2 Eliminate unauthorized user-created trails.** Identify and eliminate known undesired user-created trails through natural and built barriers.
- **4.3 Avoid impacts to environmental and cultural resources.** To the extent feasible and/or required by statute, avoid, protect and preserve known sensitive resources during the planning, design, and maintenance of trails and new facilities.
- **4.4 Facilitate Fire Safe Conditions.** Facilitate Fire Safe conditions and practices by coordinating with local land managers to maintain trails as fuel breaks (while protecting environmental resources) and to provide Fire Safe best practices information to end uses. Identify funding sources and partnerships to implement fire resiliency projects.
- **4.5 Establish maintenance responsibilities.** Establish maintenance agreements prior to the development of facilities and trails.
- **4.6 Promote and encourage volunteer days.** Hold volunteer days for trail and facility maintenance and construction.

Goal 5: Maximize funding strategy to promote recreation facility development

- **5.1 Prioritize projects.** Determine priority projects and establish preliminary costs to guide future funding requests.
- **5.2 Assess funding opportunities.** Track, evaluate and pursue federal, state, and local grants to aid in Plan implementation.

1.3 PLANNING PROCESS

The Plan development process entailed several steps to yield a recreation-specific assessment of needs and priorities for the Summit. Each step in the planning process corresponds to a section in this document.

REVIEW PAST DATA AND SEEK STAKEHOLDER INPUT

Step 1 (Section 1 of this Document): Define the study boundary, compile and synthesize
existing data and documentation, and seek stakeholder input to form the foundation of this
recreation planning effort.

INVENTORY AND DATA COLLECTION

- Step 2 (Section 2): Review existing local land use plans to facilitate consistency with recreation goals.
- Step 3 (Section 3): Identify user groups to understand who is recreating on the Summit, and where and when that recreation is occurring.
- Step 4 (Section 4): Perform a recreation facility and trail resource inventory to inform the assessment of whether recreation needs are adequately being met under current conditions.

ANALYZE DATA AND SUMMARIZE RESULTS

 Step 5 (Section 5): Identify planned projects to determine the extent to which such enhancements may supplement the existing resources inventoried in Section 4 of this document.

RECOMMENDATIONS

- Step 6 (Section 6): Synthesize the data in Sections 1 through 5 of this document to develop a recreation facility and trail needs assessment, and to inform future recreation development concepts for the Summit.
- Step 7 (Section 7): Prioritize the recreation facilities and trail projects synthesized in Section 6, based on stakeholder input and existing conditions assessments.
- Step 8 (Section 8): Review and define design guidelines based on federal, state, and local standards and specification.
- Step 9 (Section 9): Assess operation and maintenance needs for existing and potential future projects.
- Step 10 (Section 10): Develop a roadmap for project implementation and identify funding sources.



FIGURE 1.2: PLANNING PROCESS

1.4 PLANNING BASIS

Geospatial data, existing documentation, and past and present stakeholder input were reviewed as the initial step to inform the recreation facilities and trail needs assessment.

PLAN STUDY BOUNDARY

The Plan study boundary is delimited by Signal Peak to the west, the Summit Canyon trailhead and Donner Memorial State Park to the east, Point Mariah to the south, and the Hole in the Ground Trail to the north. Figure 1.3 shows the study boundary as well as land ownership. The planning area was also subdivided into recreation regions to facilitate location-specific planning.



FIGURE 1.3: PLAN STUDY BOUNDARY

EXISTING DATA AND KEY OUTREACH/MANAGEMENT DOCUMENTS

This Plan was developed using a process that includes years of discussions and input from a wide range of stakeholders and the DSA. It complements and supports adjacent and overlapping planning documents. Existing GIS spatial data were used to compile the initial inventory of trails and facilities within the study area.

This Plan incorporates planning and project concepts that have been proposed previously at Summit Summits I and II and other locally focused meetings by a diverse group of stakeholders, including, but not limited to:

- Nevada County Economic Development Study for Donner Summit (June 2004). The
 Economic Development Study funded by Nevada County was a catalyst for the formation of
 the Donner Summit Area Association (DSAA). DSAA, one of DSA's predecessors, was created
 to provide a voice for the entire Donner Summit community.
- DSAA Proposal for the Donner Summit Area Comprehensive Plan (January 2006). A
 blueprint submitted by DSAA that outlined the community's intent to engage Nevada and

- Placer counties and get their endorsement; to conduct community forums to identify priorities and increase understanding of issues; to develop an overall project plan, budget and timeline; and to get broad approval of the project plan and organizational structure.
- Summit Summit I (December 2006). Co-sponsored by DSAA and the Serene Lakes Property
 Owners Association (SLPOA). Summit Summit I was to held discuss the proposed regional plan,
 explain the planning process, and collect information from participants about issues that should
 be addressed.
- Visioning and Planning Resident Survey funded by DSAA (November 2007). The survey results formed the basis for further discussions and planning for Donner Summit.
- Summit Summit II (December 2007). This public meeting was co-sponsored by DSAA and SLPOA. The Sierra Business Council presented the Seven Planning Principles of Community Building and Planning. Participants created a draft set of guiding principles for the Donner Summit Area.
- Community Prosperity Summit Preparation Interviews (May to November 2008). In preparation for the Community Prosperity Summit, DSAA held conversations with homeowners and 19 local businesses to solicit ideas about Summit needs and vision for the future.
- Community Prosperity Summit (November 2008). This meeting, co-sponsored by DSAA and SLPOA, was to discuss opportunities to improve prosperity at Donner Summit while preserving the environment and improving quality of life and the visitor experience.
 Discussions included identifying concepts for investment, reinvestment, and restoration of the Summit.
- Economic and Conservation Vision for Donner Summit (May 2009). DSAA and eight other community organizations led this meeting to further define a vision for the Donner Summit Area.
- "Wonders of Donner Summit" (August 2012). This Donner Summit-wide meeting of 35 businesses resulted in the endorsement of the Donner Summit Economic Principles compiled by DSAA.
- Royal Gorge Properties public meetings (Summer 2013). Truckee Donner Land Trust hosted public meetings regarding the future of Royal Gorge properties.
- Nevada County Survey on Public Works Projects (December 2013). Requested by Nevada County, DSAA conducted a survey of Nevada County Public Works Projects on Donner Summit.
- Soda Springs Area Plan public meetings (2014 to 2015). Nevada County Planning
 Department hosted, with coordination support from DSAA, a series of eight public meetings
 to discuss various elements of the Soda Springs Area Plan.
- Donner Summit Legacy Resident survey (Summer 2016). Donner Summit Legacy sponsored a "Why I Love Donner Summit" survey of residents.
- South Yuba River Citizens League (SYRCL) Van Norden Meadow Community Meeting (November 2020). SYRCL hosted a virtual community meeting to share meadow restoration design alternatives with the community. The Tahoe National Forest and SYRCL presented varied restoration approaches, timelines, model outputs on the meadow surface, and

- invasive species and conifer removal plans. The presentation included recreation opportunities, such as a 1-mile-long trail and picnic tables.
- Donner Memorial State Park Road and Trail Management Plan (January 2021). The Road and Trail Management Plan for Donner Memorial State Park describes the existing roads and trails of the park and provides specific direction for management and operations in the future. The goal is to ensure that recreational trail opportunities are made available at their fullest potential, while protecting the park's resources. The Road and Trail Management Plan went through a public California Environmental Quality Act Compliance, with input from interested parties.
- Summit Summit III (July 2021). Summit Summit III included a Land Stewardship Panel, a Peak Visitation Discussion, an update on the Van Norden Meadow Restoration and Recreation Project, and an overview of the draft version of this Donner Summit Public Use, Trails and Recreation Facilities Plan. Participants included representatives from local government, NGOs, the Forest Service, and interested stakeholders. (Donner Summit Association 2021).
- Placer County Park and Trails Master Plan (March 2022). In 2021 the Draft Placer County
 Parks and Trails Master Plan was updated to reflect the updated Hidden Falls Regional Trails
 Expansion Project. The final draft Placer County Parks and Trails Master Plan was completed
 and approved by the Board of Supervisors on March 24, 2022. (Placer County 2022).
- Nevada County Recreation and Resiliency Master Plan (Ongoing in 2023). Nevada County
 is working with a consulting firm to develop a recreation master planning effort to advance
 the implementation of a variety of community objectives, especially those related to public
 health, economic development, creative placemaking, landscape restoration, and climate
 change adaptation in unincorporated Nevada County.

STAKEHOLDER INPUT

Stakeholder input specific to this Plan was sought to confirm whether the information previously gathered was still pertinent. To inform this Plan, stakeholder input was gathered during an initial stakeholder meeting on October 6, 2019, through individual outreach, and by conducting two online surveys. The stakeholder meeting and individual outreach meetings were held to discuss existing and potential Donner Summit recreation opportunities and to gather additional information. A summary of the direction received and items discussed at the stakeholder meeting is included in Appendix B.

An online survey was sent to stakeholders and residents in 2019. This survey was intended to gather information from large landowners, land managers, businesses, and residents. Its purpose was to develop a better understanding of recreation user groups, trail and facility needs, and existing issues and planned improvements. These survey results were used to create an opportunities and constraints framework to further guide future recreation improvements on the Summit. The input was summarized and trends were identified to determine the Plan focus (Figure 1.5).

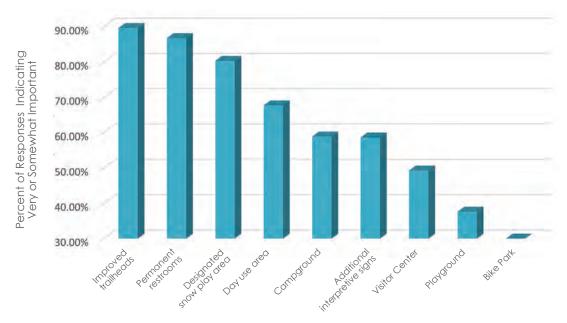


FIGURE 1.4: DONNER SUMMIT PUBLIC USE, TRAILS AND RECREATION FACILITIES PLAN SURVEY - FACILITIES IMPROVEMENTS RESULTS SUMMARY, Facilities Improvements on Donner Summit that respondents considered very important or somewhat important.

Survey Respondents: The survey yielded 152 responses. Facilities and trail improvements suggested by respondents are summarized in Figures 1.4 and 1.5. The data depicted are based on a weighted average with stakeholder and residents each contributing 50%. A description of the responses and general comments is included below.

Survey Results: Based on existing data and documents and stakeholder input, there is a clear desire for recreation facility improvements centered around nature experiences (i.e. improved trailheads and associated permanent restrooms, designated snow play areas, day use areas, campgrounds, and additional interpretive signs) with more structured areas such as a visitor center, playground and bike park ranking slightly lower in priority but still considered very or somewhat important.

Additionally, with respect to trails, there is a keen focus on the need for additional wayfinding, erosion reduction, specific trail connections (and more of them), separation of user groups, and diversity of trail difficulty rankings to expand access to all user levels.

Therefore, this Plan, which is intended to inform decision-making relative to trail connectivity and recreation facilities on the Summit, synthesizes existing data, existing documents, 2019 stakeholder input, and subsequent (2020-2023) draft Plan input via the Summit Summit III and trail focused meetings with key landowners and governing bodies to provide recommendations.

The Plan developed thus focuses on the following key opportunities to ultimately broaden user access and economic vitality on Donner Summit:

- Potential linkages and connections to existing open space and existing trail systems
- New opportunities in wayfinding, trailheads, recreation, snow play, parking and restrooms
- Planned projects and associated synergies for achieving recreation goals

Additionally, feasibility constraints and challenges considered herein include:

- Barriers to connectivity (natural/environmental barriers, ownership and conflicts with vehicular transportation systems, e.g., road crossings, intersections)
- Existing and potential user conflicts
- Concept-level engineering constructability challenges

Summit Summit III was held on July 14, 2021 to share the draft version of this plan and solicit input. Subsequently (2021-2023), input from and follow-up with, interested stakeholders (local residents), key land-owners and governing agencies was focused on increased use and user-needs since the 2020 Covid-19 Pandemic. Future planning efforts to further hone the priority projects (described in Section 7) should address potential constraints and solutions associated with environmental and cultural resource considerations, evolving landowner and management plans, landowner and manager coordination (including with the Forest Service) and spikes in recreation demands triggered by the global Covid-19 Pandemic and continue to this day. Importantly, and relevant to the increase in outdoor recreation in the region, the imperative for sanitary facilities and safe parking is clear, along with the associated long-term facilities maintenance.

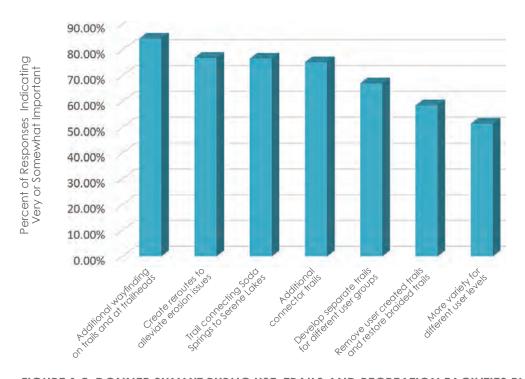


FIGURE 1.5: DONNER SUMMIT PUBLIC USE, TRAILS AND RECREATION FACILITIES PLAN SURVEY – TRAIL IMPROVEMENTS RESULTS, Trail improvements on Donner Summit that respondents considered very important or somewhat important.

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2.0 OTHER LOCAL LAND USE PLANS

This Plan is intended to build upon, and be consistent with, existing land use plans in the area. This section, therefore, describes relevant and currently applicable land use plans for the Summit. These land use plans all have several goals and policies that seek to enhance sustainable, year-round recreation opportunities at Donner Summit while preserving the environment and improving quality of life and the visitor experience. Many of the plans seek to improve the user experience through organization and guidance while protecting the unique sense of place, rural character, and natural and historic resources at Donner Summit. In short, the Vision of this Donner Summit Public Use, Recreation and Trails Plan, is consistent with the land use plans, goals, and policies described below.

2.1 SODA SPRINGS AREA PLAN

OVERVIEW

The Soda Springs Area Plan (Area Plan) was adopted by Nevada County on October 25, 2016 and serves as a comprehensive land use and zoning plan for the Nevada County portions of Donner Summit and the community of Soda Springs, California. The Area Plan builds on the goals and policies of the Nevada County General Plan while also providing goals and actions that benefit the local community.

The Area Plan is intended as a long-term guidance document providing a blueprint for the ultimate development of the area. Due in part to the strict Highway Commercial zoning designation through much of Soda Springs' center, commercial development and the existing built environment has been weakened. As a result, businesses have closed and the general socioeconomic situation of the area has diminished. Through the Area Plan, the local community expressed a desire to capitalize on the abundant natural and recreational opportunities on Donner Summit and become a recreational and nature-centered destination (Nevada County 2016).

- Goal REC-1: Maintain the quality of and expand access to year-round dispersed recreation
 opportunities on Donner Summit where those opportunities are consistent with environmental
 values and protection of natural resources.
 - Policy REC-1.1: Connected Trail System. Encourage the sustainable development of recreational facilities that complement the mountain landscape and natural resources on Donner Summit. Multi-use trail systems should be expanded to connect the Rural Center to mountain recreation opportunities and provide a link to major regional and/ or interstate trails. Biking trails should serve both mountain bikers and road cyclists, providing links to neighborhoods and adjacent areas.
 - Policy REC-1.2: Open Space. Support a broad range of enjoyable recreational experiences by integrating a variety of unique settings and isolated habitats while providing connection to regional open space lands

- Policy REC-1.9: Enhancement of Recreational Uses. Enhance recreational uses by improving trailhead parking, equestrian staging areas, picnic areas, and camping areas on recreation-zoned parcels.
- Goal REC-2: Provide non-motorized improvements that connect Soda Springs with residential neighborhoods and recreational, natural, cultural, and historic resources
 - Policy REC-2.3: Enhance Non-Automobile Transit. Promote recreational trails on existing public lands, public easements, and other public rights-of-way. Identify facilities and implementation measures to enhance pedestrian, bicycling, equestrian, and transit opportunities along with other opportunities to reduce automobile dependency.
 - Policy REC-2.4: Private Sector Development. Encourage the private sector to develop recreational improvements on their land. Improvements may include community event areas and appropriate space for the outdoor display of recreation equipment for sale or rent.
 - Policy REC-2.5: Safe Access. Provide highly visible, recognizable, and safe, trailheads, equestrian staging areas, and access points into the trail system.
 - Policy REC-2.6: Education and Interpretation. Encourage recreational trails that provide educational and interpretive opportunities.
- Goal REC-3: Encourage recreation uses in and around the Plan-area to which local business can provide support goods and services.

2.2 PLACER COUNTY PARKS AND TRAILS MASTER PLAN

OVERVIEW

The Placer County Parks and Trails Master
Plan incorporates portions of Donner Summit.
Because Donner Summit is split between Nevada
County and Placer County, there are few planning
documents that assess the entirety of the Summit.

The Placer County Parks and Trails Master Plan, adopted in 2022, serves as Placer County's first plan to comprehensively address parks and trails at a county-wide level. The planning horizon for the Placer County Parks and Trails Master Plan is 20 years and provides the framework for decision-making and guidance to the Placer County's Parks Division. Through implementation of this plan, Placer County intends to increase park and beach acreage from 2,033 acres in 2020 to 6,096 acres by 2040 and to increase trail mileage from 112 miles in 2020 to 376 miles by 2048. Tier 1 and Tier 2 priority projects have been identified in the Placer



FIGURE 2.1: HIDDEN FALLS TRAIL Source: Placer County 2019

County Parks and Trails Master Plan to focus the planning efforts over the next 20 years (Placer County 2022).

RELEVANT GOALS AND POLICIES

- Opportunity 10.1: Encourage walking and biking by linking parks, open spaces, and community nodes through a system of paved and unpaved trails
- Opportunity 10.2: Prioritize and complete identified trail gaps
- Opportunity 10.3: Create a backbone regional trail system
- Opportunity 10.4: Enhance the existing trail system
- Opportunity 10.5: Improve trailheads and access to open space trail systems and year-round recreation opportunities, including access to winter play in western Placer and the West Slope
- Opportunity 10.6: Improve crossings to enhance connectivity
- Opportunity 10.7: Provide a trail system to meet the needs of all trail users
- Opportunity 10.8: Facilitate the collaboration of local regional partners for trail development and maintenance
- Opportunity 10.9: Develop digital and print countywide trails mapping that includes partner agencies and organizations

2.3 NEVADA COUNTY RECREATION AND RESILIENCY MASTER PLAN

OVERVIEW

Nevada County is developing a Recreation and Resiliency Master Plan. The purpose of the planning effort is to advance the implementation of a variety of community objectives, especially those related to public health, economic development, creative placemaking, landscape restoration, and climate change adaptation in unincorporated Nevada County. The Nevada County Recreation and Resiliency Master Plan will define recreational opportunities where Nevada County can be directly involved and where it can assist recreational providers. Clear identification of viable, prioritized recreation enhancement and development projects and potential funding strategies for the next 10 years will be a key outcome. The Nevada County Recreation and Resiliency Master Plan and its associated process will:

- Articulate a shared vision for the functional, programmatic, and aesthetic characteristics of existing and future recreation amenities in unincorporated Nevada County.
- Articulate Nevada County's role in recreation as a facilitator of proposed improvements in those areas interfacing with Nevada County facilities.
- Promote equity and inclusion that emphasizes cultural, historic, physical, and economic accessibility.
- Describe the cultural, environmental, economic and ecological benefits of implementing the plan recommendations.
- Identify innovative and impactful strategies for grappling with climate change impacts such as increased wildfire risk, drought, extreme weather, etc
- Identify effective strategies to promote sustainable recreation to protect and preserve natural resources.

13

Recommend prioritized short term and long-term outdoor recreation projects, programs, and policies including critical infrastructure addressing public and environmental health concerns and identifying action steps and estimated costs.

The Nevada County Recreation and Resiliency Master Plan will detail feasible solutions for financing, phasing, and maintaining community investments in recreation, open space, and trail resources. It will also support interagency alignment and coordination to plan, implement, and maintain recreation amenities. The final plan will be completed in 2023.

TRUCKEE TRAILS AND BIKEWAYS MASTER PLAN

OVERVIEW

The Truckee Trails and Bikeways Master Plan was approved by the Truckee Town Council on September 22, 2015. It was developed to create a complete and connected network of bikeways, walkways, and dirt trails that will showcase the Town of Truckee's natural beauty, access open space in a way that respects the natural environment, and serve everyday destinations such as shops, schools and parks. The Truckee Trails and Bikeways Master Plan builds on the goals, policies and actions contained within the Town of Truckee 2025 General Plan. It includes the following purpose Source: Sierra Nevada Geotourism 2019 statement which is consistent with the General Plan Town of Truckee 2015:



FIGURE 2.2: TRUCKEE RIVER LEGACY TRAIL.

[The Truckee Trails and Bikeways Master Plan is a] community-based planning effort promoting the implementation of a local dirt trail, bikeway, and walkway network designed to increase recreational, educational, and active transportation opportunities for the benefit of Truckee area residents, visitors, and workers. The network will link the Town's historic downtown, residential and commercial areas, and recreational, educational, natural and historic resources and plan for connections to regional public lands, trails, and bikeways.

- Goal 1: Trail, Bikeway, and Walkway System. The trails and bikeway system should provide a full range of safe and convenient recreation and active transportation opportunities for multiple users
- Goal 2: Connectivity and Continuity. The system should link the Town's historic downtown, residential and commercial areas, and recreational, educational, natural and historical resources using public and private lands as necessary and appropriate.
- Goal 3: Design. The system design should adhere to a consistent design format to promote the development of a safe, recognizable and uniform system in keeping with the mountain character of Truckee.

- Goal 4: Private Lands. The town, appropriate public agencies and community groups should work collaboratively and cooperatively with affected private and public agency landowners to effectively implement the goals of the Plan.
- Goal 5: Land Use and User Conflicts. The system should be planned to minimize land use and user conflicts to provide a safe and enjoyable experience for the user.
- Goal 6: Community Resources. The system should seek to access, protect and enhance the natural and historic resources of Truckee.
- Goal 7: Plan Support. Community and responsible agency support is critical to successful
 implementation of the planned system. Open and consistent involvement and education in the
 final planning and implementation of the Plan should be encouraged and regularly provided.

2.5 DONNER MEMORIAL STATE PARK ROAD AND TRAIL MANAGEMENT PLAN

OVERVIEW

Part of the Donner Memorial State Park Road and Trail Management Plan area overlaps the Donner Summit Plan Study Area. The purpose of the Road and Trail Management Plan is to provide specific guidance and direction for implementing the goals and objectives of the park's approved General Plan (California State Parks 2010). It describes the existing road and trail conditions in the park and provides a roadmap for future management including specific actions for individual roads and trails. It takes into consideration the park's values and mission as well as the department's mission, trail policies, and the 2019 Trails Handbook to achieve the following goals:

- Maximize visitor use and experiences.
- Reduce potential safety issues.
- Minimize impacts to natural and cultural resources.
- Coordinate with local and regional planning efforts.
- Provide access to surrounding public lands.
- Reduce maintenance and management costs.
- Provide an appropriate range of recreational opportunities and associated infrastructure.
- Limit impacts on the natural environment to a level acceptable under the California Environmental Quality Act.
- Prioritize roads and trails projects.

2.6 TAHOE DONNER TRAILS AND OPEN SPACE MASTER PLAN

OVERVIEW

The Tahoe Donner Trails and Open Space Master Plan was adopted by the Tahoe Donner Association (TDA) in December 2022. It includes an existing and proposed trail system that supports varied membership use while encouraging exploration and environmental stewardship by means of trail networks that protect natural areas, accommodate multiple users, and provide access to significant features. It also provides connectivity throughout the TDA and into the Truckee-Tahoe community. The Tahoe Donner Trails Master Plan provides a general guideline for the long term needs of the area.

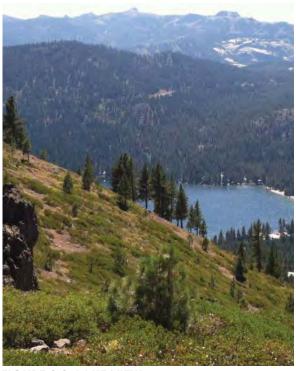


FIGURE 2.3: LAKE VIEW Source: Tahoe Donner 2013

- Goal 1: Establish management practices and protocol for a comprehensive trail system used by a diverse population.
 - Policy 1.1: Benefit and Opportunities. The trail system in Tahoe Donner will be managed to benefit the community and provide a variety of recreational opportunities for all user types.
 - Policy 1.2: Multi-Use Trail System. Tahoe Donner will provide a system of trails to accommodate a variety of users including hikers, joggers, bicyclists, equestrians, cross country skiers, snowshoers, and dog owners.
 - Policy 1.6: Resource Conservation. Tahoe Donner will strive to practice resource conservation through its trail system, future development, and any programs established for the trail system.
 - New Policy (2022) e-bikes. Class I e-bikes will be managed as mountain bikes and provided access to trails and roads open to standard mountain bikes.
- Goal 2: Create a framework and focus for trail design, construction, and maintenance of the trail system through defined standards and priorities.
 - Policy 2.1: Trail Design, Construction and Maintenance for user group needs. Trail
 design, construction and maintenance will incorporate the needs of the user groups as
 specified in the recommended trails standards.
 - Policy 2.3: Trail Type. The trail system should include multi-use and user-preferred trails of varying levels of difficulty. It should also provide the opportunity to connect to other trail systems which may offer more trail class types.

- Policy 2.4: Trail Location. Any improvement work on existing trails will consider the recommended trail standards and key destinations. New trail locations will align with the recommended trail standards for design, development, construction and maintenance.
- Policy 2.6: Connectivity of Tahoe Donner Community. Tahoe Donner's trail system will attempt to connect to landmarks, vistas, and other locations within the Association.
- Policy 2.7: Connectivity to Regional Trail Systems. Focus will be given to connecting the trail system with trail systems and points of interest in the region to the benefit of the membership.
- **Goal 3:** Development. Establish guidance for trail development and construction to achieve best practices and prudent funding mechanisms.
 - Policy 3.1: New Development. New development of trails will incorporate the recommended goals and policies. Development of trails will be at a level appropriate to the surroundings.

2.7 ROYAL GORGE PUBLIC OUTREACH PROCESS

OVERVIEW

In 2012, a total of 3,000 acres of land on Donner Summit was acquired by Truckee Donner Land Trust, The Trust for Public Land, and the Northern Sierra Partnership. In 2017, Truckee Donner Land Trust transferred Van Norden meadow, a part of the acquisition, to the United States Forest Service. Van Norden Meadow was purchased by the Forest Service with Land and Water Conservation Funds (LWCF). Created by Congress in 1964, Land and Water Conservation Funds provide money to federal, state, and local governments to purchase land, water and wetlands (Truckee Donner Land Trust, 2023). Following the land acquisition in 2012, these groups facilitated a comprehensive public outreach campaign to develop a recreation and management plan. The Royal Gorge Public Outreach Process engaged over 1,400 individuals in a process that included public meetings, focus groups, property tours, and surveys resulting in a trail plan for the region. The following is a summary of the pertinent conclusions.

- Summary of Public Meetings: Five public meetings were held to obtain input and direction from the community on future development and management of the land. The key takeaways were:
 - Trails: There is a strong desire for loop trails, regional connections, viewpoints, mountain bike trails, multi-use trails, and better trail management.
 - Infrastructure: There is a need for ADA-accessible camping, picnic areas, and recreation facilities that are properly managed. Picnic areas with trash receptacles, restrooms, tables, and parking were favored.
 - Resource Management: Resources should be equally allocated among wildfire reduction, recreation amenities, and habitat restoration.
 - Rules and Regulations: Sufficient signage should be added to convey proper etiquette for topics including off-highway vehicles (OHV), dogs, waste disposal, fire use, and trail

use. A volunteer ranger program could be developed to enforce the established rules and regulations. Low impact events might be acceptable in the region (weddings, trail runs, etc.).

- Summary of Focus Groups: Focus groups included leaders from regional hiking, biking, equestrian, and environmental groups.
 - Trails: Participants agreed that safety, environmental sustainability, and proper rule enforcement were the highest priorities. Additionally, proper trail design and implementation should be practiced, including development of stacked loops, bicycle speed management, proper wayfinding, and educational signage. Development of multiuse trails would be very desirable.
 - Environment: Participants agreed that proper management of forests and watersheds should be prioritized.
 - Key Takeaways: Participants strongly favored picnicking, economic development (lodging, retail, restaurants, events), camping, trail running/mountain biking expansion, and protection of natural resources.
- **Summary of Surveys:** Surveys were widely distributed through various online sources and resulted in over 700 responses, summarized below:
 - Top amenities desired include mountain biking trails, hiking trails, and camping.
 - Proper signage for safety, education, and trail difficulty should be widely installed.
 - Recreation implementation and habitat restoration should be equally balanced.
 - There is strong support for forestry and wildlife management and meadow restoration.
- The Trail Plan: Outreach data and feedback were used to develop a Trail Plan that included:
 - Existing and future trail connections to be developed over the next 3 to 5 years.
 - Future development of hiking, mountain biking, and multi-use trails.
 - Designated viewpoints, future trailheads, and recreation amenities to be established.

3.0 USER GROUPS

3.1 SUMMER USER GROUPS

User groups currently recreating on the Summit provide insights into where and when there are recreation demands. Future quantitative demand analyses to further justify facility and trail needs can capitalize on commercially available user data. However, by stakeholder anecdotal accounts, recreational use on the Summit is growing rapidly, with demand spiking to unprecedented levels during the global COVID-19 pandemic (2020 and 2021). Recreationists sought socially distanced, outdoor experiences on Donner Summit in 2020, exacerbating parking, sanitary, and safety issues.

HIKING

An extensive multi-use trail network traverses the high alpine and mountain environment of the Sierra Nevada, including the study area. Trails are mainly situated on Forest Service and Truckee Donner Land Trust property. Hiking trails offer views from mountaintops, ridgelines, and expansive meadow environments. This variety in landscapes attracts users from different backgrounds and areas of expertise. Trail difficulties and lengths vary, but they are generally easier and flatter in the meadow and valley environments and more challenging and steep in the mountainous and high alpine environments. There are currently more trail miles associated with the latter. The well-known Pacific Crest Trail, which connects Mexico to Canada and is monitored and maintained by the Pacific Crest Trail Association, passes north to south through the Donner Summit area. The Pacific Crest Trail is a designated National Scenic Trail which attracts day hikers, "section-hikers," and "thru-hikers."



FIGURE 3.1: CASTLE PEAK TRAIL Source: Stantec

CLIMBING

Rock climbing is a popular activity that attracts both local and non-local users. Donner Summit provides easy access to several climbing routes, from beginner to advanced. Traditional, sport, bouldering, and multi-pitch climbing opportunities are available within the granite rocks that cover much of the Donner Summit area. Many of the popular climbing destinations within the area have predetermined routes (sport climbing), however, there are also opportunities for traditional climbing, which does not include predetermined routes.

EQUESTRIAN

Equestrian uses are allowed on almost all trails that are open to hikers, and there are several trail opportunities for equestrians on Donner Summit, including the Pacific Crest Trail. The Sheep Pens trailhead on the north side of Van Norden Meadow currently provides a large parking area with turnaround space for trucks towing horse trailers, but this trailhead may be adjusted as part of a joint Forest Service and South Yuba River Citizens League meadow restoration project.

OFF-HIGHWAY VEHICLES

OHV use in the area includes uses for larger cars capable of climbing rocks and boulders (i.e., 4X4s), motorcycles/dirt bikes, all-terrain vehicles (ATVs), and other vehicles powered by an engine. OHV routes within Donner Summit are generally limited to specific trails and designated areas that do not interfere with other uses (i.e., hiking and equestrian trails) for safety and resource protection reasons. Trails for OHVs vary in difficulty based on the narrowness of the trail, steepness, and obstacles such as rocks and divots obstructing the pathways. The Cisco Grove trailhead provides access to world-class OHV opportunities, and Donner Ski Ranch holds OHV trail competitions.

MOUNTAIN BIKING

Mountain biking at Donner Summit is popular with those seeking cross-country trail mountain biking at any

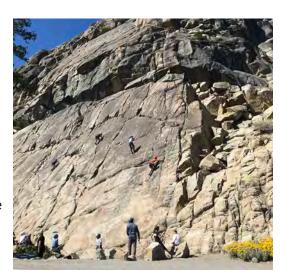


FIGURE 3.2: CLIMBING WALL Source: Stantec



FIGURE 3.3: HORSE TRAILERS Source: Stantec



FIGURE 3.4: DONNER OHV COMPETITION
Source: Moonshine Ink 2019

proficiency level. The variety of trail types includes single-track, double-track, gravel roads, and cross-country ski trails through mountainous, alpine, and meadow environments at a variety of skill levels. Importantly, Donner Summit provides better late summer seasonal conditions than lower elevations, as lower elevation trails dry out and degrade sooner in the summer months. In addition to trails on public lands or with public trailhead biker access, as of fall 2022, Boreal Mountain Resort offered a lift-served Mountain Bike Park with trails and flow lines that vary in difficulty from beginner to advanced.

ROAD BIKING

Donner Pass Road sees significant road bike use in the summer months. Views of Donner Lake and Martis Valley as well as the ride over historic Rainbow Bridge attract many road bike users. The main attraction for advanced riders and athletes-in-training is the favorable elevation for high-altitude training and the sought-after vertical climb afforded by the Donner Pass Road route from Donner Lake to the Summit to Cisco Grove. The Nevada County Donner Pass Road Improvements Project improved road biking conditions with bike lanes in both directions on the west side and in the uphill direction on the east side of Donner Summit.

CAMPING

There are four designated camping areas with easy access from Donner Summit. These include Kidd Lake Campground, Hampshire Rocks Campground, Indian Springs Campground, and Cisco Grove RV Park and Campground on the west side of Donner Summit. Note: Just outside the planning area for this document, there is camping along the east side of Donner Lake at Donner Memorial State Park. There are also many dispersed camping opportunities on Forest Service property. Illegal camping has become an issue along many of the roadways, on privately owned property, and even in Van Norden Meadow due to the lack of camping support (e.g., restroom facilities, etc.).

OTHER USES

- **Picnic and Day Use Area Visitation:** There are a few picnic tables dispersed throughout the Summit but no designated day use area.
- Disk Golfing: There is a Frisbee disc golf course located at Donner Ski Ranch.

3.2 WINTER USER GROUPS

DOWNHILL SKIING

Downhill skiing is one of the most popular winter activities on Donner Summit and attracts both local skiers and skiers from around the world. The area is rich in skiing history and this makes it a key attraction during winter months. Sugar Bowl on Donner Summit was one of the first ski destinations in North America and provides a variety of user experiences. Boreal, Soda Springs, and Donner Ski Ranch all also provide lift access to varied terrain downhill skiing opportunities on Donner Summit. Skiing difficulty and associated terrain depends on the ski resort and the specific ski slope or "run." The variety in ski run difficulty attracts users with skill levels ranging from children and new skiers to Olympic-level athletes.

BACKCOUNTRY SKIING

Backcountry skiing is available on Forest
Service-managed lands in many locations.
Skiing and snowboarding on Castle Peak and
down Summit Canyon to Donner Lake are
popular. The backcountry hut system, including
the Peter Grubb Hut, Benson Hut and Frog Lake
Huts, provides rustic shelter for backcountry
skiers, snowshoers, and snowboarders.
Parking, including overnight parking, for
backcountry skiing can be limited due to
accumulated snow and high popularity.

SLEDDING, TUBING, AND SNOW PLAY

Various ski resorts including Boreal, Soda Springs, Donner Ski Ranch, and Sugar Bowl offer facilities designated for tube sliding or sledding, including carpet conveyor lifts to



FIGURE 3.5: SUGAR BOWL Source: Sugar Bowl 2019

carry sledders to the top of hills. There is also a sledding-only business at Kingvale. The California Department of Parks and Recreation operates a Sno-Park on the south side of I-80 at Donner Summit (Exit 176), which is sometimes so crowded that vehicles cannot enter or exit. The limited parking and the conflicts that come with it have caused traffic safety concerns along I-80 and Donner Pass Road. Public demand for snow play (including sledding and tubing) on Donner Summit is a significant issue. Designated locations remain inadequate to meet demand and users spill onto private property and park unsafely along main highways on popular weekends. This causes, sanitary, safety, commercial business conflict, and private property land use issues.



FIGURE 3.6: ROAD PARK FOR SNOW PLAY AT LOCK LEVEN Source: Stantec

CROSS-COUNTRY SKIING AND SNOWSHOEING

Many of the hiking trails that are used in the summer are also used for cross-country skiing or snowshoeing in the winter. These major trails offer backcountry, cross-country skiing, and snowshoeing opportunities. They can be accessed from the Donner Summit Sno-Park, Loch Leven trailhead, and the Lamson-Cashion Donner Summit Hub trailhead. Cross-country skiers and snowshoers also have access to commercial cross-country ski areas such as Auburn Ski Club and Royal Gorge, which have professionally groomed ski tracks that vary in difficulty and skill level.

OVER-SNOW VEHICLES

Snowmobiling is popular on Donner Summit, but there are many areas where motorized over- FIGURE 3.7: ROYAL GORGE Source: Royal Gorge 2019 snow vehicles are not permitted. Lack of clarity



and signage preventing unauthorized snowmobile staging and use has resulted in conflicts with private property owners, land stewards, and commercial operations (e.g., degradation of groomed cross-country trails). There are two primary access points for over-snow vehicles, namely, Cisco Grove and the Castle Peak trailhead with parking at the Sno-Park. Both provide access to a large area extending north to Highway 49 at Yuba Pass and east to Highway 89 at Little Truckee Summit.

4.0 INVENTORY

To inform the Needs Analysis (Section 6 of this document), an inventory of existing trail systems and associated facilities was conducted. The results are summarized in the overview of trailhead facilities and trails below.

Trailhead Facilities Descriptions: Each trailhead description includes an assessment of parking, sanitation, and trash facilities. Parking is designated as paved, unpaved, roadside, or none. Roadside parking is on a shoulder or equivalent. In some cases, there is roadside parking in addition to paved or unpaved parking. A parking designation of "none" indicates that there is little or no safe parking at the trailhead, or that the trailhead is on private property and no arrangement with the owner is known for public use. Sanitation can be a permanent vault toilet, a seasonal portable toilet, or none (i.e. no restroom facility). Trash collection can be via a regularly serviced dumpster or equivalent, or none (i.e. no trash facility/collection).

Trail Description: Each trail description includes an estimate of trail miles and elevation gain/loss. Trail types can be **(a) out and back** where a round trip is completed on a single trail with the second half being the reverse of the first half, **(b) loop** where the start and end points are the same but travel along the route is not repeated in the opposite direction, **(c) point to point** where the trail starts and ends at different locations, and **(d) aggregate** where the route is covered by linking parts of two or more shorter trails. Aggregate trails usually cover more than 10 miles; the name of an aggregate trail is often chosen to simplify identification—for example, the Pacific Crest Trail is a single route that follows dozens of smaller trail segments linked end- to-end. In some cases, a destination is indicated (rather than a trail) because multiple trails would be needed to reach the end point.

4.1 EXISTING TRAILHEADS AND TRAIL SYSTEM

There are many trails on Donner Summit, including both systemized (recognized and maintained by governing agencies and land owners) and non-systemized (user- generated, unmaintained) trails. Many of the trails outside of the Truckee Donner Land Trust property have not been officially systemized, meaning they are not currently recognized by the Forest Service or other agencies as official trails, and may conflict with natural and cultural management objectives. As such, many non-systemized trails lack funding for maintenance. Figure 4.7 shows all the trails in the study area. For a more detailed depiction of trail locations, refer to Figures 7.2 through 7.10 which include the existing trail alignments along with proposed trail concepts and corridors. Hiking trails and trailheads on Donner Summit can be parsed by region and complex, as summarized in Table 4.1 and described below. In addition to the hiking, biking, and equestrian trails described in this section, there are many climbing trails east of Donner Summit, which are often user-generated trails to popular climbing locations. Many of these trails have become braided due to limited wayfinding.

The existing and future trails were assessed for difficulty generally following Forest Service definitions (Forest Service 2008). The Forest Service defines trail difficulty levels as follows: The

degree of challenge a trail presents to an average user's physical ability and skill, based on trail condition and route location factors such as alignment, steepness of grades, gain and loss of elevation, and amount and kind of natural barriers that must be crossed, and which may temporarily change due to the weather.

- Easiest or Easy signifies a trail requiring limited physical ability and skill to travel.
- More or Moderately Difficult denotes a trail requiring some physical ability and skill to travel.
- Difficult or Most Difficult refers to a trail requiring a high degree of physical ability and skill to travel.

Additionally, trails accommodate user needs for different distances and degrees of challenge by providing cutoffs for less experienced users on a system of loop trails, as follows. According the Forest Service, the recommended lengths include Half Day Easiest Trail as 3.2 to 6.4 miles and Full Day Most Difficult Trail as 6.4 to 9.5 miles. Providing a variety of trail grades is also important for accessibility.

Figure 4.1 shows the terminology for trail gradation and the corresponding angle of incline or decline a user would experience at each different gradations. Existing trails in the planning area range from 5 to 30 percent grades but are predominantly on the steeper range, given the terrain and the number of user generated trails.

There is an extensive trail network at Donner Summit with opportunities for connector trails, regionally and locally. Generally, the trails are in good condition, albeit with some needed maintenance, upgrades, and/or reroutes, both to alleviate erosion issues and braiding, and to improve user enjoyment and safety. There

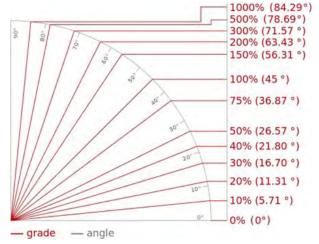


FIGURE 4.1: TRAIL GRADES

Source: Trailism 2019

Note: Gradient is calculated by elevation gain divided by trail length

is a lack of accessory trail facilities such as adequate parking, restrooms, and trail information placards. Many of the Truckee Donner Land Trust trailheads do provide adequate parking facilities with signage; these should be used as models and scaled for future trailhead development in the area, including the addition of restroom facilities. The following table summarizes the inventory of the Donner Summit trail system and includes a summary of the key trail/trailhead needs. The text following the table provides detailed descriptions of the conditions at each trailhead and trail, as well as key needs.

TABLE 4.1A: EXISTING TRAILS SUMMARY AND CONNECTIVITY NEEDS

Donner Summit Recreation Plan Area Region	Key Trailheads	Accessible Existing Trails (Systemized and Non- systemized)	Key Trail Needs
Donner Lake South and Shallenberger Ridge Region	Donner Memorial State Park	 Old Emigrant Trail Road/ JP's Trail Lake View Canyon Road and South Lake Road Coldstream Valley Road 	 Connectivity over Donner Summit to Sugar Bowl Connectivity between the Donner Memorial State Park trails and Summit Canyon Wayfinding
	Coldstream Trailhead	 Old Emigrant Road/JP's Trail Coldstream Valley Road 	 Connectivity to Sugar Bowl Region Connectivity to Summit Canyon Wayfinding
	Donner Summit Canyon Trailhead	Dutch Flat ConnectorSummit Canyon Trail	 Limited parking, limited connection to Donner Pass Road Subregion WayfindingT
Sugar Bowl Region	Lamson-Cashion Donner Summit Hub Trailhead (access to trails south)	 Pacific Crest Trail, CA Section K (Echo Lake to Donner Summit) Mount Judah Loop Donner Peak Trail Historic Donner Pass Trail 	 East West Connections to other Subregions Avoidance of Lake Mary Wayfinding
	Donner Pass Road/The Tunnels Impromptu Trailhead	The Tunnels	 Clearances from the UPPR Official trailhead Interpretive signage Wayfinding
	Sugar Bowl Road/Sugar Rush Tubing Area	 River Loop (Future Donner Lakes Rim Trail connector) 	Sugar Bowl Road Parking Trailhead improvements
Donner Pass Road Region	Lamson-Cashion Donner Summit Hub Trailhead and Restrooms (access to trails north)	 Pacific Crest Trail, CA Section K Azalea Lake Loop 	 Connection to Summit Canyon Trailhead Consolidation of User- Generated Trails and relocation to Catfish Pond, further from Lake Angela (drinking water source)

TABLE 4.1B: EXISTING TRAILS SUMMARY AND CONNECTIVITY NEEDS

Refer to Figures 7.1 through 7.10 for site location of proposed trails

Donner Summit Recreation Plan Area Region	Key Trailheads	Accessible Existing Trails (Systemized and Nonsystemized)	Key Trail Needs
		Royal Gorge Rim TrailPine Martin	 Opportunities for improved trailhead facilities given the user demand in this area Wayfinding Picnic tables or benches Restrooms Better Parking
	Van Norden Dam Trailhead	Old Dutch Flat Road	Lacks a connection to Serene Lakes and connectivity around the meadow or to adjacent subregions
Serene Lakes, Royal Gorge, and Bogus Basin	Summit Station Trailhead	Lyle's LookoutRoyal Gorge Rim TrailMemorial Overland Emigrant Trail	 Better connector to Memorial Overland Emigrant Trail Trash collection Wayfinding
	Hoelter-Hall Trailhead	 Bogus Basin Trails Royal Gorge Rim Trail Rowton Peak Point Mariah Trail Switchback Trail Razorback Trail 	 Decommissioning of Serene Lakes Rim Trail in Beacon Hill area Potential incorporation into the larger trail system (i.e., middle and upper switchback trails, the connection from razorback trail to Crow's Nest) Wayfinding
	Soda Springs Road Key Crossing (Not an Official Trailhead)	Memorial Overland Emigrant Trail	 Trailhead and connectivity along Donner Pass Road to Soda Springs and Serene Lakes Additional east-west connection over Donner Summit Wayfinding
	Serena Creek Trailhead	Serena Creek Trail	Wayfinding
I-80 South/Loch Leven Region	Loch Leven Trailhead	Loch Leven Trail	 Eastward Summit connectivity to the Serene Lakes/Royal Gorge/Bogus Basin Region

TABLE 4.1C: EXISTING TRAILS SUMMARY AND CONNECTIVITY NEEDS

* Refer to Figures 7.1 through 7.10 for site location of proposed trails

Donner Summit Recreation Plan Area Region	Key Trailheads	Accessible Existing Trails (Systemized and Non- systemized)	Key Trail Needs
		Royal Gorge Rim TrailPine Martin	 Opportunities for improved trailhead facilities given the user demand in this area Wayfinding Picnic tables or benches Restrooms Better Parking
	Van Norden Dam Trailhead	Placer County Road	Lacks a connection to Serene Lakes and connectivity around the meadow or to adjacent subregions
Serene Lakes, Royal Gorge, and Bogus Basin	Summit Station Trailhead	 Lyle's Lookout Royal Gorge Rim Trail Memorial Overland Emigrant Trail* 	 Better connector to Memorial Overland Emigrant Trail Trash collection Wayfinding
	Hoelter-Hall Trailhead	 Bogus Basin Trails Royal Gorge Rim Trail Rowton Peak Point Mariah Trail 	 Decommissioning of Serene Lakes Rim Trail in Beacon Hill area Potential incorporation into the trail system (i.e., middle and upper switchback trails, the connection from razorback trail to Crow's Nest) Wayfinding
	Soda Springs Road Key Crossing (Not an Official Trailhead)	Memorial Overland Emigrant Trail	 Trailhead and connectivity along Donner Pass Road to Soda Springs and Serene Lakes Additional east-west connection over Donner Summit Wayfinding
	Serena Creek Trailhead	Serena Creek Trail	Wayfinding
I-80 South/Loch Leven Region	Loch Leven Trailhead	Loch Leven TrailSalmon Lake Trail	Eastward Summit connectivity to the Serene Lakes/Royal Gorge/Bogus Basin Region

TABLE 4.1D: EXISTING TRAILS SUMMARY AND CONNECTIVITY NEEDS

* Refer to Figures 7.1 through 7.10 for site location of proposed trails

Donner Summit Recreation Plan Area Region	Key Trailheads	Accessible Existing Trails (Systemized and Non- systemized)	Key Trail Needs
	Salmon Lake Trailhead	Salmon Lake Trail	Wayfinding
	Cascade Lakes Trailhead	Long Lake TrailPalisades Creek Trail	 Improvements to access road Wayfinding Trash collection Restrooms
I-80 North and Pines to Mines Region	Fordyce Trailhead	Signal Peak Trail	 Lacks connectivity east and west
	Cisco Grove Campground and RV Park/Trailhead	Signal Peak Trail	
	Gould Park	Highway 40 Road biking terminus	 Potential gateway to Region Historic and access Information Bike repair station Connection to Pines to Mines Trail

DONNER LAKE SOUTH AND SHALLENBERGER RIDGE REGION

This planning area includes Donner Memorial State Park. While the walking areas around the lake are outside the Plan area, the Park does serve as a trailhead for the Old Emigrant Trail Road and potentially to connections further west over the Summit. The existing Trailheads in the Planning Area are described below.

DONNER MEMORIAL STATE PARK TRAILHEAD (Parking: Paid Lot; Restrooms: Visitor Center; Trash Collection: Visitor Center and throughout Park)

Various Donner Memorial State Park Trails: While the State Park trailheads are not in the DSA Planning area, the Park Entrance and parking areas do provide access to trails within the DSA Plan Area. The California Department of Parks and Recreation completed the environmental review for its Road and Trail Management Plan (California State Parks, 2021), which includes a summary of the existing and proposed trails, as well as the trails scheduled to be decommissioned. The trailheads at Donner Memorial State Park provide access to approximately 5 miles of road and trails (see Table 4.1, Figure 4.7), most of which are moderately difficult. There is no connection over the Summit west to Sugar Bowl, but such connections are contemplated in the Road and Trail Management Plan. Several existing trails are slated for addition to the Donner Memorial State Park trail system; several others are slated for decommissioning and site restoration.

DONNER SUMMIT CANYON TRAILHEAD (Parking: Unpaved 10 spaces; Restrooms: None; Trash Collection: None)

• Donner Summit Canyon Trail (Type: Out-and-Back/Single Track, Distance: 6 miles, Elevation Change: ±1,000 feet, Difficulty: Moderate): The trail up the canyon follows much of the Old Lincoln Highway and is a 6 mile out-and-back (with an optional loop in the southwestern portion). It has an elevation gain/loss of approximately 1,000 feet. It is considered moderately difficult. The trail lacks systemized connections up Summit Canyon and to Donner State Park.

COLDSTREAM TRAILHEAD (Parking: Roadside; Restrooms: None; Trash **COLLECTION: NONE**)

The Coldstream Trailhead, many of its associated trails, and much of Coldstream Canyon are within Donner Memorial State Park jurisdiction. The Coldstream trailhead is at the end of Coldstream Road, 0.6 miles south of I-80 at exit 184. It provides access to the Old Emigrant Trail/Road and several miles of roads and trails within the study area to the west (Table 4.1.1 and Figure 4.7), most of which are moderately difficult. There are no direct connections to Summit Canyon or to the Sugar Bowl region but such connections are proposed. There are very few signs in this area.

- Old Emigrant Road/Trail: (Type: Point-to-Point/Single Track and Unpaved Road; Distance: 2.5 miles; Elevation Change: +400/-100 feet; Difficulty: Easy) The Old Emigrant Road/Trail is an unpaved road and a separate single-track trail that run parallel to, and between, Cold Creek and the continuation of Coldstream Road. They are popular with bicyclists, hikers, and runners.
- JP's Trail (Type: Point-to-Point/Single Track; Distance: 3 miles; Elevation Change: +600/-100 feet; Difficulty: Moderate) This single-track trail departs to the right from the Old Emigrant Trail about 0.2 miles from the gate and the unpaved parking. It is popular with mountain bikers, hikers, and runners. The trail parallels Coldstream Road (on the northwest side) for

a distance, then climbs via eight switchbacks to viewpoints in several directions. There are options to continue. A loop including JP's Trail, Schallenberger Ridge, Emigrant Canyon, and the Old Emigrant Trail is 10.5 miles and ±1900 feet of elevation from parking; it is rated most difficult.

SUGAR BOWL REGION

Perched atop Donner Summit, Sugar Bowl Resort is the closest major downhill ski resort to Sacramento and the Bay Area. The Sugar Bowl area offers a variety of terrain spanning four peaks and approximately 1500 acres. It has a variety of summer trails, including but not limited to the Pacific Crest Trail, plus the following trailheads and trails within the general Sugar Bowl Area:

LAMSON-CASHION DONNER SUMMIT HUB TRAILHEAD (Parking: Paved eight spaces, Unpaved 24 spaces; Restrooms: Seasonal Portable; Trash Collection: Seasonal Dumpster) and Pacific Crest Trail South Trailhead (Parking: Unpaved, 12 spaces; Restrooms: Seasonal Portable; Trash Collection: None)

The Pacific Crest Trail crosses Donner Pass Road at the Lamson-Cashion Donner Summit Hub. Heading north, the Pacific Crest Trail leaves directly from the north side of The Hub; the South trailhead is located a few hundred yards to the south and has a separate set of facilities. This trailhead is undergoing upgrades using grant funding secured by the DSA. The upgrades are described in Section 6 below, but generally include parking and facilities upgrades and a new trail connection to the central shaft of train tunnel #6. Trails that currently can be accessed from this trailhead include the following:



FIGURE 4.2: LAMSON-CASHION DONNER SUMMIT TRAILHEAD Source: DSA

- Pacific Crest Trail Section K (Type: Aggregate/Single-Track; Distance: 61 miles to Echo Lakes; Elevation Change ±11,000 feet; Difficulty: Most Difficult): The Pacific Crest Trail is one of the most well-known hiking trails in the world, stretching from Mexico to Canada. The segments of the trail that cross through Donner Summit provide stunning views of both mountain and meadow environments and unique wildflower displays. Mountain biking is not allowed on the Pacific Crest Trail.
- Mount Judah Loop (Type: Point-to-Point/Single-Track; Distance: 1.9 miles; Elevation
 Change: +700/-400 feet; Difficulty: Moderate): The Judah Loop is a recognized 1.9-mile
 alternative to a 0.9-mile primary segment of the Pacific Crest Trail. It passes over the summit

of Mount Judah and very near the summit of Donner Peak. Together with Pacific Crest Trail connectors, the Judah Loop is 4.8 miles long with an elevation gain/loss of approximately 1,220 feet from the Lamson-Cashion Hub. There are several stunning vista points along the way, including a spectacular view from the Mount Judah summit. It is said to be the most visited segment of the Pacific Crest Trail system. The



FIGURE 4.3: PCT SOUTH TRAILHEAD Source: DSA

Judah Loop is also accessible at the Donner-Judah Saddle via non-systemized trails from the Donner Memorial State Park trailhead. As with the Pacific Crest Trail, bicycles are not allowed on the Judah Loop.

• Donner Peak Trail (Type: Point-to-Point/Braided Single-Track; Distance: 0.2 miles, Elevation Change: +125 feet, Difficulty: Moderate): The Donner Peak Trail is a user-generated trail from the saddle between Mount Judah and Donner Peak to the summit of Donner Peak. The trail is mostly on open granite slabs and is highly braided. Together with the Pacific Crest Trail and Judah Loop, the round-trip distance to Donner Peak is 3.8 miles from the Lamson-Cashion Hub with an elevation gain/loss of approximately 880 feet. The hike is considered moderately difficult. Donner Peak provides stunning views of Donner Lake and the Pacific Crest. The Donner Peak Trail is also accessible at the Donner-Judah saddle via non-systemized trails from the Donner Memorial State Park trailhead.

THE TUNNELS IMPROMPTU TRAILHEAD (Parking: Unpaved 100 Spaces; Restrooms: None; Trash Collection: None)

To access a popular destination known as the Tunnels, a parking area adjacent to the west entrance to Tunnel 6 is used. This property is leased by the Sugar Bowl Corporation from the Union Pacific Railroad and is used as an impromptu parking area:

Tunnel 6 Trail (Type: Out-and-Back/Road; Distance: 0.6 miles Round Trip; Elevation Change:

±100 feet; Difficulty: Easy). This trail is located on Union Pacific Railroad property, which is posted for no trespassing. Nonetheless, many people day hike through Tunnel 6 for its unique experience. At 1659 feet, Tunnel 6 is the longest of the tunnels cut for the Transcontinental Railroad in the 1860s. It is approximately 20 feet high and 16 feet wide at its base. The roof is a half-circle with a radius of 8 feet. The railroad tracks were removed in the last century and



FIGURE 4.4: TUNNELS IMPROMPTU TRAILHEAD Source: DSA

motor vehicles are blocked from entry by a locked gate. The walkable surface is relatively flat with only a very slight grade downhill to the east. Graffiti is a significant issue (but also an attraction) on both the insides and outsides of the tunnels and associated snowsheds. Interested hikers can continue east through additional tunnels and snowsheds for another 4 miles (round trip).

SUGAR BOWL ROAD

The River Loop Trail (Type: Point-to-Point/Single Track; Distance: 2.6 miles; Elevation Change: ±700 feet; Difficulty: Easy). Sugar Bowl recently constructed a tubing area for winter snowplay located off Sugar Bowl Road that will also act as a summer parking area and trailhead to access the Sugar Bowl trails. The summer trails may be accessed by following Sugar Bowl's Lake Mary Trail about 0.4 miles west from Sugar Bowl Road to a junction with Sugar Bowl's Village Loop Trail nearly under the gondola. The River Loop Trail then crosses Mules Ear Drive, enters Van Norden Meadow, and meets Anna's Chute on the south side of the meadow. From that junction, the River Loop Trail heads east and ends a short distance south of Sugar Bowl Lodge. At some future date, parts of the Lake Mary and River Loop Trails may be incorporated into Truckee Donner Land Trust's Donner Lake Rim Trail.

DONNER PASS TO 1-80 REGION

This planning area is centrally located and accessible from several locations.

LAMSON-CASHION DONNER SUMMIT HUB TRAILHEAD AND THE PACIFIC CREST TRAIL NORTH TRAILHEAD (Parking: Paved 100 spaces; Restrooms: Vault Toilet and Portable Toilets in the Winter; Trash Collection: Dumpster).

These two trailheads are at either end of north-south connection trails between Donner Pass Road and I-80. Lamson-Cashion Donner Summit Hub is physically within the Sugar Bowl Region and is described in the section above. The Pacific Crest Trail North trailhead is located on Bunny Hill Drive, on the south side of I-80 and east of Boreal Mountain Resort. It doubles as a California Sno-Park during winter. Winter visitors typically participate in snow play at the site or cross to the north side of I-80 for backcountry skiing, snowshoeing, snowboarding, and snowmobiling. The trails that connect are as follows:

- Pacific Crest Trail Section L (Type: Point-to-Point/Single-Track; Distance: 3 miles [Donner Pass Road to I-80]; Elevation Change: +500/-300 feet, Difficulty: Moderate): Like the Pacific Crest Trail segment described in the Sugar Bowl section of this document, this part of the Pacific Crest Trail has scenic vistas of the Sierra Crest and its east and west approaches, including Donner Lake. It also provides access to Stephens and Stewart Peaks. A half-mile spur trail connects the Pacific Crest Trail with trailhead parking east of the Boreal Mountain Resort; part of the spur trail overlaps the Forest Service's Glacier Meadow Trail, which is accessible from the I-80 southside rest area. Only hikers and equestrians are permitted on the Pacific Crest Trail.
- Azalea Lake-Flora Lake/Pacific Crest Trail Alternative Trail (Type: Point-to-Point/Braided Single-Track; Distance: 3 miles; Elevation Change: +300/-200 feet, Difficulty: Moderate):
 The trail to Flora and Azalea Lakes follows the historic route of the Pacific Crest Trail from the Lamson-Cashion Hub at Donner Pass nearly to I-80; but it is no longer a systemized trail and

what remains is highly braided and difficult to follow. This trail is located on Forest Service and Donner Summit Public Utility District property. Upgrading the trail to systemized status as a north/south alternative to the Pacific Crest Trail would require clear wayfinding. Such a trail could highlight attractions such as Catfish Pond (also known as Maiden's Retreat), Stephens Peak, and Stewart Peak while guiding users away from Lake Angela, which is used by the Donner Summit Public Utility District for drinking water on the Summit.

Glacier Meadow Loop (Type: Loop; Distance: 0.5 miles; Elevation Change: ±50 feet;
 Difficulty: Easy): Glacier Meadow Loop is a 0.5 mile lightly trafficked trail that starts and ends at the rest area on the south side of eastbound I-80 at Donner Summit. The trail is used for hiking, nature trips, and snowshoeing; it is accessible year-round.

I-80 NORTH TO CASTLE PEAK REGION

This planning area is accessible from several locations and has a well-developed trail system associated with the Castle Peak, Lola Montez, and Johnson Canyon Trailheads.

CASTLE PEAK TRAILHEAD (Parking: Roadside; Restrooms: None; Trash Collection: None):

There is summer parking along the road. During winter, visitors can use the Sno-Park on the south side of I-80. Castle Peak Road provides access to Castle Valley (summer camping and entry-level backcountry skiing), Castle and Basin Peaks, the Pacific Crest Trail, and the Sierra Club's winter backcountry Peter Grubb Hut.

- Castle Peak Trail (Type: Out-and-Back; Distance: 6 miles; Elevation Change: ±1,800 feet; Difficulty: Moderate): The Castle Peak trail is a strenuous hike that once on the Summit provides stunning 360-degree views. The lower half of the route is an unpaved road; the upper half is a user-generated, sometimes braided, trail. Vehicles with excellent clearance may be able to negotiate the road, cutting the distance by half and the elevation by a third. Castle Peak is a popular destination for backcountry skiers and snowboarders.
- Castle Peak/ Basin Peak Trail (Type: Point-to-Point/Single-Track; Distance: 2 miles; Elevation Change +300/-1,200 feet; Difficulty: Moderate): The Castle Peak/Basin Peak Trail connects the Castle Peak Trail with Basin Peak and the Pacific Crest Trail to its northwest. There are almost no trees, so users can enjoy views in all directions. Mount Lassen is sometimes visible to the northwest. The round trip from I-80 is an 8.9-mile loop that is rated as most difficult with an approximate elevation change of ±2330 feet. The round trip is primarily used for hiking, running, skiing, and snowshoeing.



FIGURE 4.5: CASTLE PEAK TRAILHEAD Source: DSA

- Andesite Peak Road (Type: Point-to-Point; Distance: 3 miles; Elevation Change: +700/-600 feet; Difficulty: Moderate): This road provides access to the south and west sides of Andesite Peak for OHV users during summer. In winter it provides access to the Lower Castle Creek drainage for snowmobiles.
- Hole in the Ground Trail (Type: Point to Point/Single Track; Distance 11.6 miles; Elevation Change: +1,300/-1,900 feet; Difficulty: Most Difficult): The Hole in the Ground Trail is a popular and advanced mountain biking trail on Donner Summit. It departs from Castle Peak Road about 1 mile north of I-80 with a steep climb that tops out on Andesite Ridge where there are spectacular views of Castle Peak. Hole in the Ground Trail ends at Lower Lola Montez Lake. The trail can be done as part of a 13.5-mile loop starting at the intersection of Donner Pass and Soda Springs Roads in Soda Springs, with an elevation change of approximately ±2,000 feet. Additional connections and proposed inner loops make longer or shorter rides. Hikers can ascend Andesite Ridge, then leave the trail at Castle Pass and return to I-80 via the Castle Peak Trail for a total of about 4.7 miles and ±920 feet of elevation. This shorter hike is rated moderately difficult.
- Andesite Peak Trail (Type: Out and Back; Distance: 4.7 miles; Elevation Change ±900 feet;
 Difficulty: Moderately Difficult): A steep climb that offers spectacular views of Castle Peak
 from the top. The trail travels out and back and is 4.7 miles long with an elevation gain/loss of
 approximately 900 feet. It is considered moderately difficult.
- Summit Lake Trail (Type: Point-to-Point/Single-Track; Distance: 2 miles; Elevation Change ±440 feet; Difficulty: Easy): The Summit Lake Trail departs from the rest area on the north side of westbound I-80, crosses the Pacific Crest Trail, turns right at the intersection with the Donner Lake Rim Trail, and ends at Summit Lake.
- Donner Lake Rim Trail (Type: Aggregate; Point-to-Point/Single-Track; Distance: 23 miles; Elevation Change: TBD once complete; Difficulty: Most Difficult): The Truckee Donner Land Trust plan for the Donner Lake Rim Trail is a 23-mile multi-use trail circling Donner Lake. Approximately 12 miles has been completed, all on the north side of I-80. The Truckee Donner Land Trust plan envisions that the Donner Lake Rim Trail will provide a north-south multi-use alternative to the Pacific Crest Trail on the south side of I-80 (within the Donner Pass to I-80 Region). Castle Peak Road is one of several trailheads used to access existing trail segments; other access points include the Trout Creek and Glacier Way Trailheads in Tahoe Donner (outside the study area) and the Wendin Way Trail in Johnson Canyon. The Donner Lake Rim Trail also overlaps the Summit Lake Trail east of the Pacific Crest Trail and Castle Peak Road at its western end. The trail is, and when completed will be, rated as most difficult.

LOLA MONTEZ TRAILHEAD (Parking: Roadside; Restrooms: None; Trash Collection: None)

This trailhead is on Sherritt Lane, north of I-80 in Soda Springs.

Lola Montez Trail (Type: Point-to-Point/Mixed Road and Single-Track; Distance: 3.1 miles; Elevation Change: +750/-200 feet; Difficulty: Moderate): The Lower Lola Montez Trail is a popular mountain biking trail. It can be accessed from the Lola Montez Trailhead or, more commonly, as a continuation (in the counterclockwise direction) of the Hole in the Ground Trail (described under Castle Peak Road above).



FIGURE 4.6: JOHNSON CANYON TRAILHEAD Source: DSA
JOHNSON CANYON TRAILHEAD (Parking: Unpaved 40 spaces; Restrooms:
None; Trash Collection: Dog Waste Bin)

The Johnson Canyon Trailhead is on the north side of I-80 at the Donner Lake Interchange (exit 180). It provides access to the Wendin Way Trail, which connects with the Donner Lake Rim Trail. Although unplowed, the trailhead is popular with users of over-snow vehicles during winter.

- Wendin Way Trail (Type: Point-to-Point/Single-Track; Distance: 1.3 miles; Elevation Change +500 feet; Difficulty: Moderate): This trail climbs from the trailhead to the Donner Lake Rim Trail. The grade is moderately steep and exposed to the south, so snow melts quickly in winter, and the climb can be hot in summer. The Donner Lake Rim Trail can be followed west to Summit Lake and Castle Peak Road or up to Glacier Way and then east to trailheads in the Tahoe Donner development. Both Wendin Way and the Donner Lake Rim Trail are popular with mountain bikers.
- Summit Lake Road (Type: Point-to-Point/Unpaved Road; Distance: 3 miles; Elevation
 Change: +1,050/-100; Difficulty: Moderate): This trail climbs northwest from the Johnson
 Canyon trailhead to Summit Lake. Vehicles with excellent clearance may be able to negotiate
 the road; four-wheel-drive is desirable for extended steep sections. The final mile is part of the
 Donner Lake Rim Trail.

VAN NORDEN MEADOW REGION

This area is generally flat to gently sloping, with user-generated trail access. It includes a systemized trailhead on Forest Service land. The trailhead leads to some moderately difficult trails and connects to steeper trails on Forest Service Ridge.

SHEEP PENS TRAILHEAD (Parking: Unpaved 30 spaces; Restrooms: None; Trash Collection: None)

Sheep Pens provides access to the central and eastern parts of Van Norden Meadow. The Forest Service's Van Norden Meadow Restoration and Recreation Project Plan shows the trailhead being relocated to the east to improve Lytton Creek water flow (Forest Service 2022).

• Meadow Bisect Road (Point-to-Point/Unpaved Road; Distance: 0.5 miles; Elevation Change: ± 40 feet; Difficulty: Easy): This trail is sometimes called "Railroad Car Trail" after the railroad car infrastructure (removed in 2022) that used to bridge the South Yuba River. As an unpaved road, this trail leads south from the Sheep Pens Trailhead into the meadow. Across the South Yuba River, the trail connects to the Summit Valley and Pine Marten Trails. The



FIGURE 4.7: SHEEPS PEN TRAILHEAD Source: DSA

Summit Valley Trail is proposed to connect with the River Loop and Donner Lake Rim Trails (see Sugar Bowl Region); these trails have small elevation changes within the meadow. The start and end segments of the Royal Gorge Rim Trail overlap with Meadow Bisect Road (see the Serene Lakes, Royal Gorge, and Bogus Basin Region for more information on the Royal Gorge Rim Trail). Currently there is very little wayfinding. Trailhead facilities and a way to loop around the meadow on an easily accessible and flat trail are proposed in the Van Norden Meadow Restoration and Recreation Project Plan.

VAN NORDEN DAM TRAILHEAD (Parking: Unpaved 100 spaces, Restrooms: None, Trash Collection: None)

This trailhead is currently an unpaved parking lot on private property, used by people who wish to access the west end of Van Norden Meadow. During winter it is used by Soda Springs Mountain Resort for ski area parking and by people seeking free parking for snow play (often without permission). No systemized trails extend from this trailhead, though trail development and a viewing platform are proposed in the Van Norden Meadow Restoration and Recreation Project Plan at a slightly different location. Trail alignment will need to avoid cultural and biological resources in the meadow.

SERENE LAKES, ROYAL GORGE, AND BOGUS BASIN REGION

The Serene Lakes, Royal Gorge, and Bogus Basin Region (Figures 7.7 and 7.8) includes a variety of trails, many of which are long and well-connected, and sometimes include steep sections. Many of the trails are groomed by the Royal Gorge Resort for cross-country skiing during winter.

SUMMIT STATION TRAILHEAD (Serene Lakes), Royal Gorge Area Trails (Parking: Unpaved 15 spaces; Restrooms: Seasonal portable toilet; Trash Collection: None)

The Summit Station Trailhead provides access to a number of multi-use trails, which inherit their summer names from Royal Gorge winter designations. The beginning of the Big Ben, James Joy, Palisade, and Little Dipper Trails are within a quarter mile south and west of the trailhead. The Memorial Overland Emigrant Trail Soda Springs segment (see below) is a quarter mile north. All are generally considered easy to moderately difficult. The trailhead is not plowed in winter.

Lyle's Lookout (Type: Aggregate/Out and Back; Distance: 3 miles; Elevation Change: ±340 feet; Difficulty: Easy): Lyle's Lookout can be reached via the James Joy, Killy's Cruise, and



FIGURE 4.8: SUMMIT STATION TRAILHEAD Source: DSA

Lyle's Lookout Trails (in sequence) from the Summit Station Trailhead. Lyle's Lookout provides a spectacular view to the west including Devil's Peak and Snow Mountain.

 Royal Gorge Rim Trail (Type: Loop/Single-Track and Unpaved Road; Distance: 13 miles; Elevation Change: ±2,500 feet; Difficulty: Most Difficult): The Walter and Esther Hewlett Royal Gorge Rim Trail circles Serene Lakes. It starts and ends at the Sheep Pens Trailhead (Van Norden Meadow Region) and incorporates segments of at least 18 other trails connecting Summit Station Trailhead, the Hellman warming hut, and Rowton Peak. It is considered one of the premier mountain biking routes in the Donner Summit planning area.

HOELTER-HALL TRAILHEAD (Parking: Unpaved 10 spaces; Restrooms: Seasonal Portable Toilet; Trash Collection: None)

Two prominent recreation destinations from the Hoelter Hall Trailhead are Rowton Peak (elevation 7,530 feet) and Crow's Nest (elevation 7,980 feet). These are typically accessed through a combination of Bogus Basin trails. The Point Mariah Trail can also be accessed from this trailhead.

- Bogus Basin Trails: There are multiple braided trails within Bogus Basin; most are used for summer hiking and mountain biking and are groomed by Royal Gorge for winter cross-country skiing. Trails that can be accessed from the Hoelter-Hall Trailhead include Reindeer, Claim Jumper, the Royal Gorge Rim Trail, Razorback, Crow's Nest, Upper Switchback, and Middle Switchback. The trails vary in length and steepness. Most of the trails are considered easy to moderately difficult.
- Rowton Peak (Type: Aggregate Loop/Single-Track and Road; Distance 5 miles; Elevation Change: ±1,000 feet; Difficulty: Moderately Difficult): Rowton Peak can be accessed through several trails in the Bogus Basin area. One of the most popular loop hikes that includes Rowton Peak links portions of the Switchback, Claim Jumper, Razorback, Lola's Lookout, Rowton Peak, Bogus Basin, and Tiny Tim Trails. It leads through several wildflower and bird areas, offers expansive views of Royal Gorge, and passes through impressive volcanic geology.



FIGURE 4.9: HOELTER-HALL TRAILHEAD Source: DSA

Point Mariah Trail (Type: Aggregate, Out-and-Back/Mostly Roads; Distance: 6 miles round trip; Elevation Change: ±600 feet; Difficulty: Moderate): Point Mariah can be reached using segments of the Royal Gorge Rim Trail and Point Mariah Trails and a short unpaved segment of Soda Springs Road. The highlight of this hike is the view from Point Mariah 4,000 feet down into the Royal Gorge of the North Fork of the American River. The peaks of Sugar Bowl, Anderson Peak, Tinker Knob, the Granite Chief Range, Desolation Wilderness, Snow Mountain, and Devil's Peak are also visible in a panorama from east through south to west.

SODA SPRINGS ROAD TRAILHEAD (Parking: Roadside; Restrooms: None; Trash Collection: None)

This trailhead is a wide shoulder on the east side of Soda Springs Road, where Royal Gorge's Summit Connection cross-country ski trail crosses the road in winter. It is also the eastern terminus of the recently constructed Memorial Overland Emigrant Trail-Soda Springs segment.

The Memorial Overland Emigrant Trail-Soda Springs Segment (Type: Point-to-Point/Single-Track; Distance: 3 miles; Elevation Change +400/-200 feet, Difficulty: Moderate): This Memorial Overland Emigrant Trail segment was completed in 2018; it extends west where it joins the extension of Pahatsi Road near its junction with the road to Palisade Lake. The easternmost part of this trail is steep and winding and has become popular with mountain bikers.



FIGURE 4.10: SODA SPRINGS TRAILHEAD Source: DSA

I-80 SOUTH TO LOCH LEVEN REGION

The I-80 South to Loch Leven region (Figure 7.9) is large but has limited systemized trails. Some of the region's more attractive features such as larger lakes and peaks are either privately owned or surrounded by private property, leading to complaints about trespassing and litter. The only restrooms are at the Loch Leven Trailhead. Royal Gorge's winter cross-country ski grooming extends into the eastern part of this region. The two key trailheads and three key trails are as follows:

CASCADE LAKES TRAILHEAD (Parking: Unpaved 50 spaces; Restrooms: None; Trash Collection: None)

This trailhead is at the western extension of Pahatsi Road and can be reached via a rough (in areas), unpayed road from Serene Lakes.

- Long Lake Trail (Type: Out-and-Back/Single-Track; Distance: 0.5 miles round trip; Elevation Change: ±40 feet; Difficulty: Easy): The Long Lake Trail branches from the Palisades Creek Trail about 0.5 miles from the trailhead. Long Lake is a 1.4-mile out-and-back route (±100 feet elevation change) from the trailhead and is a popular overnight destination for campers with lightweight watercraft.
- Palisades Creek Trail (Type: Out-and-Back/Single-Track; Distance: 13.5 miles round trip; Elevation Change: ±2,300 feet; Difficulty: Most Difficult): This is a strenuous hike that travels from the Long Lake trailhead south to the north fork of the American River. The trail crosses a bridge over the North Fork; ambitious hikers may then continue up the south side of the canyon for additional mileage and elevation.

LOCH LEVEN LAKES TRAILHEAD (Parking: Paved 15 spaces; Restrooms: Vault Toilets; Trash Collection: None)

The Loch Leven Trailhead is a short distance north of the Big Bend Forest Service station on Hampshire Rocks Road in Big Bend between I-80 exits 166 and 168.

Loch Leven Lakes Trail (Type: Out-and-Back/Single-Track; Distance: 5 miles to first lake/7 miles to second lake; Elevation Change: ±1,500 feet; Difficulty: Moderate): This trail leads to three lakes at roughly the same elevation that are popular backpacking destinations for youth groups. This area is also popular for snow play in the winter.



FIGURE 4.11: LOCH LEVEN LAKES TRAILHEAD Source: DSA

SALMON LAKE TRAILHEAD (Parking: Unpaved six spaces; Restrooms: None; Trash Collection: None)

The Salmon Lake Trailhead is a wide spot in Forest Service Road 38 southeast of Lake Valley Reservoir. It is about 2 miles by air south of Big Bend on I-80, but 7.3 miles by road from I-80 exit 160.

Salmon Lake Trail (Type: Out-and-Back/Single-Track; Distance 2.5 miles round trip; Elevation Change: ±425 feet; Difficulty: Easy): This trail is a moderately trafficked out-and-back route starting from the Salmon Lake Trailhead. Reaching Salmon Lake requires a descent at the end of the trail. Another mile of hiking (each way, with little additional elevation change) gains Lower Loch Leven Lake, providing an alternative access route to those lakes.

1-80 NORTH AND PINES TO MINES REGION

Similar to the area south of I-80, this planning area is large and has limited systemized trails. It also lacks an east-west connection, which is currently being designed as the Pines to Mines trail. While a portion of the Hole in the Ground Trail (I-80 North to Castle Peak Region) extends into the area, there are no trailheads for access; all the trailheads are further east. The two key existing trailheads connecting an OHV trail are as follows.

INDIAN SPRINGS OHV TRAILHEAD (Unpaved 20 spaces with trailer parking; Restrooms: Vault Toilets; Trash Collection: Dumpster)

The Indian Springs OHV Staging Area is near the Forest Service Indian Springs Campground on the north side of I-80, accessed from the Eagle Lakes freeway exit (exit 164). It is a large gravel parking area suitable for trucks towing trailers.

Signal Peak OHV Trail (Type: Point-to-Point/OHV Road; Distance: 6 miles; Elevation Change: +2,550/-700 feet; Difficulty: Most Difficult): The Signal Peak OHV Trail climbs over Signal Peak and descends to Fordyce Summit. The trail is used primarily for hiking and off-road driving. Trails heading northeast from Fordyce Summit go to Fordyce Reservoir and Lake Sterling; travelers can return to I-80 via Fordyce Road.



FIGURE 4.12: INDIAN SPRINGS OHV TRAILHEAD Source: DSA

GOULD PARK TRAILHEAD (Parking: Paved 12 spaces; Restrooms: Two Vault Toilets; Trash Collection: Four Receptacles)

Gould Park in Cisco Grove serves as a staging area for Fordyce Road and the Signal Peak OHV Trail. It is a county park on the South Yuba River, accessed from the north side of the Cisco Grove I-80 interchange (exit 165). Gould Park is closed in winter.

Fordyce Road (Forest Road 85) (Type: Point-to-Point/OHV Road; Distance: 5 miles; Elevation Change: +1,500 feet, Difficulty: Moderate): Fordyce Road is an easier route to Fordyce Summit than the Signal Peak OHV Trail (see above); but neither is maintained for passenger vehicles, and both are primarily used for hiking and off-road driving. The nearest parking for Fordyce Road is at Gould Park. Forest Road 85 is an authorized route for over- snow vehicles as far as Upper Lola Montez Lake.

TRAILS THAT TRAVERSE MULTIPLE REGIONS

There are three trails with larger connectivity across regions enabling users to disperse and reduce pressure on any given area. The currently initiated larger trail systems include the Pacific Crest Trail, the Memorial Overland Emigrant Trail, and the Donner Lake Rim Trail.

- Pacific Crest Trail: The Pacific Crest Trail, which traverses the Sierra Nevada mountains
 and associated ranges from Mexico to Canada, provides opportunities for north-south
 connectivity. Trail segments K and L are in located within the Plan area. Mountain bikes
 are not permitted on the Pacific Crest Trail, so there is a need for a parallel north-south
 connection that is multi-use and far enough away to maintain the current Pacific Crest Trail
 user experience.
- Memorial Overland Emigrant Trail: The Memorial Overland Emigrant Trail is partially
 completed and once finished will traverse the Summit from near the Kingvale Exit on I-80 in
 the west to Donner Memorial State Park in the east (Figure 7.1).
 - This trail-in-progress is being developed by Placer County and will be approximately 27 miles long. Five Memorial Overland Emigrant Trail segments are currently envisioned, each with independent utility (i.e. independent access for each segment). The Memorial Overland Emigrant Trail Soda Springs segment was constructed in 2018 west of Soda Springs Road. The remaining segments to be constructed are:
 - Memorial Overland Emigrant Trail—Kidd Lake Connection (Conceptual Corridor)
 - Memorial Overland Emigrant Trail -Forest Service Ridge Trail
 - Memorial Overland Emigrant Trail-Roller Pass Trail
 - Memorial Overland Emigrant Trail—Schallenberger Ridge Trail
- Donner Lake Rim Trail: The Donner Lake Rim Trail is a Truckee Donner Land Trust project to build a 23-mile multi-use trail on the mountains and ridges surrounding Donner Lake. In areas it will overlap with the Memorial Overland Emmigrant Trail. Hikers, mountain bikers, and equestrians will enjoy stunning views of Donner Lake, Mount Rose, and the Pacific Crest. Trails will run from downtown Truckee to Donner Summit and connect with existing trails, including the Pacific Crest Trail, Warren Lake Trail, Summit Canyon Trail, Hole in the Ground Trail, and the proposed trails in the Castle Peak area. Currently 12 miles of the 23-mile trail have been constructed and are available for public use all on the north side of I-80.

4.2 EXISTING RECREATION FACILITIES

WAYFINDING

Wayfinding is the way in which people orient themselves or navigate from place to place. Signage within the study area is a key wayfinding feature for recreational users to get to their desired locations while protecting natural resources. The type of sign varies based on location. For example, Forest Service, Truckee Donner Land Trust, Donner Memorial State Park, Placer and Nevada Counties, and Caltrans have signage specifications regarding colors, fonts, and placement of signs within spaces. Trailheads are generally marked with larger signs or have information kiosks. Smaller directional signs and arrows guide users through defined trail systems. Some trailheads have existing information kiosks, but there are many still lacking. There is a range of wayfinding styles found on Donner Summit, so implementing a standardized system to replace existing signs would help to reduce user confusion. Installing additional wayfinding would also discourage user created trails and better protect the natural and cultural resources of the Summit.

RESTROOMS

Permanent public restrooms are severely lacking on Donner Summit. There is one permanent public restroom located at the Loch Leven Trailhead that is maintained by the Forest Service. There are other vault toilets at the Indian Springs OHV trailhead, Gould Park (described below), and within the Donner Summit Sno-Park, south of I-80. Some of these are closed (or at least not maintained) seasonally. Portable restrooms located at the Pacific Crest Trail trailhead on Donner Pass Road and at China Wall are funded and maintained through private and Placer County contributions. During the increase of visitors in 2020 and 2021 associated with the COVID-19 pandemic, sanitary issues arose related to use of restricted areas and overflow of portable restrooms during both summer and winter months. Sanitary conditions must be addressed in an immediate and sustainable fashion to accommodate the existing users and then be expanded to address anticipated growth.

PARKS

Gould Park is the only county public park within the Donner Summit area. It is a 15-acre public park located in Cisco Grove along the south fork of the Yuba River. Half of the area lies between I-80 and the South Yuba River; it has paved parking for 10 to 12 vehicles, a two-stall vault toilet, three picnic tables, trash receptacles, and access to the river. There is little room for a large vehicle (or a vehicle with trailer) to turn around in the parking area, especially when other vehicles are present. The other half of the park straddles Hampshire Rocks Road on the north side of the river. It has wide unpaved roadside parking, the remains of an 85-year-old gift shop and fruit stand, the overgrown rock foundations of rental cabins, and access to the river. Given its location, Gould park could be an important gateway to the Summit, with historic, tourist, and bike repair station services; however, as currently managed, it lacks visibility to travelers on I-80.

The Plan Area includes a large portion of Donner Memorial State Park, which has been discussed previously in Section 4.1 (Donner Lake South and Shallenberger Ridge Region).

FIGURE 4.13: EXISTING WAYFINDING EXAMPLES Source: Self



















CAMPGROUNDS

Donner Memorial State Park provides designated camping immediately to the east of the Plan Area. Within the Plan area there are 4 designated campgrounds.

HAMPSHIRE ROCKS CAMPGROUND

This campground is located in the Tahoe National Forest on the south side of I-80 at exit 168, adjacent to the South Yuba River, on the west side of Donner Summit (Figure 7.9). The campground offers 31 sites available by reservation. Campground amenities include tent and RV camping, vault toilets, and limited parking (Forest Service 2023).

KIDD LAKE CAMPGROUND

This campground is located off Pahatsi Road, on the west side of Donner Summit, adjacent to Kidd Lake (Figure 7.9). It is operated by Pacific Gas & Electric. The campground includes tent camping, vault toilets, and potable water, and features three group camps formed by clusters of several campsites (Pacific Gas and Electric 2023).

CISCO GROVE CAMPGROUND AND RV PARK

This campground and RV park is located north of I-80 (exit 165) and the South Yuba River in the Cisco Grove area on the west side of Donner Summit (Figure 7.10). The campground is privately operated and requires reservations. Amenities include tent camping, RV sites, potable water, hot showers, and flush toilets (Around Donner Summit 2023). The facility recently changes hands and is not currently open to the public.

INDIAN SPRINGS CAMPGROUND

This campground is located in the Tahoe National Forest on the north side of I-80 (exit 164), adjacent to the South Yuba River and the Fordyce Trailhead on the west side of Donner Summit (Figure 7.10). The campground offers 35 sites available by reservation. The amenities include paved parking, vault toilets, potable water, and space for small trailers (Forest Service 2023).

4.3 LOCAL AMENITIES

SODA SPRINGS STORE

This local landmark is a general store located off Old Highway 40 (Donner Pass Road). The store offers a wide variety of products, including groceries, produce, wine, beer, deli sandwiches, and gifts.

ART GALLERY

Nancy O Gallery & Glass is owned by Donner Summit local artist Nancy Oudegeest. The gallery and studio showcase her glasswork along with other local artwork.

DONNER SUMMIT HISTORICAL SOCIETY

The Donner Summit Historical Society operates the 20-Mile Museum along the highway. The museum petroglyphs showcase Native American grinding rocks, mortars, hundred-year-old wagons, the site of the first transcontinental railroad, and other historic artifacts. Information about the Historical Society can be found online: http://www.donnersummithistoricalsociety.org/.

OLD 40 BAR AND GRILL

This restaurant is located at the base of Donner Ski Ranch, along Old Highway 40 (Donner Pass Road), and just west of the road's high point. It offers indoor and outdoor seating and variety of food and drink options.

SUMMIT HAUS

Summit Haus Biergarten is located off Old Highway 40. This casual dining spot operates only on summer weekends, offering local sausages, homemade sides, and a variety of beer.

GAS STATION AT DONNER SUMMIT GAS

This gas station is located at the junction of I-80 (exit 174) and Old Highway 40 (Donner Pass Road). In addition to automobile products, it offers snack foods and has a bathroom for customers.



FIGURE 4.15: OLD 40 BAR AND GRILL Source: DSA



FIGURE 4.16: SODA SPRINGS STORE Source: DSA



FIGURE 4.17: NANCY O GALLERY AND GLASS Source: DSA

4.3 LOCAL AMENITIES (CONTINUED)

KINGVALE SHELL

Kingvale Shell is a combination gas station and convenience store on the south side of I-80 at exit 171. It sells three grades of Shell gasoline, snacks, and beverages for travelers.

FOR REAL DOUGH PIZZA

For Real Dough Pizza sells pizza, calzones, appetizers, salads, sandwiches, and beverages on the south side of I-80 at exit 171. Dine-in and take-out options are available. For more information, including a menu, go to https://www.forrealdoughpizza.com

CISCO CHEVRON

Cisco Chevron is a combination convenience store and refueling stop for automobiles and trucks on the south side of I-80 at exit 165.

LUCKY'S TRAVEL PLAZA - SUBWAY

The Cisco Subway sells sandwiches, wraps, salads, and beverages on the south side of I-80 at exit 165. Both dine-in and take-out options are available. For more information, including the menu, go to https://www.restaurants.subway.com/united-states/ca/cisco-grove/100-cisco-road

4.4 LODGING

LYTTON LAKE LODGE

This lodge is located on the back side of Donner Ski Ranch, offering a remote getaway with food and drink options.

CLAIR TAPPAAN LODGE

This hostel-style lodge is located on Old Highway 40 (Donner Pass Road), offering a mix of private and shared accommodations and family-style breakfasts and dinners. The lodge was built in the 1930's by Sierra Club volunteers and has a rustic atmosphere.



FIGURE 4.18: SUGAR BOWL VILLAGE LODGING Source: Sugar Bowl Resort

SUGAR BOWL VILLAGE

The Hotel at Sugar Bowl Village is part of a European-inspired village that offers slope-side lodging. It offers a variety of specials that include accommodation and ski passes.

4.5 SNOW PLAY AREAS

SNO-PARK OFF OF INTERSTATE 80

Donner Summit Sno-Park is located on the south side of I-80 at exit 176. The park offers fun snow play opportunities with beautiful mountain views. Parking is limited at this facility, and a Sno-Park pass is required (http://ohv.parks.ca.gov/?page_id=1233).

TUBING AREA AT DONNER SKI RANCH

This tubing destination is operated by Donner Ski

Ranch and offers a large tubing hill, tube rentals, and a FIGURE 4.19: BOREAL TUBING Source: Boreal moving carpet for transport.



Tahoe Tubing is owned and operated by Boreal and offers groomed tubing lanes, tube rentals, and moving carpet for transport.

SODA SPRINGS: TUBE TOWN / PLANET KIDS

Tube Town and Planet Kids are snow play destinations that are owned and operated by Soda Springs Mountain Resort. Planet Kids is a small-scale snow park for young children under the age of seven. Tube Town is a tubing location for kids and adults that offers 10 groomed tubing lanes, tube rentals, and a moving carpet for transport.

SUGAR BOWL SUGAR RUSH TUBING

Sugar Bowl constructed Sugar Rush Tubing in December 2022. Sugar Rush offers 10 different tubing lanes, tube rentals, and a magic carpet for transport.

KINGVALE RESORT

Kingvale Resort is located on the south side of I-80 at exit 171. It offers 12 lanes of sledding for all levels of expertise.



FIGURE 4.20: DONNER SUMMIT Source: Stantec

4.6 SKI AREAS

There are four downhill ski resorts at Donner Summit. A brief description of each is included below.

SUGAR BOWL

Sugar Bowl is one of the oldest ski resorts in the American West; it offers a unique history and a variety of skiing opportunities. There are 12 chair lifts, four mountain peaks, 100 trails, 1,650 skiable acres, and 1,500 vertical feet. Of the 100 trails, approximately 17 percent are considered beginner runs, 45 percent are considered intermediate runs, and 38 percent are considered advanced runs (Sugar Bowl 2023).

BOREAL SKI AREA/WOODWARD

The Boreal Mountain Resort is slightly smaller than Sugar Bowl and it is located directly off I-80 at exit 176. There are eight chair lifts, 33 trails, six snow parks, and 380 skiable acres. Of the 33 trails, 26 percent are considered beginner runs, 29 percent are considered intermediate runs, and 44 percent are considered advanced runs (Boreal Mountain Resort 2023). Woodward is a year-round 33,000 sq. ft. indoor action sports hub with trampolines, foam pits, and an indoor skate park. Woodward is a year-round 33,000 sq ft indoor action sports hub with trampolines, foam pits, and an indoor skate park.

DONNER SKI RANCH

Donner Ski Ranch is also among the oldest ski resorts in North America; it is the second largest ski resort on Donner Summit. There are six chair lifts and two magic carpets, 52 trails, and 500 acres of skiable terrain. Of the 52 trails, 31 percent are considered beginner runs, 38 percent are considered intermediate runs, 21 percent are considered advanced runs, and 10 percent are considered expert runs (Donner Ski Ranch 2023).



FIGURE 4.21: ROYAL GORGE Source: DSA

SODA SPRINGS

The Soda Springs Mountain Resort is the smallest downhill resort in the Donner Summit area. It offers four chair lifts, 15 trails, a tubing park, and 200 skiable acres. Of the 15 trails, 30 percent are considered beginner runs, 40 percent are considered intermediate runs, and 30 percent are considered advanced runs (Soda Springs 2023).

4.7 CROSS-COUNTRY SKIING AND SNOWSHOEING

ROYAL GORGE

Royal Gorge provides access to nearly 100 miles of groomed cross-country ski and snowshoe trails on 6,000 acres (conditions permitting). Facilities include a lodge with daytime food service, a rental shop, and a ski school.

AUBURN SKI CLUB

Auburn Ski Club operates a training facility next to Boreal Mountain Resort. The club maintains a 15-mile trail system with a variety of loops for all abilities. They offer training for adults and youth, and host a variety of races.

5.0 PLANNED AND PARTIALLY/ RECENTLY COMPLETED PROJECTS

The projects listed below are as of early 2023 in various stages of planning implementation process. These projects were considered as likely to be implemented when assessing future recreation needs in this Plan (Section 6).

MEMORIAL OVERLAND EMIGRANT TRAIL

Placer County has built approximately 3 miles of the Memorial Overland Emigrant Trail from Soda Springs Road to the Kidd Lake area. Placer County plans to extend the trail eastward from Soda Springs Road over Roller Pass and Schallenberger Ridge to Donner Memorial State Park, and westward from Kidd Lake to near Kingvale on I-80. This will eventually connect the trail to the western foothills.

DONNER LAKE RIM TRAIL

The Truckee Donner Land Trust is designing and building the Donner Lake Rim Trail. The trail will circle Donner Lake and is currently under construction, with sections north of Donner Lake already built. Segments along the south and west sides of Donner Lake will stretch north and south through Donner Summit and along Schallenberger Ridge and will be shared with the Memorial Overland Emigrant Trail.

PINES TO MINES

The Bear Yuba Land Trust, Truckee Trails Foundation, Bicyclists of Nevada County, Gold Country Trails Council, and Nevada County have partnered to develop the Pines to Mines trail. Pines to Mines will be an 80-mile trail connecting Truckee with Nevada City via mostly existing trails. A 20-mile section of new multi-use trail is proposed between Hole in the Ground and Lake Spaulding. Work has begun on the Pines to Mines Environmental Assessment. Field surveys were conducted in the summer of 2022, and the assessment is on track for completion by December 2023 with an anticipated signed decision by the Tahoe National Forest Supervisor to follow.

HOLE IN THE GROUND TRAIL RE-ROUTE AND TRAIL MAINTENANCE

Hole in the Ground Trail is one of the most popular and heavily used mountain biking trails on Donner Summit. The Forest Service is currently exploring options to re-route portions of the existing trail and add a segment to create a single-track loop, which will provide shorter loop alternatives to the existing Hole in the Ground Trail.



FIGURE 5.2: VAN NORDEN MEADOW Source: DSA

VAN NORDEN MEADOW RESTORATION PROJECT

Van Norden Meadow is the epicenter of Donner Summit, with many stunning views of the meadow from nearby vista points. In 2022, the South Yuba River Citizens League, in partnership with the Forest Service, Truckee Donner Land Trust, and other entities, began restoring 485 acres of meadow habitat where portions of the South Yuba River had been diverted from their historic flows. On the western edge of the prehistoric meadow, Van Norden Dam was lowered and the removed soil was used to fill incised channels.

The goal of the project is to restore water flow through the meadow to the slower and broader conditions that existed before the arrival of Europeans. As a by-product, the restoration may provide opportunities for new parking and trailhead facilities, interpretive signs describing the restoration, and new natural meadow habitat.

Following the restoration, the South Yuba River Citizens League plans a trail that will follow part of the existing road through the meadow and across the South Yuba River. The trailhead and current parking area at Sheep Pens will be moved slightly east to facilitate restoration of Upper Castle and Lytton Creek meadowlands. Additional trails, separate from the restoration project, are being contemplated by the Forest Service, in coordination with local Native American representatives.

CASTLE PEAK TRAILHEAD

The Castle Peak Trailhead is in extremely high demand given the popularity of the Castle Peak and Hole in the Ground Trails. The Forest Service is planning upgrades to the Castle Peak trailhead including a permanent, year-round restroom. The upgrades will include an expansion of the parking area and additional informational kiosks. Upgrading of this trailhead could take pressure off the Sno-Park on the south side of I-80 at this same exit.

INDIAN SPRINGS CAMPGROUND UPGRADES

The Forest Service is planning significant upgrades to the Indian Springs Campground.

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6.0 NEEDS ANALYSIS

This needs analysis was developed by compiling the existing recreation facilities, trail data, and other inventory information; adding the current (2023) understanding of planned proposed projects; and cross-referencing the compiled data set with stakeholder and residents' input and qualitative information about user groups and demands.

6.1 NEEDS ANALYSIS SUMMARY

STRENGTHS

- Collaboration with (and support from) local businesses, non-profit organizations, residents, second homeowners, other landowners, and government agencies has been demonstrated in past DSA and other projects in the region.
- Donner Summit has extensive and diverse year-round recreation opportunities (as documented in previous Sections).
- Vast natural beauty, scenic vistas, and diverse ecology.
- A rich history as a trading crossroads for hundreds, if not thousands, of years.
- A robust existing trail network (with planned regional connectors).
- Strong local ski areas and abundant access to backcountry, providing a basis for future improvements.
- Many educational opportunities that can be built around the strengths above.
- Easy access from I-80.

CHALLENGES

- Initial funding for facilities and visitor support is available; but funding for operations and maintenance is scarce.
- Comprehensive, accurate maps of trails and recreation sites have either not been developed or are not available to the public (other than for Truckee Donner Land Trust properties).
- Wayfinding throughout the study area, including along roadways, is inadequate.
- The high density of user-created trails that need to be either systemized or removed complicates planning.
- The lack of organized trailheads, organized parking, and public restroom and trash facilities encourages irresponsible behavior by visitors.
- Illegal incursions onto private property partly (due to lack of signage and education) alienates property owners from joining in searches for solutions.
- Poor integration of, and year-round walkability within, central Soda Springs ignores its potential as a core for visitor support.
- Lack of public parks and outdoor community gathering areas discourages community events and small family activities, such as picnics.
- Inadequate attractive snow play opportunities leads to snow play in inappropriate locations, traffic congestion, and hazardous and/or unsanitary behavior.
- Lack of designated campgrounds leads to illegal camping and resource degradation.

- Shortage of suitable nearby lodging discourages overnight tourist visitation and makes recruitment of employees by local businesses difficult.
- Lack of trail connectivity between subregions within the Plan Area discourages challenging recreational pursuits, which could draw positive attention to the Summit.
- Graffiti on railroad tunnels and snowsheds, historic rock masonry, and granite faces detracts from or shifts the scenic appeal of Donner Summit.
- The seasonal nature of recreation leaves Donner Summit with shoulder seasons when visitation is low and peak seasons when visitors can overwhelm resources.
- Climate change altering the winter season, adding wildfire (and smoke) as a component of summer, and changing vegetation through events like fir engraver beetle attacks on droughtstressed red fir trees.

NEEDS

WAYFINDING

- Consistent and clear wayfinding
- Trail mapping
- Scenic, historic, biological resource identification markers
- Trailhead information kiosks
- An overall composite map identifying the recreational opportunities and facilities for public awareness

IMPROVED TRAILHEADS AND TRAILS

- Additional and well-delineated and designated parking at heavily used trailheads
- Systemization of desirable user-generated trails
- Removal and restoration of undesired user-generated trails
- New beginner, multi-generational, and ADA -compliant systemized trails in flat areas such as Van Norden Meadow
- New connections among trails to add options and variety for users
- New extensions of trails, in addition to the Memorial Overland Emigrant Trail and Donner Lake Rim Trail, especially in areas such as the western slope of the Sierras north and south of I-80, where trails are limited (Figures 7.9 and 7.10)
- Permanent restrooms
- Permanent funding sources and long-term partnerships for garbage collection and restroom service and maintenance
- Designated snow play areas with parking

SIGNAGE

- Regarding proper etiquette, bringing awareness to users
- Enforcement signage (no parking, no graffiti, etc.)
- Agreements with local agencies for enforcement of restrictions
- Interpretive signs (i.e., natural, historic and prehistoric, cultural, etc.)

COMMON AREAS

- A walkable Soda Springs that addresses pedestrian safety
- Additional public parks and community gathering areas

LODGING

- Campgrounds and other recreational support lodging
- Camping where major recreation can be accessed directly from the campground
- Long-term rentals for local employees
- Coordination of projects and recreation improvements among landowners, businesses, government agencies, and other stakeholders

6.2 NEEDS AND GAPS

Donner Summit is unique in its ecology, topography, and cultural history; it provides a correspondingly unique opportunity for expanded economic development based on ecotourism and outdoor recreation. Overuse—potentially resulting in parking and recreational safety issues, hygiene issues, and forest health management issues—is a major risk of development without adequate planning. Based on the inventory, known proposed projects, user group and stakeholder input, and a qualitative understanding of demand, DSA recommends the Donner Summit-specific developments outlined below.

TRAIL NEEDS

Trails are in high demand, as evidenced by consistent difficulty in finding parking and by user complaints. The most popular trails are predominantly steep and/or long. Pacific Crest Trail Segments K and L and the Hole in the Ground Trail during summer, and the Castle Peak Trail year-round serve as examples of this. Trail slopes in the Serene Lakes/Bogus Basin/Royal Gorge area average approximately 8 percent with slopes well over that in areas on the Royal Gorge Rim Trail from Bogus Basin to Rowton Peak. Similarly, in areas near Castle Peak and Donner Summit (between Donner Pass Road and I-80) some slopes average 13 percent and more. This occurs, for example, on the Castle Peak Trail. In the Sugar Bowl region, slopes generally average between 8 and 14 percent, with steeper climbs to Crow's Nest.

Near Van Norden Meadow slopes are much gentler, often less than 5 percent on trails that are also much shorter (see Figure 6.1). The most popular trail at Donner Summit may arguably be the Tunnel 6 Trail, which invites visitors to experience the hand drilled tunnels by Chinese laborers, striking views, and history during a half mile stroll with a slope of only about 4 percent. Parking pressure at Van Norden Meadow is low while meeting parking demand for Tunnel 6 at the east portal is a challenge and at the west portal is met by a large dirt lot.

Based on trail length and slope assessments, it is apparent that there is a need for additional flat trails, and loop options to facilitate variable-length excursions. Development of additional trail segments, stacked loops, local and regional connections, trail extensions, and new trails will help satisfy and distribute the demand for various trail experiences. In particular, based on survey input and an analysis of the terrain (i.e., elevation change) of trails, additional options for users with differing abilities, and wider, flatter trails where people can walk side by side or push all-terrain strollers are needed. ADA-compliant trails are generally lacking. Additionally, based on user input, a connection from Soda Springs to Serene Lakes is needed. There is also a general lack

of connections between subregions within the Plan area, which warrants new trails. In contrast, many user-generated trails that are not safe or cause confusion and degradation should be decommissioned.

For specific user groups, the following is needed:

- Hikers, Runners, and Walkers: At Donner Summit there are ample trails with steep climbs. However, for hikers, runners, and walkers seeking flatter terrain, choices are limited. Runners would benefit from longer flatter trails to increase the diversity of running experiences and increase accessibility for diverse running capabilities. Walkers would benefit from trails that enable access to multiple generations of walkers, ADA-accessible boardwalks, and low-grade routes with opportunities for birding, nature walking, side-by-side social walking, and learning about Summit ecology, history, and prehistory.
 - This user group would benefit from a review of trails for foot travel only. As mountain biking increases in popularity, bikers are accessing more and steeper terrain and conflicts result. A review of hiker-only trails, such as certain routes on Rowton Peak, may be warranted. See also the comment below regarding advanced trails for mountain-bike-only use.
- Mountain Bikers: Mountain bikers would benefit from increased diversity and connectivity. For example, the addition of flow trails that allow for varied user experience levels would increase access and diversify experiences. Flow trails can be built such that a variety of skill levels can enjoy them. Additionally, spreading use and access across the region would reduce congestion for cyclists and conflicts with other user groups. This could include development north and south of I-80 in the western portion of the Plan Area (I-80 North, Pines to Mines, I-80 South, and Loch Leven area). Although potentially contentious, designating some routes for mountain-bike-only use could allow bikers to experience advanced trails safely.
- Equestrians: Equestrian trails with ample parking, horse watering, wayfinding, and limited mountain bike and e-bike access are desirable. Multiple-use trails for equestrians could be added in the eastern region of the plan area north and south of I-80 in association with the Memorial Overland Emigrant Trail Kidd Lakes Connection Segment and the Pines to Mines Trails.

WAYFINDING NEEDS

Given the general lack of wayfinding and the increasing number of recreationists accessing the Summit (especially since the Covid-19 pandemic), additional maps and information about trailhead and trail locations, directions, and distances are necessary. Wayfinding is an integral component of accessing the trail system on Donner Summit. Significantly more of it is needed, and the design, layout, and attributes need to be standardized. This needs analysis found several locations where better wayfinding would help to enhance the user experience. These locations are organized into three categories: (1) motorist wayfinding, (2) signage at trailheads, and (3) signage along trails.

 Motorist Wayfinding: Wayfinding indicating the direction to trailheads should be installed on Donner Pass Road east of the I-80 exit 174 interchange and along Donner Pass Road where it intersects with Soda Springs Road. Installing wayfinding at these two locations would provide motorists with clear instructions on how to access specific trailheads. Wayfinding is needed at the intersection of Soda Springs Road and Old Donner Summit Road, which runs along the

- north side of Van Norden Meadow (see Fig. 7.6), to direct users to the Van Norden Meadow area. It would also help to disperse users and reduce congestion where the Pacific Crest Trail crosses Donner Pass Road. Gould Park also offers potential for more general motorist wayfinding at the west end of the Plan area.
- Trailhead Wayfindings: Wayfinding should be installed at all trailheads. Wayfinding should be included as a component of trailhead kiosks, which will provide users with trail location and distance information as well as information showing private lands that are not to be accessed. There is currently trailhead wayfinding information at many of the Truckee Donner Land Trust trailheads. In addition, the DSA is developing a new trailhead design for the Summit Hub trailhead that will include wayfinding. However, as described in Table 4.1, there are still many trailheads that are in need of wayfinding information, including:
 - Long Lake trailhead
 - Castle Peak trailhead
 - Sheep Pens trailhead
 - Summit Station trailhead
 - Van Norden Dam trailhead
 - Salmon Lake trailhead
- Trails Wayfindings: Once recreationists are on the trails, wayfinding is vital to the overall quality of the experience. It provides information about the nearby components of the system, helping to keep users on the trail, and thereby protecting the natural environmental surrounding the trail and helping to reduce erosion. Ideally, trail wayfinding should be installed at all trail intersections. Priority locations include north of the Lamson-Cashion Donner Summit Hub trailhead on user-generated trails such as Flora Lake and Azalea Lake and along the Palisades Creek Trail from the trailhead to Long Lake.

In addition to wayfinding at specific locations, different types of wayfinding and signage are needed, including informational, educational, and enforcement. Informational wayfinding would include information about recreational opportunities around Donner Summit. Educational wayfinding would include information regarding the environmental and cultural resources of the area. Lastly, the enforcement signage would include information about no-parking areas, trespassing, graffiti, etc. All types of wayfinding and signage are equally important and would be used to guide recreational use on Donner Summit.

Regarding wayfinding standardization, wayfinding on Donner Summit is varied and thus can seem disparate (Figure 4.6). The Design Guidelines section of this document (Section 9) includes information to facilitate wayfinding standards.

IMPROVED TRAILHEAD NEEDS

As discussed above, trailhead kiosks with trail distance, difficulty, and location, delineation of private property, trail etiquette, and environmental, cultural resources, and educational awareness information should be included at every trailhead. Approximately 90 percent of the survey respondents agreed that trailhead upgrades were very or somewhat important. Trailheads also need ample parking and obvious delineation of areas where parking is allowed and where it is prohibited. The Cascade Lakes trailhead, Castle Peak trailhead, and Van Norden Dam Trailhead have

been identified as needing improvements due to the increased use at these locations. A successful trailhead typically includes parking, wayfinding information, a kiosk with interpretive signage, picnic tables, and a restroom.

RESTROOM FACILITY NEEDS

With increased demand on Donner Summit trails, the need for permanent public restrooms is apparent. Approximately 87 percent of survey respondents agreed that the installation of restrooms is somewhat or very important. As was noted in the surveys, these facilities were needed prior to the Covid -19 pandemic that motivated people to get outside when indoor gathering sites were closed. According to local residents and Sugar Bowl staff, when trail demand greatly increased during 2020, the already taxed portable toilets that had been provided overflowed weekly in some areas. There are currently portable restrooms located at the Pacific Crest Trail crossing of Donner Pass Road and at the China Wall, Hoelter- Hall, and Summit Station trailheads. Permanent restrooms located at heavily used trailheads will help to keep Donner Summit clean and ease environmental issues associated with improper disposal of human waste. At a minimum, permanent restrooms with long-term maintenance agreements should be located at the Lamson-Cashion Donner Summit Hub trailhead, Long Lake Trailhead, and the Castle Peak trailhead.

Once these have been installed, permanent restrooms east of Donner Summit along Donner Pass Road and at Van Norden Meadow (at the Dam site and/or at Sheep Pens) should be added. Additionally, a plan for the maintenance of restrooms is an ongoing challenge and should be addressed in coordination with landowners.

USER-GENERATED TRAIL NEEDS

The existing trail system on Donner Summit is extensive. The Forest Service, Truckee Donner Land Trust, and private entities, such as Sugar Bowl Resort have developed and maintain many of these trails. There are, however, many user-generated trails that have been created over the years. Online trail mapping applications can exacerbate issues opened by user- generated trails; this has been the case on Donner Summit in many instances. Recreational users accessing private property via user-generated trails has become a significant issue and a combination of trail closure, restoration, wayfinding, and enforcement is necessary to curb increasing trespassing.

Better wayfinding and maintenance will encourage trail users to stay on systemized routes, which will reduce erosion and maintain the health of the environment. Connectors between local trail systems will satisfy more aggressive recreationists who set goals in terms of miles, elevation change, and steps. Proposed regional connector trails such as the Donner Lake Rim Trail and the Memorial Overland Emigrant Trail will connect Donner Summit with the Town of Truckee. The proposed Pines to Mines Trail will connect eastern and western Nevada County via Donner Summit. Additional trail connection opportunities are included in Table 4.1, Existing Trail Inventory and Connectivity Needs.

SNOW PLAY NEEDS

As summarized in the Recreation Facilities Inventory (Section 4), most of the ski resorts at Donner Summit provide sledding and/or tubing opportunities, including the newly added Sugar Rush Tubing. Kingvale Resort (I-80 exit 171) offers slopes for plastic sleds and saucers (no tubes, skis, or boards). However, Donner Summit would benefit from an additional designated Sno-Park or snow play area. The existing Sno-Park on the eastbound side of I-80 sees significantly more demand than it can accommodate.

Many snow enthusiasts play in the snow along Donner Pass Road and Soda Springs Road and thus either encroach on private property or put themselves or others in danger by recreating along the roadway or beneath the interstate overpasses. Without restrooms or trash receptacles, these sites have become littered with human waste and other trash. In addition, because there is limited parking along Donner Pass Road and Soda Springs Road during the winter months, many drivers park their vehicles in the roadway, impeding traffic flow. Additional designated sledding and tubing area can provide snow-cleared parking, a safe place for people to sled or play in the snow, and restroom facilities per day.

DAY USE AREA NEEDS

A day use area is a designated location for public use, picnics, community gatherings, and events. There currently is not a designated day use area on Donner Summit and about 65 percent of the survey respondents believe that the development of a day use area is very or somewhat important. The development of such an area would provide a central location for community gatherings and events staging. It could also provide a location for the development of a public park and playground, if future public outreach determines that a public park and playground would be an asset to the Donner Summit community.

CAMPGROUND NEEDS

Although there are four designated campgrounds on Donner Summit, they are all located west of the Summit away from the central trailheads or on the east side of the Summit but outside the Plan Area. Many campers take advantage of dispersed camping opportunities on Donner Summit, but these are sometimes in areas where camping is not allowed.

Without adequate restrooms and trash receptacles, campers do not always properly dispose of their waste, which can lead to environmental degradation and wildlife issues. Developing a designated camping area would help to curb illegal camping and would provide campers with a means to dispose of waste properly.

VISITOR CENTER NEEDS

The Sierra Business Council conducted a study for DSA to determine the feasibility of a new visitor center at Donner Summit; although construction of such a facility was deemed feasible (and some funding available), DSA was unable to develop a practical plan for funding ongoing operations. There continues to be local interest in such a facility, particularly to educate the public about the recreation resources on Donner Summit.

Since a secondary goal of such a center is to disperse users throughout the Summit area, the concept of several Donner Summit Welcome Centers has been proposed, with information nodes at various key locations, including a potential Western Gateway at Gould Park, various Eastern Gateway locations (e.g., along I-80 and Donner Pass Road), and at popular trailheads such as the Lamson-Cashion Donner Summit Hub and the Van Norden Dam Trailhead. Donner Summit Welcome Centers with regional information would help disperse recreationists and reduce user pressure on the most popular trailheads and facilities. The Donner Summit Welcome Centers would also provide information about trail etiquette, private property, and the protection of environmental and cultural resources. The local Art Gallery, Nancy O Gallery and Glass located on Donner Pass Road, currently houses an interim visitor center on its lower level. The Gallery could also become one of the Donner Summit Welcome Centers.

Donner Summit Association Welcome Visitor Center Concept:

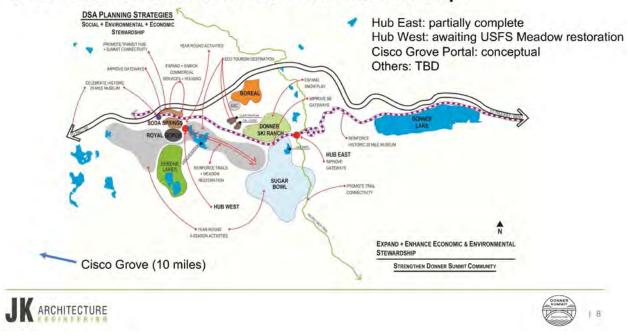


FIGURE 6.2: EVERYWHERE VISITOR CENTER SCHEMATIC Source: JK Architecture and Engineering

7.0 PRIORITY PROJECTS

The projects identified using the filters of the stakeholder survey (Section 1), local planning efforts to date (Section 2), user group interests (Section 3), the recreation resource inventory (Section 4) currently planned and recently implemented projects (Section 5), and the needs assessment (Section 6) were ranked using the following key aspects, each weighted equally:

- ✓ Safety and security
- Accessibility and diversity of accessibility
- Economic development
- Environmental stewardship and
- Stakeholder interests

The following project types are generally listed in order of priority; however, all are needed. Therefore, funding the order of implementation will be contingent upon funding availability for each project.

7.1 TOP PRIORITY PROJECTS

WAYFINDING SIGN DEVELOPMENT PROJECTS

Wayfinding is an essential component of recreational activities and therefore wayfinding sign development is considered a priority project type because it meets all five screening criteria.

- ✓ Increase Safety and Security: Wayfinding is an integral aspect of user safety. Wayfinding is used to plan for, get to, and return from a recreation experience on the Summit safely. The majority of existing trails, with the exception of many Truckee Donner Land Trust trails, lack and need wayfinding information (Table 4.1).
- ✓ **Improve Accessibility:** Wayfinding will help educate potential recreationists regarding the ease or difficulty of a particular experience, allowing users to choose the specific levels of difficulty and avoid recreating in areas beyond their skill levels.
- ✓ Add Economic Vitality: Wayfinding to and around the Summit will enable users to be more efficient with their time and make informed decisions about places to stay (near a trail or near a ski resort, for example), places to eat, and places to purchase goods or rent equipment. Wayfinding is a key component of economic development.
- ✓ Promote Environmental Stewardship: Wayfinding will keep people on trails, reduce creation of user-generated trails, and minimize encroachment on private property. It can steer recreationists toward established trails and recreational facilities and away from sensitive resources.
- ✓ **Align with Stakeholder Interests:** Over 80 percent of surveyed stakeholders identified Wayfinding as the highest priority on Donner Summit (Figure 1.5).

Given that wayfinding improvements for the Planning Area meet all five screening criteria, they are a priority project type. The assessments in Sections 4, 5, and 6 of this report then yield the following specific wayfinding upgrades as priorities. Through the planning process, multiple wayfinding needs have been identified and span the entire Planning Area.

- 1. Motorist Wayfinding Signage Projects: At a minimum, motorist wayfinding should be installed at the Donner Pass road I-80 interchange, along Donner Pass road where it intersects with Soda Springs road, at Gould Park, and at the Pacific Crest Trail/Donner Pass Road crossing. Signage should be standardized and clearly delineate the location of trailheads. Having effective motorist wayfinding will help to spread people out on the trail system by using wayfinding to educate users of other trail options, which will help to alleviate congestion at the most popular trailheads.
- 2. Trailhead Wayfinding Signage Projects: It is essential to install wayfinding at trailheads. This provides needed information to users before they head out on the trail. Although trailhead wayfinding should be installed at all trailheads throughout the trail system, at a minimum, it needs to be installed at the Long Lake, Castle Peak, Van Norden Dam, and Lamson-Cashion Summit Hub trailheads. This would include the installation of a trailhead kiosk with information about the trail options and specific distances, points of interest, and information about land ownership so that users know not to trespass on private property.
- 3. Trail Wayfinding Signage Projects: Trail wayfinding should be installed at all trail intersections and periodically along granite segments of trails where the trail alignment is not obvious. Wayfinding at trail intersections should include trail names and arrows unambiguously indicating the direction of the trail. Other wayfinding along the trail can be as simple as rock cairns placed along the trail edge. Trails warranting additional wayfinding are identified in Table 4.1.

TRAILHEAD FACILITY UPGRADE PROJECTS

Trailhead upgrade projects are a high priority for Donner Summit for the reasons summarized below.

- ✓ Increase Safety and Security: Trailheads with designated parking areas improve safety and security when compared with parking on road shoulders where there is higher risk of injury and probability of theft. Trailheads with restrooms and trash collection also improve local hygiene. They can provide trail information for planning routes and can serve as areas to rest before or after an arduous recreational experience. Trailheads provide additional parking and safety for equestrians and snowmobile operators who typically have trailers; in the case of equestrians there are additional safety concerns related to unloading and loading of horses in a noisy, traffic-filled environment. Trailhead parking will also increase snow play user safety.
- ✓ Improve Accessibility: Trailheads increase accessibility because they define parking, provide users with wayfinding information to make informed decisions regarding hiking locations, and facilitate picnic and day use at adjacent rest areas.
- ✓ Add Economic Vitality: Upgraded and new trailheads will increase user attraction to the area, improve education regarding trail and facility locations, and provide additional parking to accommodate increasing numbers of visitors. Higher use levels will result in economic benefits for the region.
- ✓ Promote Environmental Stewardship: Trailheads focus parking, waste, and use into designated areas, thereby reducing environmental impacts.
- ✓ Align with Stakeholder Interests: According to the stakeholder survey (Table 1.4), over 90 percent of respondents desire upgraded and additional trailheads.

Given that trailheads meet all five screening criteria, they are a priority project type. Through the planning process, multiple trailheads have been identified as needing improvements; the majority are in the Van Norden Meadow, Sugar Bowl, and Donner Pass Road to I-80 Regions (Figure 7.1).

- 1. Van Norden Meadow: Van Norden Meadow is a prominent element of Donner Summit; it marks the headwaters of the South Yuba River and provides habitat for a diverse ecosystem. It is also a central hub that is important in its historic and prehistoric context. The current meadow restoration will help to bring the meadow environment back to its natural state.
 Van Norden Meadow is a place to calculate the natural and historic diversity and the headsic
 - Van Norden Meadow is a place to celebrate the natural and historic diversity and the beneficial effects of restoration on high alpine meadows. Public education through interpretive signs, a potential ring trail with a river crossing near the Sheep Pens, and a proposed 1-mile boardwalk trail at the former Van Norden Dam would allow the public to experience and explore a high alpine meadow environment. The meadow restoration plan does not include trail upgrades, but trail planning is a priority for the Forest Service during a follow-up recreation phase. In the meadow area there are two options for trailhead upgrades, potential day use areas, restrooms, and interpretive trails. One is located at the existing Sheep Pens Trailhead (or slightly eastward as part of the Forest Service meadow restoration project) and the other is near the Van Norden Dam site. These two trailheads are not mutually exclusive and either (or both) would be a good candidate for a Donner Summit Welcome Center enhanced trailhead.
 - The Sheep Pens trailhead would provide an optimal meadow experience for users. Sheep Pens is already an established trailhead; any upgrades could be incorporated into the existing layout or into a new trailhead located slightly to the east where it would be out of the Lytton Creek floodplain. The Sheep Pens trailhead provides direct access to an existing trail network. Access to the Sheep Pens under current conditions can be difficult; the unpaved roadway is more than a mile long and it can become rutted if not graded frequently. Road upgrades, wayfinding at the intersection of Soda Springs Road and Old Donner Summit Road, and clear delineation of the roadway through an existing dirt parking lot near the dam could help to make the trailhead more accessible.
 - The Van Norden Dam trailhead would be a new trailhead. It would include restrooms, interpretive displays, parking, a day use area, and an interpretive trail near the Van Norden Dam site. The architectural character of the facility should draw from the North Pacific Province section of The Built Image Guide for the National Forests and Grasslands (September 2001). The Van Norden Dam site provides easy access to Van Norden Meadow from Soda Springs and would connect to the proposed ring trail around the meadow. The site, however, is not currently developed for recreation and would need significant construction.

This trailhead is a priority and has been identified as a Donner Summit Welcome Center because of its proximity to Van Norden Meadow and its relatively flat trails. Those trails would be accessible to families with young children, people with limited abilities, and people new to outdoor recreation on the Summit. The area would help users get oriented at good trailheads linked to trails designated as easy.

2. Sugar Bowl Road/Trailhead Upgrades: This area lacks a trailhead (Table 4.1) and access is located along Sugar Bowl Road without safety provisions. Additional parking is necessary for trail access safety, particularly as the extension of the Donner Lake Rim Trail passes through Sugar Bowl and connects to the Memorial Overland Emigrant Trail. There is an opportunity to leverage Sugar Bowl's new Tubing Park parking area for a trailhead though it lacks a permanent restroom facility at this time.

RESTROOM ADDITION AND MAINTENANCE PROJECTS

Restroom additions are essential to meet demand, respond to stakeholder priorities, and promote safety, hygiene, accessibility, economic vitality, and environmental stewardship. These types of improvements are considered a priority project type.

- ✓ Increase Safety and Security: Restrooms facilitate hygiene which promotes safety and security. Portable or permanent restrooms are necessary to alleviate biological issues associated with the improper disposal of human waste.
- ✓ Improve Accessibility: Restrooms increase accessibility for families with young children or others who may have more frequent hygiene needs.
- ✓ Add Economic Vitality: Restrooms can often establish trailheads as well-developed. For example, the Loch Leven trailhead, which is a destination for winter and summer recreationists, who in turn look for local places (e.g., the Rainbow Lodge, when it was open for a hot chocolate or lunch after sledding.)
- ✓ **Promote Environmental Stewardship:** Designating areas for hygienic needs reduces litter in public spaces and along trails.
- ✓ Align with Stakeholder Interests: Over 80 percent of stakeholders surveyed indicated a need for additional permanent restrooms. This is the second highest stakeholder priority for facilities development.

Given that the addition of restrooms meets all five screening criteria, they are a priority project type. Through the planning process, multiple trailheads have been identified as needing improvements, including restrooms. However, the priority areas were selected due to their central location and high user demand or their remote location far from other public restrooms.

- 1. Lamson-Cashion Donner Summit Hub Trailhead: The Summit Hub trailhead is an important launch point for the Pacific Crest Trail Sections K and L. Additionally, the site connects to multiple trails in three distinct DSA planning regions: the Sugar Bowl Region, the Donner Pass Road to I-80 Region, and the Donner Lake South/Shallenberger Ridge Region. This trailhead needs at least one permanent restroom given the high recreation traffic in the area.
- 2. Cascade Lakes Trailhead: The Cascade Lakes trailhead sees significant use. It is located between two artificial lakes, and far from existing public use restrooms. It is a high priority candidate for a restroom addition. A portable or permanent restroom is necessary to alleviate biological issues associated with the improper disposal of human waste. Additionally, according to user input, the trailhead also merits parking and wayfinding upgrades. Parking at the trailhead can be cumbersome due to road condition and the lack of designated parking areas.

67

TRAIL ADDITION AND CONNECTION PROJECTS

Proposed trail additions and connections are essential to meet the growing demand on and around Donner Summit in a safe, inclusive, environmentally protective manner that promotes economic vitality and aligns with stakeholder interests.

- ✓ Increase Safety and Security: Trail additions and connections reduce demand and trail pressure, thereby decreasing the number of inadvertent unsafe interactions between disparate user types. Adding trails helps keep up with demand and disperse users. Adding trail connections helps reduce pressure on single trailheads by providing safer staging and parking conditions.
- ✓ Improve Accessibility: Adding distinct trail types allows for increased accessibility for diverse user types and abilities. For example, Donner Summit has an abundance of moderate and difficult trails but because of the topography it has limited flat, easy trails. New trails in Van Norden Meadow can help to meet the need for trails with increased accessibility.
- ✓ **Add Economic Vitality:** Adding trails to keep up with demand means more user enjoyment, more repeat visits, an increasing reputation as a world-class recreation area, and a growing local economy during all seasons.
- ✓ Promote Environmental Stewardship: Adding well-considered and sustainable trails and connections will help keep people on existing alignments and reduce the user-generation of trails through sensitive resources. Properly planned trails can keep recreational users away from cultural resources. Adding proper stream crossings can reduce erosion and sedimentation.
- ✓ Align with Stakeholder Interests: Over 80 percent of stakeholders surveyed are interested in controlling erosion and adding connector trails. One popular connector would be a trail connecting Soda Springs with Serene Lakes (Figure 1.5).

Given that trail additions and connections meet all five screening criteria, they are a priority project type. Multiple trail extension or connection needs have been identified (Table 4.1 and Figures 7.0 through 7.9). These provide links between planning regions as well as between trail alignments and trailheads. The proposed connections also meet the need for improved accessibility, providing for a diversity of trail accessibility types (easy, moderate, and difficult), with a keen focus on the need for easy trails at (for example) a key location toward which people currently gravitate for such an experience (e.g., the Van Norden Meadow area). The following are trail connections and extensions considered high priority, given the input from user surveys and the trail inventory analysis. Refer to Table 4.1 for an assessment of connectivity needs associated with existing trails.

1. Van Norden Meadow Boardwalk and Perimeter Trail: Van Norden Meadow is the epicenter of Donner Summit. The restoration of the meadow initiated in 2022 will provide an excellent educational opportunity to teach the public about meadow function and the importance of subalpine meadows. The installation of a boardwalk at the Van Norden berm near the dam site, with a designated trail around the perimeter, is a needed addition to the meadow, though this is not currently being considered with the restoration. A relatively flat loop trail could allow the public to experience a subalpine meadow in its almost natural state, post- restoration, which is a truly unique experience. According to the Forest Service, a potential perimeter trail may need

to be located away from the meadow edge (Figure 7.6) to avoid bringing the public too close to sensitive resources. It is estimated that a conceptual trail would remain connected to meadow features through vistas and a meadow crossing. Restoration activities to be implemented over the next several years include removal and thinning of lodgepole pines around the meadow rim, which would clear some vistas of the meadow from a perimeter trail. This conceptual trail would allow for connectivity and options regarding trail length given the meadow perimeter trail would be comprised of two smaller interlinked loop trails. Improvement options for this concept include designing the conceptual trail outside of existing roadways and powerline corridors. Any trails on Forest Service land, including concepts for Van Norden Meadow, need to be developed in compliance with Forest Service policies and the National Environmental Policy Act (NEPA), and in coordination with local Native American Tribal representatives to minimize environmental and cultural resource impacts. All trail improvements will also have to avoid conflicts with winter cross-country ski trail preparation and use.

- 2. Pine Marten Trail Connections: There are two minor connections to the Pine Marten trail that will keep that trail generally at a single elevation on the south side of Van Norden Meadow, while creating the western edge of a Van Norden Ring trail without encroaching on the meadow. These connectors would allow visitors to walk, hike, bike, or ride Pine Marten without having to climb a steep hill, thereby rendering this trail more accessible to diverse experience levels and user groups. This upgrade would systemize the Pine Marten trail to provide easier loop options from the Sheep Pens trailhead. Pine Marten is currently used as a cross-country ski trail for Royal Gorge and provides hiking, biking, and equestrian opportunities in the summer.
- 3. Memorial Overland Emigrant Trail: Remaining Memorial Overland Emigrant Trail segments would connect Donner Lake with Donner Summit and Kingvale, spreading users and reducing impact on any given subregion. Additionally, these segments would allow for more connectivity between planning regions south of I-80 as this trail system traverses Donner Summit from east to west (and vice versa). Natural resource surveys have been completed on the remaining segments and, pending environmental reviews, these trails are planned for construction within the next 1 to 3 years.
 - Memorial Overland Emigrant Trail Kidd Lake Connection
 - Memorial Overland Emigrant Trail Forest Service Ridge Segment,
 - Memorial Overland Emigrant Trail Roller Pass Segment (Sugar Bowl)
 - Memorial Overland Emigrant Trail Schallenberger Ridge Segment
- **4. Donner Lake Rim Trail:** The Donner Lake Rim Trail extension from I-80 to Donner Pass Road, Sugar Bowl, and the Memorial Overland Emigrant Trail will provide additional connectivity to the Donner Memorial State Park expanding trail system.
- 5. Five Creeks Trail: The proposed Five Creeks Trail would branch off the Donner Lake Rim Trail/ Memorial Overland Emigrant Trail and head south. This trail would be multi-use and located east and out of view of the Pacific Crest Trail.
- **6. Royal Gorge Rim Trail Improvements:** The Royal Gorge Rim Trail erosion bypass at Nose Dive improves safety and protects the environment (reducing further erosion in that area).

69

- 7. Donner Memorial State Park Trail Extensions: In January 2021, California State Parks published their Roads and Trails Master Plan for the Donner Memorial State Park. Extensions in this plan will add regional connectivity to the Summit on the north and south sides of the railroad tracks.
- 8. Palisades Creek Trail to Long Lake: The trail from the Cascade Lakes trailhead to Long Lake is braided, which can cause confusion. Adding wayfinding, eliminating user-generated trails, and restoring the trail centerline would help to keep users on designated trails and conserve the surrounding natural and cultural resources.
- 9. Summit Canyon Trail: The Forest Service is considering installing a new bridge on the existing abutments to upgrade this trail, reducing the appeal of user-generated trails, and protecting resources.
- 10. Systemized trail to Devil's Peak: Currently, there are multiple user-generated trails to Devil's Peak that cross private property. The property owners are firmly opposed to recreation users walking through their land. These trails should not be accessed (or promoted) until there is a trail to Devil's Peak that is acceptable to the property owners.
- 11. Trail Connection between Soda Springs and Serene Lakes: A trail connecting Soda Springs and Serene Lakes would provide a safe connection between the two neighborhoods. The trail could either be constructed along the roadway, similar to the Donner Pass Road upgrades, or it could be offset from the road, which would allow for additional safety features. Ideally it would be a paved Class I trail and bikeway where a new alignment would ease the climb to a more gradual grade, thus promoting safety.
- 12. Walkable Soda Springs for Pedestrian Safety: Nevada County has completed a rebuild of Donner Pass Road through Soda Springs to the Truckee town limits at the west end of Donner Lake. The improvements include addition of bike paths and shoulders in both directions. This will help to improve pedestrian and biker safety, but it is imperative that the new bike lanes along Donner Pass Road be marked with two white bike lane lines, bike lane designation symbols, and "no parking in bike lane" signs for increased safety. Additional pedestrian upgrades would be beneficial to the community. Creating a "walkable" Soda Springs for both summer and winter, while taking into account the need for significant snow removal during winter, would provide safer and more hospitable streets for both residents and visitors. A summer access trail along the South Yuba River would be an attractive interpretive hiking trail within Soda Springs itself, while creating an alternative to walking or biking along Donner Pass Road.
- **13. Trail Additions:** Other possible trail additions include Hole in the Ground loops, a modification to the Warren Lake Trail, a bike-friendly PCT alternative via Mt. Lola, and a systemized Basin Peak Trail.

ADDITIONAL SNOW PLAY AREAS

Designated snow play areas on Donner Summit are extremely limited, as evidenced by the multitude of sledders accessing snow-covered slopes along roadsides and on private property. Additional designated snow play areas are a high priority.

- ✓ Increase Safety and Security: Current snow play on private lands along roadways is dangerous on many levels. The sled and saucer routes are not safe, often going over rocks and ending in parking or on roads. There are no amenities such as benches or trail access, so there are risks of injury during access.
- ✓ **Improve Accessibility:** People cannot access safe, designated snow play areas now and thus are opportunistically sledding along roadways. If there were parking areas maintained for winter conditions, appropriate snow play trail access, and safe resting and restroom areas, families and individuals could more safely participate in this recreational activity.
- ✓ Add Economic Vitality: There is clearly a high demand for snow play as the existing ski areas are crowded and opportunistic snow play sites sprout up along roadways throughout the area each year. Adding a designated snow play area would better accommodate existing recreationists, and thus bring a more enjoyable experience, more patronage for local businesses, and more repeat visits.
- ✓ Promote Environmental Stewardship: Under current conditions, areas throughout the Summit are trampled and littered because of the high demand and lack of focus for designated snow play areas. Providing additional sites will provide better focus and improve environmental protection.
- ✓ Align with Stakeholder Interests: Almost 80 percent of stakeholders identified additional snow play areas as an important recreation initiative, making snow play the third most important facility improvement in the region.

Snow play additions are, therefore, a priority project type because they meet all five screening criteria. However, the assessments in Sections 4, 5, and 6 of this report resulted in a lack of consensus on potential snow play locations, with the exception of the Castle Peak trailhead, as described below.

Snow play is difficult to manage due to the ad hoc nature of its practice and the maintenance required (plowing, rest room services, and trash collection). Many of the local ski areas have, or are planning, paid snow play facilities. If the upgrades at the Castle Peak trailhead are implemented and the parking and restroom facilities are maintained year-round, this location could provide an ideal snow play area with easy access from I-80. However, until additional snow play areas are designated and developed, paid use at the ski areas must suffice along with enforcement for users that are on private property, illegally parked, or playing near the freeway. Placer and Nevada Counties should continue to monitor and identify solutions for tubing and sledding congestion issues and the lack of sufficient and safe parking.

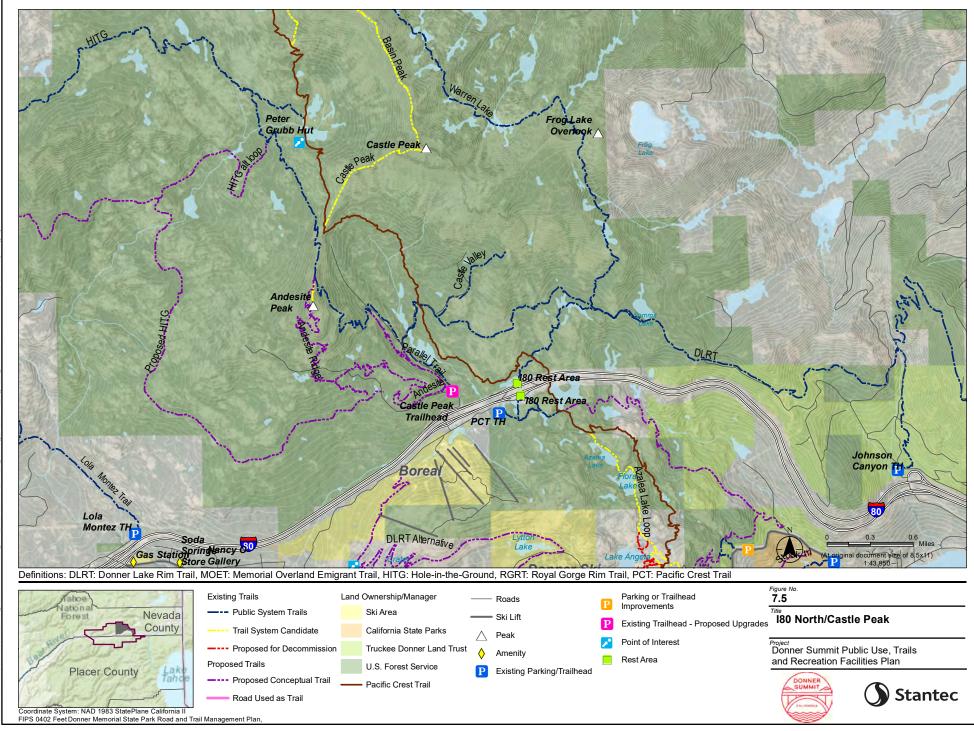
ADDITIONAL DESIGNATED CAMPGROUND PROJECTS

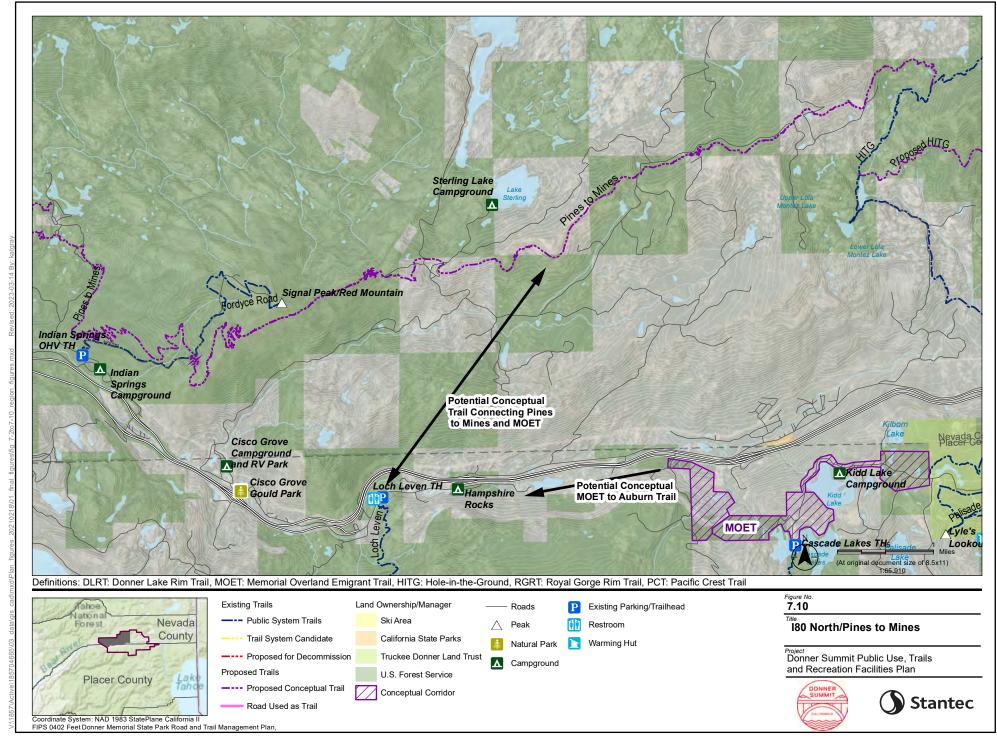
Camping opportunities are limited on Donner Summit, resulting in opportunistic dispersed illegal camping in areas such as the sensitive Van Norden Meadow. Augmenting designated camping areas where campers naturally gravitate will provide opportunities to contain camping activities, protect habitats, augment accessibility, and reduce fire risks.

- ✓ Increase Safety and Security: Opportunistic camping in dispersed unsanctioned sites is a fire and safety risk for public and private land owners. Providing designated fire rings, specific camping locations, and associated amenities will reduce such risks.
- ✓ **Improve Accessibility:** Increasing camping opportunities on the Summit will help keep up with demand and provide for increased overnight user opportunities.
- ✓ Add Economic Vitality: Longer stays and repeat camping visits in the region will result in increased revenue for local business.
- ✓ Promote Environmental Stewardship: Designated camping areas will help keep unsanctioned users from camping in sensitive habitats, such as Van Norden Meadow.
- ✓ Align with Stakeholder Interests: Ranked as the fourth highest stakeholder priority, over 60 percent of stakeholders indicated that additional camping areas are an important priority for the Summit area.

Camping area additions are a priority project type because they meet all five screening criteria. The assessments in Sections 4, 5, and 6 of this report yield the following specific campground location proposals. These priority campground projects were selected due to their central location or the high user demand in the area.

- Black Wall: The Truckee Donner Land Trust is considering the development of a campground
 in the vicinity of the Black Wall climbing area. The plan is in the preliminary stages and a
 specific location still has not been determined. However, the development of a campground
 would provide camping opportunities along Donner Pass Road, where many visitors currently
 camp illegally.
- 2. Van Norden Meadow: Van Norden Meadow also has great camping potential. There are dispersed campsites along Old Donner Summit Road from Van Norden Dam to the Sheep Pens trailhead, with many campsites possible at the Sheep Pens. Having a designated camping area in the region or clearer signs for appropriate camping locations would reduce waste issues and would help to protect the meadow environment by allowing camping only in specific locations.





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8.0 DESIGN GUIDELINES

8.1 VAULT TOILETS

CXT, Inc., precast concrete buildings with vault toilets (or an approved equal) is the preferred restroom facility for Forest Service recreation sites. The prefabricated restrooms comply with ADA requirements and are single vault or double vault, depending on the number of users. The restroom building materials, colors, and finishes should be selected to match the context of the recreation site.

The Summit receives a considerable amount of snow during winter months, and restroom facilities should be designed to withstand such weather conditions. It is recommended that restroom utility manholes be raised to prevent flooding or other water intrusion, and the top of the vault restroom floor should be least 6 inches higher than surrounding grade to prevent flooding (Forest Service 1995). Additionally, restrooms should be regularly cleaned and the vault regularly pumped to maintain restroom safety and cleanliness. Refer to section 9.1 for additional information.

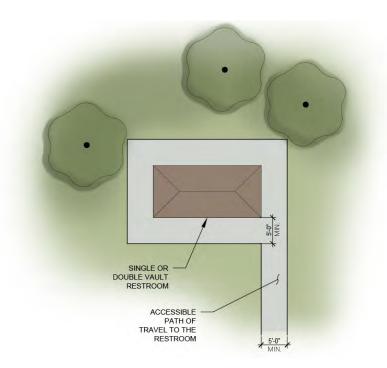


FIGURE 8.1: VAULT TOILET DESIGN DIAGRAM

PORTABLE RESTROOM

Portable restrooms may be located at select trailheads and trail junctions. The restroom manufacturer should be selected by the land management agency. The restroom should include grab bars, anti-slip surfacing, and adequate wheelchair turning space. The toilet capacity should be 68 gallon minimum, and larger toilets or additional restrooms may be added if necessary. Restrooms should be properly cleaned and maintained. Refer to section 9.1 for additional information.

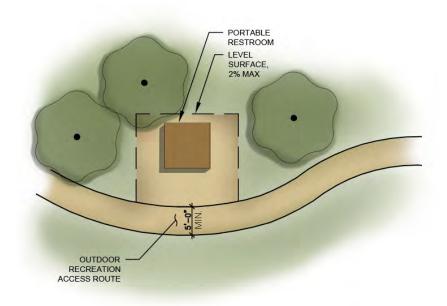


FIGURE 8.2. PORTABLE RESTROOM DESIGN DIAGRAM

8.2 TRAIL CONNECTIVITY AND VARIETY

SUMMARY

The Summit has an extensive network of recreational trails, including Class 2, 3, and 4 trails, as classified by the Forest Service's Trail Fundamentals and Trail Management Objectives. These systemized and non-systemized trails can be seen in Figures 7.1 through 7.10. This Plan aims to develop a more connected trail system that accommodates varied activities, deactivates unmaintained user-defined trails, and provides a variety of trails for different ability levels.

The proposed trail system would include new trails to accommodate a range of trail difficulty levels. The proposed trails will include Class 2, Class 3, and Class 4 multi-use trails, with the intention of connecting to trails of similar classification. Non-developed user defined trails should be decommissioned to ensure only safely managed trails are in use.

Both systemized and non-systemized proposed trails should be developed according to Forest Service Trail Class Requirements, as shown in Tables 8-1A and 8-1B.

Proposed trails should not only accommodate a greater variety of difficulty levels, but should be expanded to accommodate various recreation uses, including but not limited to hiking, mountain biking, and equestrian uses (see Figures 8.3 through 8.7). The proposed trails will include more loop and branch trails, wider widths to accommodate multiple recreation users side-by-side, and options for trails of varying difficulty.

Types of Trails (See Appendix A: Forest Service Trail Classification):

Trail Class 2: Moderately Developed

Trail Class 3: Developed

Trail Class 4: Highly Developed

TABLE 8-1A: TRAIL CLASS REQUIREMENTS, This table was developed based on Forest Service Trail Design Parameters: FSH 2309.18, Section 23.11, Exhibit 01; FSH 2309.18, Section 23.12, Exhibit 01; FSH 2309.18, Section 23.13, Exhibit 01; FSH 2309.18, Section 23.31, Exhibit 01

FOREST SERVICE TRAIL CLASS REQUIREMENTS					
TRAIL DESCRIPTION	TRAIL CLASS 2: HIKING AND PEDESTRIAN	TRAIL CLASS 2: BIKING	TRAIL CLASS 2: EQUESTRIAN		
Tread Width	6-12 inches	single lane: 12–24 inches double lane: 36–48 inches	12–18 inches May be up to 48 inches along steep side slopes, 48–60 inches or greater along precipices		
Surface Type	 Native ungraded May be continuously rough 	 Native, with limited grading May be continuously rough Sections of soft or unstable tread on grades 5% may be common 	 Native, with limited grading May be frequently rough 		
Protrusions	≤ 6 in, may be common and continuous	≤ 6 in, may be common and continuous	≤ 6 in, may be common and continuous		
Obstacle (Max height)	14 inches	12 inches	12 inches		
Target Grade	5-8%	5-12%	5-20%		
Target Cross Slope	5-20%	5-8%	5-10%		
Maximum Cross Slope	25%	10%	10%		
Design Clearance (height)	6-7 feet	6-8 feet	8-10 feet		
Design Clearance (width)	24–48 inches, some light vegetation may encroach into clearing area	36–48 inches, some light vegetation may encroach into clearing area	72 inches, some light vegetation may encroach into clearing area		
Shoulder Clearance	6-12 inches	6-12 inches	6-12 inches, pack clearance: 36 by 36 in		
Design Turn Radius	2-3 feet	3-6 feet	4-5 feet		

^{*} A tread obstacle is anything that interrupts the evenness of the tread surface

TABLE 8-1B: TRAIL CLASS REQUIREMENTS, This table was developed based on Forest Service Trail Design Parameters: FSH 2309.18, Section 23.11, Exhibit 01; FSH 2309.18, Section 23.12, Exhibit 01; FSH 2309.18, Section 23.13, Exhibit 01; FSH 2309.18, Section 23.31, Exhibit 01

FOREST SERVICE TRAIL CLASS REQUIREMENTS				
TRAIL DESCRIPTION	TRAIL CLASS 3: PEDESTRIAN	TRAIL CLASS 4: MULTI-USE		
Tread Width	12–24 inches Exception: may be 36–48 inches at steep side-slopes	Single lane: 18-36 inches Double lane: 26-60 inches Non-wilderness double lane: 48-72 inches		
Surface Type	 Native, with some on site borrow or imported material where needed for stabilization and occasional grading Intermittently rough 	 Native with improved sections of borrow or imported material, and routine grading Minor roughness 		
Protrusions	≤ 3 inches May be common, not continuous	≤ 3 inches Uncommon, not continuous		
Obstacle (Max height)	10 inches	8 inches		
Target Grade	3-12%	2-10%		
Target Cross Slope	5-10%	3-7%		
Maximum Cross Slope	15%	10%		
Design Clearance (height)	7-8 feet	8-10 feet		
Design Clearance (width)	36-60 inches	48-72 inches		
Shoulder Clearance	12-18 inches	12-18 inches		
Design Turn Radius	3-6 feet	4-8 feet		

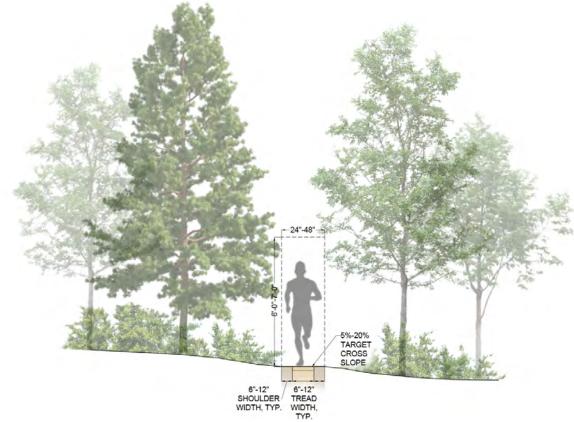


FIGURE 8.3: CLASS 2 PEDESTRIAN TRAIL ELEVATION

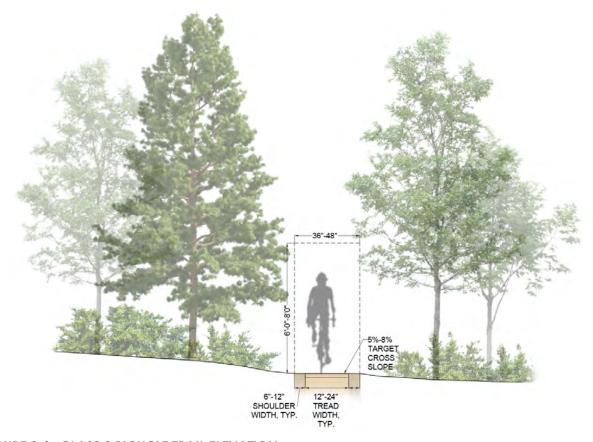


FIGURE 8.4: CLASS 2 BICYCLE TRAIL ELEVATION



FIGURE 8.5: CLASS 2 EQUESTRIAN TRAIL ELEVATION

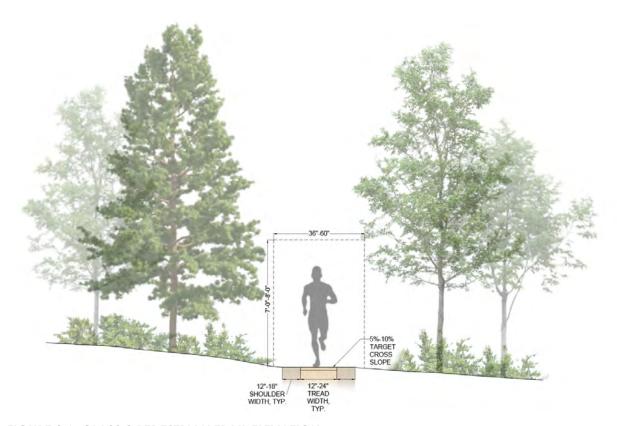


FIGURE 8.6: CLASS 3 PEDESTRIAN TRAIL ELEVATION

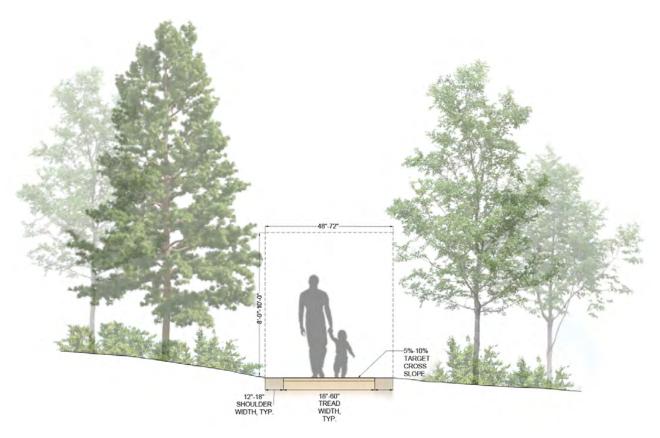


FIGURE 8.7 CLASS 4 MULTI-USE TRAIL ELEVATION

ACCESSIBILITY

The proposed trail system and recreation areas as shown in this Plan should be available and accessible to a range of user groups. The proposed updates must include Class 4 Multi-Use Accessible trails at select trailheads. Any significant feature or environmental experience should comply with local and federal accessibility requirements to ensure universal access to all users, including those with physical and cognitive impairments.

Below are the US Access Board definitions for recreation elements (U.S. Access Board 2014):

- *Trail* A route that is designed, designated, or constructed for recreational pedestrian use or provided as a pedestrian alternative to vehicular routes within a transportation system.
- Accessible trails Newly constructed and altered trails that meet all the provisions of section 16.2 of United States Access Board (USAB) Guidelines for Outdoor Developed Areas.
- Outdoor Recreation Access Routes (ORARs) A continuous unobstructed path designated for pedestrian use that connects accessible elements within a picnic area, camping area, or designated trailhead.

Tables 8-2A and 8-2B include design guidelines for Trails and Outdoor Recreation Access Routes as adapted from the US Access Board Standards. A trail should be labeled accessible only if it meets agency policies and guidelines.

TABLE 8-2A: US ACCESS BOARD TRAIL AND ORAR ACCESSIBILITY STANDARDS

This table was developed from the 'United States Access Board standards for Recreation Facilities and Outdoor Developed Areas,' including 'Trails and Outdoor Recreation Access Routes (ORARs)' (U.S. Access Board 2014)

US ACCESS BOARD TRAIL AND ORAR ACCESSIBILITY STANDARDS				
ACCESSIBILITY STANDARD	TRAIL	OUTDOOR RECREATION ACCESS ROUTES		
Purpose	 Designed for the "recreation experience" Generally includes a trailhead Limited to no transportation function 	 Connects outdoor constructed features and spaces within picnic and camping facilities, viewing areas, and trailheads only 		
Surface	Surface shall be firm and stable*	Surface shall be firm and stable		
Clear Width	36 inches minimum clear width	36 inches minimum clear width		
Passing Spaces	 Where the tread width is less than 60 inches, passing spaces must be provided at intervals of at least 1,000 feet Passing space shall be 60 by 60 inches minimum, or The intersection of two ORARs that provide a T-shaped space that complies with section 304.3.2 of the Architectural Barriers Act (ABA) Standards, where the base and the arms of the T-shaped space extend a minimum of 48 inches beyond the intersection 	 Passing space shall be 60 by 60 inches minimum or the intersection of two ORARs that provide a T-shaped space that complies with section 304.3.2 of the ABA Standards, where the base and the arms of the T-shaped space extend a minimum of 48 inches beyond the intersection When the clear width of the passing space is less than 60 inches, passing spaces must be provided at intervals of at least 200 feet 		
Obstacles	 When the trail surface is constructed of concrete, asphalt, or boards, tread obstacles cannot exceed one-half inch in height at their highest point When the trail surface is constructed of materials other than concrete, asphalt, or boards, tread obstacles are permitted to be a maximum of 2 inches high 	 When the surface is constructed of concrete, asphalt, or boards, obstacles cannot exceed one-half inch in height at their highest point. When the surface is constructed of materials other than concrete, asphalt, or boards, obstacles cannot exceed 1 inch in height at their highest point 		
Openings	Openings in the surfaces of trails, passing spaces, and resting intervals must be smaller than one-half inch	Openings in surface shall be smaller than one-half inch		

^{*} See US Access Board [1017.2] for list of acceptable stable materials

TABLE 8-2B: US ACCESS BOARD TRAIL AND ORAR ACCESSIBILITY STANDARDS

This table was developed from the 'United States Access Board standards for Recreation Facilities and Outdoor Developed Areas,' including 'Trails and Outdoor Recreation Access Routes (ORARs)' (U.S. Access Board 2014)

US ACCESS BOARD TRAIL AND ORAR ACCESSIBILITY STANDARDS				
ACCESSIBILITY STANDARD	TRAIL	OUTDOOR RECREATION ACCESS ROUTES		
Running Slope	 Trails or trail segments of any length may be constructed with running slopes up to 5% Maximum segment length: 200 feet: 5-8.33% 30 feet: 8.33-10% 10 feet: 10-12% No more than 30% of the total length of the trail may have a running slope exceeding 8.33% 	Maximum running Slope shall be 5-10%		
Cross Slope	 2% maximum cross slope for a trail surface of concrete, asphalt, or boards 5% maximum cross slope for a trail surface other than concrete 	 2% maximum cross slope for a trail surface of concrete, asphalt, or boards 5% maximum cross slope for a trail surface other than concrete 		
Resting Intervals	 Resting intervals are required between trail segments any time the running slope exceeds 5% When the resting interval is adjacent to the trail, it must be at least 60 inches long and 36 inches wide A turning space that complies with section 304.2.3 of the Architectural Barriers Act (ABA) Standards must be provided 	 Resting intervals are required at the top and bottom of an ORAR section any time the running slope exceeds 60 inches long and 36 inches wide 2% maximum slope at concrete, asphalt, or boards 5% maximum slope for materials other than concrete, asphalt, or board 		
Protruding Objects	Constructed elements on trails, resting intervals, and passing spaces must comply with the technical requirements for protruding objects in section 307 of the ABA Standards	To prevent injuries to people who are blind or have low vision, whenever possible, maintain the vertical clearance free of tree branches a minimum of 80 inches above the ground surface along ORARs, resting intervals, and passing spaces.		

^{*} Technical requirements for protruding objects do not apply to natural features, such as tree branches and rock formations

8.3 TRAIL DESIGN

The following was adapted from "Additional Trail Elements," Forest Service Trail Construction and Maintenance Notebook:

GAINING GRADE

The proposed trails should be well designed and the selected grade gaining technique should be well thought out prior to implementation. Primary means for gaining elevation on a trail are climbing turns and switchbacks. According to the Forest Service's Trail Construction and Maintenance Handbook (Forest Service 2008), a climbing turn is defined as "a reversal in direction that maintains the existing grade going through the turn without a constructed landing," while a switchback, is a "reversal in direction, but [...] has a relatively level constructed landing" (Forest Service 2007).

CLIMBING TURN

Climbing turns are intended to be used on gentle slopes of less than 15 percent and work best when the trail climbs at the same rate as the slope. Climbing turns generally have a wide radius, of approximately 13 to 20 feet, and should have side slopes of approximately 7 percent. They are generally easier to construct than switchbacks because they require less excavation and fill. It is recommended that climbing turns weave around natural features to prevent shortcutting. Approaches to the turn should be designed with grade reversals in order to prevent water from pooling at the turn. For information on insloping, outsloping, and grade reversals, refer to Section 8.5, Erosion Control (Forest Service 2007).

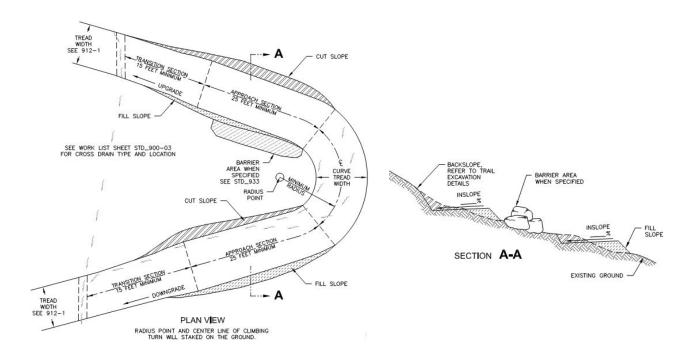


FIGURE 8.8: FOREST SERVICE STANDARD CLIMBING TURN DESIGN.

Source: www.fs.fed.us/t-d/pubs/htmlpubs/htm07232806/page12.htm

94

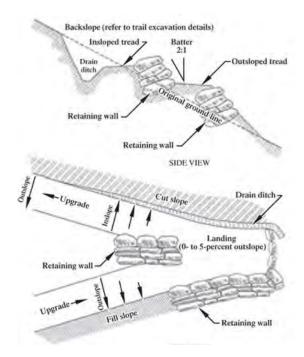


FIGURE 8.9: SWITCHBACK WITH RETAINING WALL AND Y-SHAPED PLATFORM, Source: www. fs.fed.us/t-d/pubs/htmlpubs/htm07232806/page12.htm

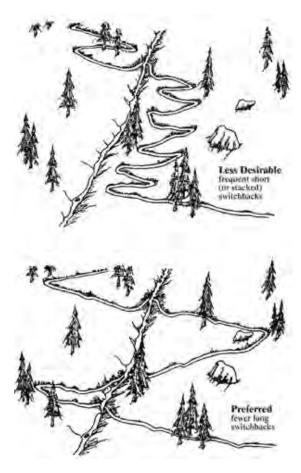


FIGURE 8.10: SWITCHBACKS
Source: www.fs.fed.us/t-d/pubs/htmlpubs/
htm07232806/page12.htm

SWITCHBACKS

Switchbacks are typically located on terrain with side slopes between 15 and 45 percent. Adequate excavation is necessary to create suitable landing platforms, and it is recommended that natural platforms be used to reduce the need for grading. According to the Forest Service's Trail Construction and Maintenance Handbook, "approaches should be designed for the primary user group [...] and the last 65 feet to the turn should be as steep as the desired level of difficulty will allow. This grade should be smoothly eased to that of the turn in the last 6.5 to 10 feet.

The upper approach of the switchback should be excavated from the slope, while the lower approach should be constructed of fill. Switchback turns can either be a Y-shaped platform or a smooth radius of 5 to 10 feet. If using the Y-shape, the platform should not exceed a 5 percent slope. It is recommended that the length of the trail between turns be maximally extended, to discourage users from cutting switchbacks (Forest Service 2007).

ROADWAY CROSSINGS

In locations where the existing and proposed trails intersect a roadway, designated intersections should provide a safe crossing for pedestrians and recreation users. Proper signage and pavement markings should be used to avoid any pedestrian and motorist conflicts. For specific guidelines on sign type, sign location, and pavement marking standards refer to the California Manual on Uniform Traffic Control Devices (MUTCD) Guidelines Chapter C2C, 9B, and 9C, and California Department of Transportation (Manual on Uniform Traffic Control Devices for Streets and Highways).

RAILROAD CROSSINGS

In locations where the existing and proposed trails intersect a railroad, designated intersections should be developed to provide a safe crossing for pedestrians and recreation users. A site-specific engineering study should be performed to develop an appropriate traffic control system. The system may include a Flashing-Light Signal, Roadway Gate, and Pedestrian Gate. The traffic control signs, marking, systems, and practices should comply with MUTCD Traffic Control for Railroad and Light Rail Transit Grade Crossings (U.S. Department of Transportation 2009).

8.4 STREAM CROSSINGS

The following was adapted from the Forest Service Trail Construction and Maintenance

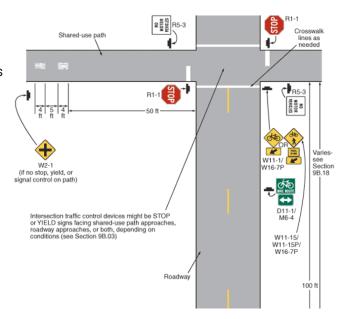


FIGURE 8.11: MUTCD EXAMPLES OF SIGNS AND MARKERS AT ROAD CROSSING

Source: U.S. Department of Transportation 2009

Notebook (Forest Service 2007): In locations where the proposed trails cross streams, the design must provide a safe way for users to traverse the stream with either a bridge or ford. Caution should be taken to reduce the number of stream crossings to minimize impacts to the natural flow of the waterway and its environment.

BRIDGES

Bridges are built structures that are used to cross a stream or river. Bridges can range in level of development from a simple log foot bridge, consisting of a logs, sills and bulkheads, to more developed bridges, including multi-span, suspended, or truss-structures.

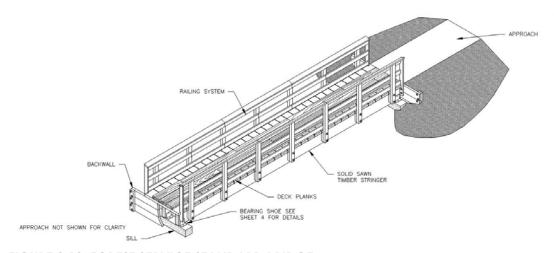


FIGURE 8.12: FOREST SERVICE STANDARD BRIDGE

Source: Forest Service 2008

A log footbridge is the simplest bridge option. According to the Forest Service guidelines, log foot bridges should:

- Be level and well anchored
- Include drainage and airspace to prevent rotting
- Be made of logs with a minimum diameter of 18 inches, with a minimum top surface of 10 inches.

Highly developed bridges may be needed where a trail intersects a large river or stream. For more information, including detailed explanation of bridge design standards, material selection, handrail placement, and engineering requirements, refer to "Crossing Streams and Rivers" in the Forest Service's Trail Construction and Maintenance Notebook. Bridge installations on Donner Summit should be properly permitted. They must be designed to withstand heavy snow load and would be located outside of existing ski area operations to avoid interference with grooming activities.

FORDS

Fords are designed to get trail users from one side of a river to the other, by providing a stable footing that can be accessed during high and low flow.

Fords require minimal maintenance and should not be challenging for the average user. The depth of a ford will vary based on the intended use; they typically range from 16 to 39 inches. Fords constructed on Donner Summit should be properly permitted and strategically placed with the approach above high water lines and away from turns, to prevent water from flowing over or around the edge of the tread (Forest Service 2007).

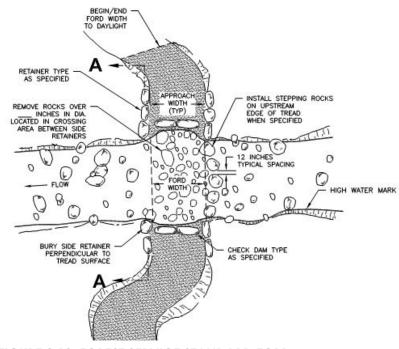


FIGURE 8.13: FOREST SERVICE STANDARD FORD

Fords should be constructed according to Source: Forest Service 2007

Forest Service standards. A solid footing should be provided with rocks or medium-sized gravel; and rows of rocks can be placed above the tread to slow flow and reduce erosion (Forest Service 2007). It is important to avoid disruption of the stream and to minimize impacts on the aquatic ecosystem.

BOARDWALKS

A boardwalk is an elevated walkway that creates a continuous, sometimes accessible, path of travel through a meadow, wetland, or other-natural feature. This Plan includes a potential boardwalk at Van Norden Meadow, should site conditions and funding permit and align with the Forest Service meadow restoration. The boardwalk would offer a unique opportunity for visitors to connect with the environment. The boardwalk must be designed to allow for cross country ski trail grooming by Royal Gorge.

Boardwalks vary greatly in size but will essentially consist of parallel stringers that rest on piers. The stringers are topped with a deck built from lumber laid perpendicular to the centerline of the walk (Forest Service 2007). Beam, pier, and lumber size should be determined by an engineer for structural stability and longevity. Boardwalks should be constructed in accordance with federal accessibility standards when possible.

8.5 DRAINAGE AND EROSION CONTROL

The following was adapted from "Surface Water Control," in the Forest Service Trail Construction and Maintenance Notebook. Newly constructed trails should be properly graded to divert surface water. Poorly drained trails can lead to soft tread that will eventually fail. For new trails, sheet flow and grade reversals should be incorporated into the design to prevent pooling water and erosion. Existing trails can be retrofitted with knicks, rolling grade dips, and waterbars to improve drainage (Forest Service 2007).

SHEET FLOW AND GRADE REVERSALS

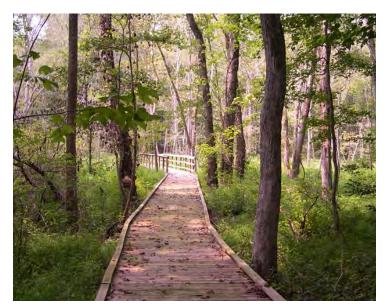


FIGURE 8.14: FOREST SERVICE STANDARD BOARDWALK Source: Francis Marion and Sumter National Forests (usda.gov)

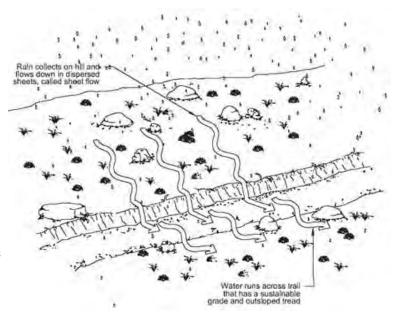


FIGURE 8.15: SHEET FLOW DIAGRAM Source: Forest Service 2007

Sheet flow is defined as water that continues to flow down a hill after infiltration. It is important that a trail include sustainable grades, grade reversals, and outsloping to allow water to flow across the trail without causing damage.

Grade reversals are outsloped treads that guide water across the trail by using natural dips in the terrain. It is recommended that the grade reversal extend for 6.5 feet to 10 feet and be located consistently every 19.5 feet to 49 feet ("Surface Water Control").

KNICKS, ROLLING DIPS, AND WATERBARS

A knick can be constructed to improve drainage at locations where puddling occurs on a trail. A knick is a semicircle that is shaved into a trail, outsloped at approximately 15 percent, and spanning about 10 feet. It allows water to drain into the adjacent lower grade (Forest Service 2007).

A rolling grade dip can be used to divert water off steeper sections

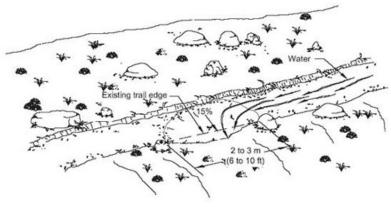


FIGURE 8.16: KNICK DIAGRAM

Source: Forest Service 2007

of existing trails. A rolling grade dip consists of an outsloped ramp, approximately 14.75 feet long, that leads to a knick located mid-slope. The frequency of rolling grade dips will depend on the slope of the trail, but it is recommended that they be placed regularly enough to prevent erosion (Forest Service 2007).

Waterbars are constructed drainage structures that are strategically located to help direct water off a trail. They are created with a log or rocks and are anchored flush with the downgrade side of the trail. A log or rocks should be placed at a 45- to 60-degree angle to the outsloped trail, and should

extend 12 inches minimum beyond the edge of the trail (Forest Service 2007). Waterbars commonly fail due to sediment buildup, especially on slopes steeper than 20 percent, so knicks and rolling dips are the recommended treatment for trail erosion. Refer to the Forest Service's Trail Construction and Maintenance Notebook for more information on waterbar design and construction.

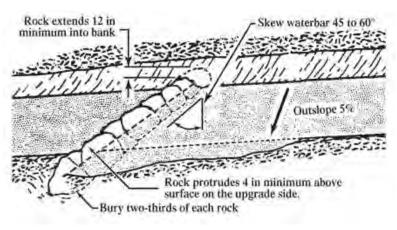


FIGURE 8.17: WATERBAR DIAGRAM Source: Forest Service 2007

8.6 WAYFINDING AND SIGNAGE

Proper wayfinding is necessary to orient users and to ensure that only managed trails and new recreation features are employed. Wayfinding should be consistent throughout the trail or recreation area, creating visual continuity, and should be highly visible to ensure users can safely navigate the trails. The following was developed based on the Sign and Poster Guidelines for the Forest Service.

TRAFFIC CONTROL DEVICES

Traffic control devices are placed along roadways, bikeways, or trails to warn users of upcoming recreation features. These signs help promote safety and predictability for drivers, bikers, equestrians, and pedestrians. The primary traffic control devices for this plan include Guide Signs and Recreation and Cultural Interest Area Signs.

Guide Signs inform drivers and other users of the various recreation features within the area. These signs should match Forest Service standards or be an approved equal. Recreation and Cultural Interest Area Signs are used to inform visitors of recreation features used for relaxation, engagement, or entertainment. These signs should only be used when the area is specifically managed for one of these uses. Refer to Sign and Poster Guidelines for the Forest Service when designing signs for various recreation uses, as well as for recommendations about sign size and placement (Forest Service 2013).

TRAIL SIGNAGE

Trail signage should be installed at new and existing trails that lack proper wayfinding. The purpose of trail signage is to identify routes and junctions, mark distances, and inform users of any known hazards. The specific requirements for various trail sign types differ, but the sign material, color and finish, sign supports, and signage placement should comply with current Forest Service standards. On non-Forest Service land, signage should match local aesthetics, which include rustic metal signs.

NON-WILDERNESS TRAIL SIGNAGE

- Route identification is required for any trail leg of the Forest Service.
- Route identification should include the trail name and/or its trail designation number.
- Distance to trailhead access points or exit points should be included.
- Additional information could include location or distance to adjacent facilities, geographic features, or administrative structures.
- Destination mileage should be rounded to the nearest guarter-mile or half-mile for distances less than 3 miles. or to the nearest mile for those over 3 miles.





FIGURE 8.18: NON-FOREST SERVICE DIRECTIONAL SIGN FOR TRAILHEADS AND JUNCTIONS Source: DSA

Trail Signage should be mounted at a minimum height of 5 feet, and should have a 3-foot clearance from the edge of the trail.

JUNCTION IDENTITY SIGN REQUIREMENTS

- Junction identity signs should be used at trail system junctions, labeled with "JCT" and any associated junction number or letter.
- A location map should be provided at the trailhead, showing the lettered or numbered junction locations.



FIGURE 8.19: FOREST SERVICE **DIRECTIONAL SIGN** Source: Forest Service 2013

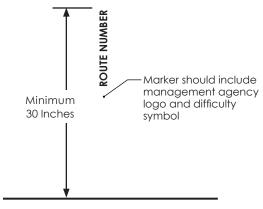


FIGURE 8.21: ROUTE MARKER ALONG TRAIL Source: Adapted from Forest Service Standard Blazer

TRAIL REASSURANCE MARKERS

- Reassurance markers are used to confirm the route and location of a designated trail.
- Markers include the route number or letter, specific logos, and blazer.
- Trails that are not well defined may need many blazers that can be visible under a variety of conditions.
- Difficulty markers are optional and should be properly placed and identified based on national standards.

RECREATION AND CAMPING SIGNAGE **RECREATION SITES**

- Site identification signs and recreational and cultural interest area symbols should be used to designate sites developed and maintained for specific recreation uses.
- All identification signs should match current recreation site maps, and can be located along and perpendicular to recreation site access roads.
- For campgrounds, all units should be consistently marked, and should be retroreflective for enhanced nighttime visibility.
- Waste disposal should be clearly marked with Sanitary Dumping Station signs.





FIGURE 8.21: EXAMPLE FOREST SERVICE **DESTINATION RECREATION SIGNS** Source: Forest Service 2013

Warning signs for natural hazards, such as wildlife, landslides, or flooding should be consistent throughout a recreation area, and should comply with any local requirements

CAMPING

- Camping entrances should be well designated with the current name of the recreation site and a site map.
- Individual camping units should be consistently marked with camping unit identification markers, and should be retroreflective for enhanced nighttime FIGURE 8.22: EXAMPLE FOREST SERVICE visibility.
- Camping host units should be well designated.

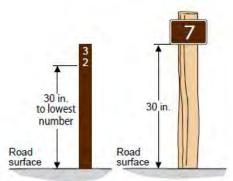
*Refer to Sign and Poster Guidelines for the Forest Service for sign design and placement standards

ADVENTURE BADGES

- Adventure Badges may be developed for existing and proposed recreation facilities.
- These badges can be placed at key recreational destinations or cultural interest locations.
- The intent is to establish a modern, cohesive wayfinding network throughout the Donner Summit region.

INTERPRETIVE SIGNAGE

- Interpretive signage should be used to engage visitors at recreation sites by providing valuable knowledge about the local history or ecology.
- The information should be accurate, detailed, and regionally contextual.
- The intended audience should be considered when selecting the appropriate sign.
- Durable sign materials should be carefully selected to withstand the region's extreme weather conditions.
- Size, height, and placement of signage will VARY based on specific site conditions.
- Signage should be placed in an accessible and highly visible location.



CAMPING UNIT MARKER

Source: Forest Service 2013







FIGURE 8.23: CONCEPTUAL **ADVENTURE BADGES** Source: Donner

Summit Graphic Standards

FIGURE 8.24: INTERPRETIVE SIGN EXAMPLE Source: Stantec



FIGURE 8.25: INTERPRETIVE SIGN AND KIOSK **EXAMPLE** Source: DSA

OTHER SIGNAGE

Wayfinding signage selection and placement should be consistent throughout existing and proposed sites to create a cohesive signage network. A comprehensive inventory and analysis of existing wayfinding signage needs to be conducted to assess specific needs for trailhead, trail, motorist, and recreational signage.

8.7 OUTDOOR GATHERING AREA

An outdoor gathering area is a place for visitors to gather, relax, picnic, and enjoy the outdoors. Gathering areas may include picnic tables, shade shelters, outdoor learning spaces, interpretive panels, restrooms, vegetation, and accessible pathways. Despite the variety of site elements, it is important that the space feel cohesive and connected. The materials, colors, and finishes should be continuous throughout the site and should be carefully selected to withstand the area's cold, snowy winters and hot summer weather.

The site elements should be accessible to users of all abilities and ages. The outdoor gathering space is intended to connect users to the surrounding natural environment and provide opportunities for visitors to learn about the history, wildlife, ecology, and culture of the Donner Summit region.

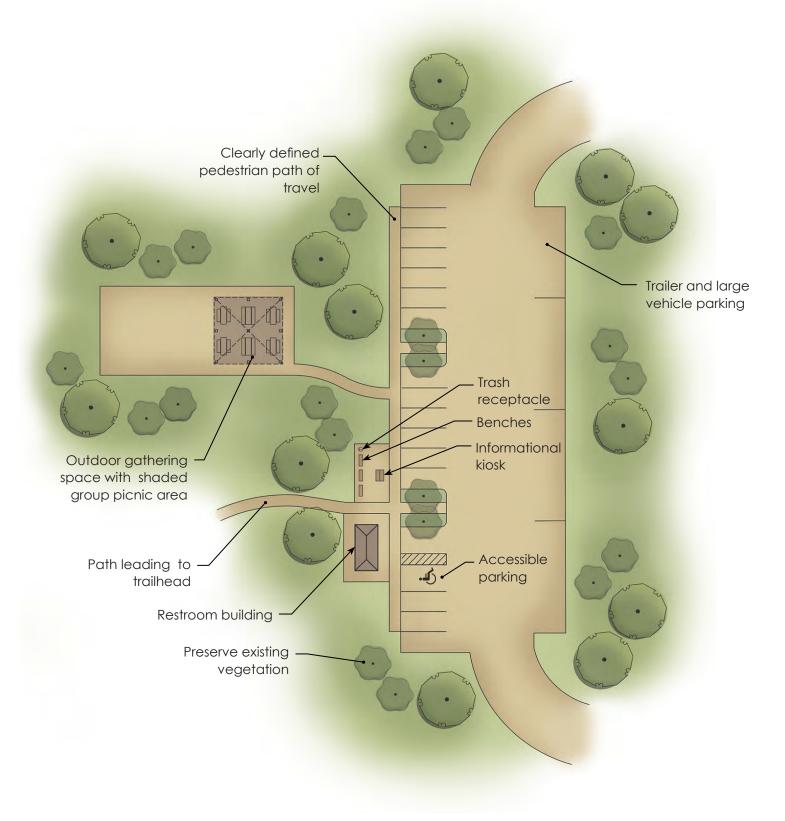


FIGURE 8.26: OUTDOOR GATHERING AREA GENERIC DESIGN

8.8 CAMPING

The following was adapted from Bureau of Land Management (BLM) Guidelines for a Quality Built **Environment:**

Campgrounds can range in development from primitive, consisting of simply a level area for a tent, to highly developed, consisting of a campsite, fire pit, table, restrooms, and running water. The proper level of development should be carefully considered to meet the user needs, site constraints (including fire safety), and budgetary limitations.

SITE SELECTION

The following should be considered when selecting land for campground development:

- Existing slopes and grades of the site
- Ecological and cultural sensitivities
- Proximity to roads and recreation features
- Potential for utility connections
- Potential access to road connections

CAMPGROUND DESIGN

A moderately developed campground should include tent campsites, accessible campsites, group gathering spaces, restroom facilities, roads, and supporting infrastructure. Campsites should be placed on level ground to minimize the amount of necessary grading and disturbance to the surrounding environment. A buffer of approximately 100 feet should be left between individual campsites, and natural features, such as trees and boulders, should be preserved to provide natural screening (Bureau of Land Management 2010).

Cars and vehicles should be routed through the campground with looped, one-way roads that have a 12 foot minimum width. All roads, campsites, and campground amenities should have proper signage, and if the campground is located on Forest Service land it should comply with Sign and Poster Guidelines for the Forest Service and MUTCD standards. Individual campsites should be located along the loops and can include either pull-through or back-in parking spaces. The primary entrance to the campground should have a gate for seasonal or temporary closures, and a primary kiosk or permit station (Bureau of Land Management 2010).

Individual campsites should include a table, fire pit, level space for a tent, and parking space. Campsites should be approximately 30 by 30 feet in size, as well as relatively level, well drained, and free from any rocks or obstructions. If the campground is intended to accommodate recreational vehicle (RV) camping, the RV spots should be located on a separate loop and should be approximately 16 by 52 feet in size. If a fire pit is added to individual sites, it must be the type with a lid that can be locked in the summer season, if required for wildfire protections (Bureau of Land Management 2010).

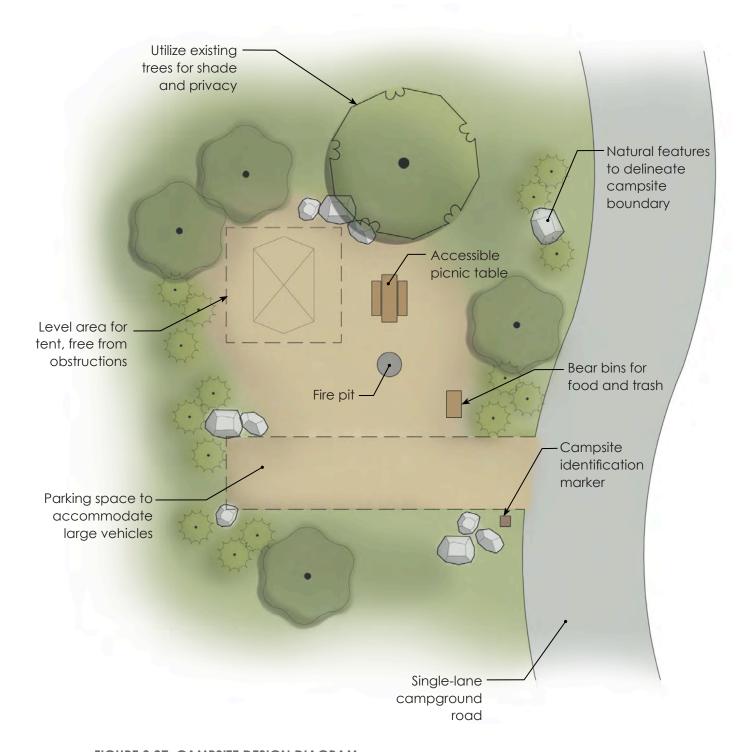


FIGURE 8.27: CAMPSITE DESIGN DIAGRAM

- 1. Materials selected for all site amenities should be selected to withstand the elements.
- 2. Due to current regulation, installation of fire pits may not be permitted. Fire Pits, if installed, should have a lid that can be locked to control use. Any future development should adhere to current fire district requirements.

The campground should have a distinct pedestrian path of travel to common areas. The common areas should include shared amenities, such as a restroom facility, trash receptacles, and available potable water or other utilities (*Bureau of Land Management 2010*).

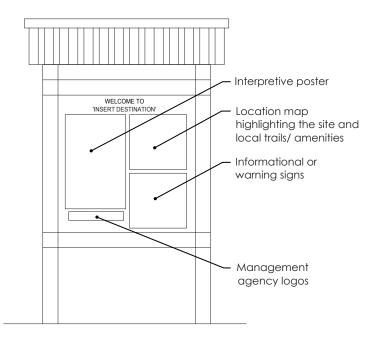
Every effort should be made to ensure that group facilities and designated campsites are accessible to visitors with physical and cognitive disabilities. Campground design should comply with Forest Service Trail and Accessibility Guidelines (FSTAG) and USAB Guidelines for Camping Facilities and Camp Shelters.

8.9 TRAILHEAD PARKING

The following was adapted from Bureau of Land Management *Guidelines for a Quality Built Environment*:

TRAILHEAD

Proposed trailheads should include adequate parking, pedestrian circulation, portable or permanent restroom facilities, trash disposal, and informational signage. A clearly defined pedestrian path of travel should lead from the parking lot to the trailhead. The location of the path should minimize interference with local vegetation. The shape and material of the pathway should minimize impacts on the natural environment (*Bureau of Land Management 2010*).



A kiosk should be located near the parking lot and trailhead to provide maps, warnings, general information, and interpretive panels. Trailheads may also include picnic tables, benches, or shade shelters to provide spaces for visitors to picnic or relax (Guidelines for a Quality Built Environment).

If the trail is located on Forest Service land, the kiosk and signs should comply with Forest Service standards. The capacity and maintenance levels of the trailhead should match the amount of trailhead use.

Notes:

- 1. Kiosk maps, signage information, image quality, and sign material specification should comply with local management agency requirements.
- 2. Text, colors, and graphic style should comply with local management agency requirements.
- 3. The kiosk should be placed in a visible and accessible location.

FIGURE 8.28: KIOSK SIGN LAYOUT

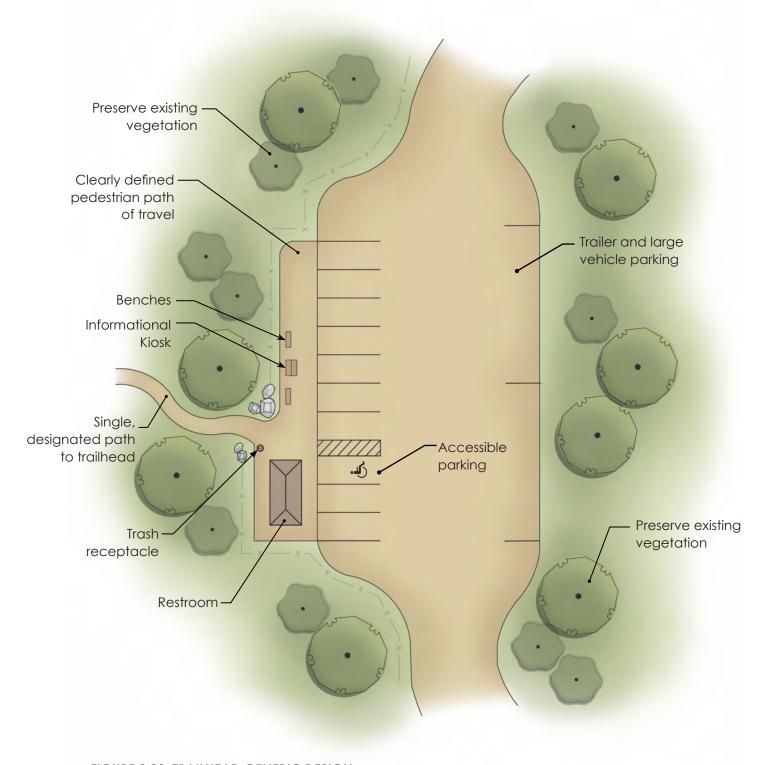


FIGURE 8.29: TRAILHEAD GENERIC DESIGN

PARKING

Below are some important considerations for parking lot design:

- The parking lot placement should minimize impacts on the local natural environment and avoid impacts to cultural resources. It also should be strategically placed to minimize necessary grading.
- Designated parking areas and loading zones should be clearly defined with proper striping, wayfinding, and signage.
- Equestrian trailers and large vehicles should be accommodated with large stalls and properly sized turn around areas.
- Separated pedestrian walks, striped crosswalks, and other pedestrian spaces should be clearly defined.
- Accessible parking spaces should be provided in compliance with local and federal code and should be located near an accessible pedestrian path of travel.
- Traffic calming measures should be implemented to slow vehicular speeds and protect pedestrians.
- Parking located at trailheads should include a clearly defined path from the parking lot to the trailhead.

8.10 WINTER RECREATION: SNOW PARK

Snow parks should include, but not be limited to, a parking lot, ticket and rental kiosk, restroom facility, and downhill slopes varying in difficulty levels. The size and capacity of the park and parking lot will be determined by the amount of use at each individual site.

The snow park should be located close to a major roadway to allow for snow removal from the access road and parking lot. The road and parking lot surfacing should be asphalt or concrete with proper reinforcement to sufficiently sustain heavy vehicle loads. The parking lot layout should provide adequate turning radii for snow removal equipment and should include space along the shoulders for snow storage. Parking should include large vehicle parking spaces and ample pedestrian loading and unloading zones (Oregon Department of Transportation 2014).

Potential development sites should be analyzed to ensure the location meets the physical and environmental needs for a snow park. This analysis should include an inventory of existing slopes, topography, hydrology, fish and wildlife, vegetation, soils, and geology. The design of the selected site should ensure minimal disturbance to the surrounding environment.

8.11 ACCESSIBILITY

The proposed developments outlined in this Plan should be accessible to users of varying abilities and should comply with current ADA Guidelines. It is the responsibility of the owner and designer to ensure that proposed trails and recreational features comply with current accessibility requirements. The following tables were adapted from USAB and Forest Service Accessibility Standards:

ACCESSIBLE PARKING SPACES		
Vehicle Space Width	96 inches minimum	
Access Isle Width	60 inches minimum	
Van Parking Space Width	132 inches minimum	
Parking and Isle Slope	Should not exceed 2%	
Identification	Must be marked by signs with the International Symbol of Accessibility	

TABLE 8-3: PARKING ACCESSIBILITY STANDARDS

GRILL	ACCESSIBILITY REQUIREMENTS	
Single Cooking Surface	Connected to an outdoor recreation access route (ORAR)	
Cooking Surface Height	15 inches minimum and 34 inches maximum above the ground or floor surface and 48 inches minimum in width.	
Clear Floor Space	All usable portions of the cooking surface should be provided with a clear floor or ground space which is 48 inches minimum in depth measured from the cooking surface, and 48 inches minimum in width.	
Slopes	Not to exceed 2% in any direction	
Surface	Stable and firm	

TABLE 8-4: ACCESSIBLE GRILL STANDARDS

FIRE PIT	ACCESSIBILITY REQUIREMENTS	
Single Fire Ring	Connected to an ORAR	
Clear Floor Space	All usable portions of the fire ring should be provided with a clear floor or ground space extending 48 inches minimum in depth from the fire ring, and 48 inches minimum wide.	
Fire Surface Height	9 inches minimum above ground	
Slopes	Not to exceed 2% in any direction.	
Surface	Stable and firm	

TABLE 8-5: ACCESSIBLE FIRE PIT STANDARDS

PICNIC AREA	ACCESSIBILITY REQUIREMENTS
Access Route	Connected to ORAR
Wheelchair Seating Space	Knee space at least 27 inches high, 30 inches wide, and 19 inches deep. Toe clearance 9 inches minimum in height and extending an additional 5 inches minimum from the knee clearance.
Table Clearance	36 inches minimum clear floor space
Surface	Stable and firm
Slope	Not to exceed 2%

TABLE 8-6: PICNIC AREA ACCESSIBILITY STANDARDS

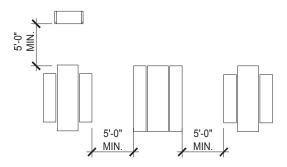


FIGURE 8.30: PICNIC TABLE SPACING **DIAGRAM**

CAMPGROUND	ACCESSIBILITY REQUIREMENTS
Number of Camping Spaces	Number of Accessible Camping Spaces
1	1
2 to 25	2
26 to 50	3
51 to 75	4
76 to 100	5
101 to 150	7
Surface	Stable and firm
Slope	Not to exceed 2%

TABLE 8-7: CAMPGROUND ACCESSIBILITY STANDARDS

9.0 OPERATION AND MAINTENANCE

It is the responsibility of the landowners and management organizations to maintain the trails, recreation features, and site amenities that fall within their operational boundaries. Once final locations of the priority projects are established, the owners should define maintenance roles and responsibilities among the various management organizations.

OPERATIONS AND MAINTENANCE OVERVIEW 9.1

The following is a list of annual maintenance activities to be considered for the proposed projects, all of which must be conducted in a fire-safe manner:

- A. Vegetation Removal: Trim branches, brush, and remove vegetative obstructions within the trail clear zone. Remove any fallen trees and hazardous trees or tree limbs.
- B. Signage: Signs and signposts will stay intact all year round, so sign and post materials should be selected to withstand winter conditions. Permanent kiosks, trailhead signs, map signs, and trail wayfinding are essential year-round. Signposts should be mounted into metal sleeves that are cemented into the ground. Non-removable signs should be cleaned and stained each spring.
- C. Trail Repair: Assess and repair any damage at climbing turns, switchbacks, roadway crossings, and fords. Necessary repairs should be made prior to the trail opening each
- D. Erosion Control: Assess damage and slope erosion at grade reversals, knicks, rolling dips, and waterbars to ensure the erosion control features function as intended. Trail inspections should be performed throughout the snow melt and an effort should be made to keep trails clear from excessive snow melt.
- E. Structure Maintenance and Repair: Built structures including bridges, kiosks, restrooms, benches, picnic tables, and boardwalks, should be assessed for structural damage each spring and necessary repairs should be made. This includes removing movable elements for the winter months and replacing them in the spring to prevent water/flood damage.
- F. Restroom Maintenance: Portable restrooms should be cleaned and serviced weekly at a minimum, or according to usage. All permanent restroom facilities should be serviced weekly including cleaning, trash disposal, and restocking. Permanent restrooms should be assessed for damage each spring and throughout the summer months, and necessary repairs should be made.
- G. Waste: Trash receptacles and pet waste stations should be emptied twice a week during summer months. Receptacles should be removed in winter to prevent seasonal damage.
- H. Snow Park: Maintenance should include restroom maintenance, signage repair, and snow-clearing on roads and within the parking lot. The land manager is responsible for operations and maintenance within the snow-park.

I. Fire Risk: With the increasing fire risk in California, it is necessary that all land be properly managed to prevent the spread of wildfire. This includes, but is not limited to, closure and locking of campground fire rings as required during peak fire season, brush clearing, vegetation removal around powerlines, and continued monitoring of vegetative conditions and potential fire hazards (Bureau of Land Management 2020). It is imperative to determine who will be responsible for such activities on a case-by-case project development basis.

The items listed above are preliminary recommendations for operational activities. The owner/ management organization should develop thorough operational and maintenance requirements for each of the projects selected for implementation.

FOREST SERVICE MAINTENANCE ACTIVITIES

Proposed projects located on Forest Service land must follow Forest Service standard maintenance protocols. The following was adapted from the Forest Service's Trails Management Handbook.

- A. Trail Assessment and Conditions Surveys: This is a Forest Service methodology used for conducting standardized trail inventory and assessments. This methodology should be used for assessing new trails and conditions of existing trails within Forest Service lands (Forest Service 2008).
- B. Design Parameters: Each proposed trail on Forest Service land must be designed and maintained according to its proposed Trail Class and Designed Use (see Table 8-1A and 81-B of the Forest Service's Trails Management Handbook) with particular attention to Design Tread Width, Design Surface, Design Grade, Design Cross Slope, Design Clearing, and Design Turns.
- C. Site-specific considerations for trail development and maintenance include: existing topography, natural obstructions, waterways, and vegetation. Existing features must be thoroughly assessed to ensure new trail segments comply with their intended classification and can be managed according to their designated use, including Trail Type, Trail Class, Managed Use, and Designed Use (Forest Service 2016).
- D. National Crosscut and Chainsaw Program: This is a Forest Service program that oversees the use of chainsaws and crosscut saws on national forests. Any Forest Service employee or volunteer that will be helping with trail clearing and tree removal must consult with the Forest Service National Saw Program and the National Saw Technical Advisory Group.

The items listed above are an overview of the Forest Service trail management programs. The owner is responsible for ensuring that all development activities comply with local and federal agency requirements.

9.3 NON-FOREST SERVICE MAINTENANCE ACTIVITIES

There are a number of local volunteer groups and non-profit organizations that assist with trail maintenance activities in the Tahoe Donner region.

- A. Friends of Tahoe Donner Trail Crew: Friends of Tahoe Donner Trails is a community volunteer group that focuses on promoting stewardship within the Tahoe Donner region. Their activities include volunteer trial maintenance, invasive species removal, planting, and environmental restoration.
- B. Truckee Donner Land Trust: The Truckee Donner Land Trust organizes volunteer trail days to help preserve and maintain trails within the region. Their activities include brush removal, grading, trail repairs, and new trail construction.
- C. AmeriCorps National Civilian Community Corps (NCCC): NCCC is a team-based service program for youth that focuses on strengthening communities within key service areas, including environmental stewardship. The environmental stewardship program focuses on trail-building and maintenance, tree planting, invasive species removal, river restoration, and environmental education. There is an opportunity for the local organizations, within the Tahoe Donner region, to sponsor an AmeriCorps team, provide lodging, technical oversight, supplies, and service-learning support, in exchange for 3 to 13 weeks of service.

10.0 IMPLEMENTATION AND FUNDING

This section includes preliminary priority project costs and amenity unit costs to be used for project feasibility studies. Once project funding sources and implementation budgets are established, a detailed project phasing plan can be developed. Costs were originally developed in 2020 and have been updated to include a 20% escalation to account for inflation.

10.1 PRELIMINARY COST ESTIMATE

No	Description	Unit	Unit Cost
	Priority Properties		
1	Comprehensive Wayfinding and Signage Installation (Trail, Recreation, and Vehicular)	ls	\$82,620
2	Major Trailhead (vehicular parking, double vault restroom facility, kiosk, trash receptacles, benches, pet waste station, boulders, and site signage/wayfinding)	ls	\$2,958,000
3	Minor Trailhead (vehicular parking, single vault restroom facility, trash receptacles, and site signage/wayfinding)	ls	\$540,600
4	Large Restroom Facility (Double vault restroom facility and accessible path of travel)	ls	\$316,200
5	Snow Play (vehicular parking, double vault restroom facility, trash receptacle, and site signage/wayfinding)	ls	\$2,040,000
6	Meadow Boardwalk and Outdoor group picnic area (paved gathering area, shade shelter, picnic tables, benches)	ls	TBD
	Trails		
7	Clear, Grub, Grade	sf	\$2
8	Vegetation Removal and Trimming	mi	\$1,020
9	Trail Construction - Natural Surface	mi	\$20,400
10	Rolling Dips	mi	\$66,300
11	Climbing Turns and Switchbacks	mi	\$51,000
12	Rock Rake, Regrade, and Reroute	mi	\$35,700
13	Close and Restore Trail (Repair, recontour, resurface, regulatory sign)	mi	\$28,560
14	Accessible Interpretive Walkway (6' wide) - import and gravel Surface, galvanized mesh, rock base, and redwood header	mi	\$59,242
15	Erosion Control	mi	\$510
16	Construction of Natural Drainage Swale with Rock Check Dams	lf	\$12
	Trail Crossings		
17	Boardwalk	lf	\$306
18	Sawn Timber Stringer Bridge	ls	\$25,500
19	Ford	lf	\$20
20	Culvert	ea	\$15,300
	Forest Service Signage		
21	Forest Service Roadside Entry and Exit Sign (FE OR FL-3 108" X 72")	ea	\$10,200
22	Forest Service Roadside Site Approach Sign (MFE OR MFL-2, 27" X 27")	ea	\$510
23	Forest Service Facility Sign - with name and symbol (SA-1, 38" X 40")	ea	\$1,020
24	Recreation Sign (RS-2, 63" X40")	ea	\$1,734
25	Trailhead Sign - Two Line Site Name (RSE-2, 48" X 20")	ea	\$714
26	USFS - Shield (S-15")	ea	\$204
27	Forest Road Destination Sign (48"x17", Aluminum/ Reflective)	ea	\$306
	Non-Forest Service Signage		
28	Informational Kiosk	ea	\$36,720
29	Trailhead/Trail Junction Sign - Routed Cedar with Paint/Stain (7" tall sign)	ea	\$306
30	Trailhead/Trail Junction Sign - Routed Cedar with Paint/Stain (11" tall sign)	ea	\$612
31	Trail Marker - Aluminum (3.5"x5") - with Solid Stained Post and Vandal Resistant Screws	ea	\$306
32	PCT Marker - Laser Engraved Oak (5.5" x5.5")	ea	\$61
33	Custom Map & Text Bulletin Board (48"x48")	ea	\$4,080
34	Recreation and MUTCD Symbols (18"x18")	ea	\$4,080
35	Donner Summit Custom Adventure Badge (size and material TBD)	ea	\$1,632
36	Donner Summit Custom Visiting Icon (size and material TBD)	ea	\$1,632
	Miscellaneous Signage		
37	Accessible Parking Sign	ea	\$816

No	Description	Unit	Unit Cost
	Miscellaneous		
38	Asphalt Paving (4" depth asphaltic concrete, 6" depth aggregate base)	sf	\$12
39	Concrete Accessible Walk (6" depth, 6" aggregate base)	sf	\$17
40	Boulders (3'-5')	ea	\$510
41	Interpretive Sign and Mounting Structure (36" x48")	ea	\$5,304
42	Trash Receptacle (metal, animal-proof)	ea	\$3,060
43	Drinking Fountain	ea	\$9,180
44	Picnic Table - concrete, 6' with square legs (ADA)	ea	\$1,632
45	Bench - concrete, 6' with square legs	ea	\$2,244
46	Dog Waste Dispenser	ea	\$816
47	Group Shade Structure (12'x22')	ea	\$30,600
48	Single Vault Pre-Fabricated Restroom Building	ea	\$153,000
49	Double Vault Pre-Fabricated Restroom Building	ea	\$306,000
50	Portable Restroom - Standard Porta Potty with weekly cleaning (one-year rental)	ea	\$4,284

Assumptions:

- 1. Depth of concrete, asphaltic concrete, and aggregate base may vary based on geotechnical analysis and design.
- Existing roads and proposed project roads will be utilized as permanent access roads for public recreation areas.
- 3. Dollar estimates are for 2020, adjusted upward of 20% to account for inflation.
- 4. All quantities and costs are preliminary and subject to change.
- 5. All sign costs are for the sign only, printed on one side, as manufactured by Wood Product Signs or approved equal.
- 6. Stantec has no control over supply chain issues, inflation fluctuation, the costs of materials, equipment, labor, or the contractor's method of determining bid prices. Bids and actual costs may vary significantly from the estimates provided here.

Costs for trail improvements and priority projects include 50 percent contingency, including project mobilization and bonding, construction contingency, and design/soft cost fees. All unit costs are intended to be used for planning purposes. The owner is responsible for determining final construction costs and any costs associated with feasibility studies, environmental surveying, engineering studies, detailed site analysis, and permitting.

10.2 PHASING

Near-term projects are those which can be funded, designed, and installed within one to five years from adoption of this Plan. Long-term projects are those which will be funded, designed, and installed within 5 to 15 years. Below is a preliminary breakdown of near-term and long-term projects.

NEAR-TERM (1 TO 5 YEARS)

The recommended near-term projects include:

- Motorist wayfinding signage at the Donner Pass Road I-80 interchange, along Donner Pass Road where it intersects with Soda Springs Road, and at the Pacific Crest Trail/Donner Pass Road crossing
- Lamson-Cashion Donner Summit Hub Trailhead development

- Trail wayfinding signage
- Summit Hub Trailhead restroom installation
- Long Lake Trailhead development and restroom installation
- Memorial Overland Emigrant Trail to Forest Service Ridge Segment from Soda Springs Road to Mount Disney with a connection to the River Loop Trail
- Memorial Overland Emigrant Trail to Sugar Bowl/Roller Pass Segment through Sugar Bowl to near Donner Peak (with a new undefined connection to the Sugar Bowl Road)
- Donner Lake Rim Trail extension from I-80 to Donner Pass Road/Sugar Bowl/Memorial Overland Emigrant Trail
- Royal Gorge Rim Trail erosion reroute at Nose Dive/Alan's Pass section
- Braiding Restoration on Palisades Creek Trail from the trailhead to Long Lake
- Systemize Pine Marten Trail
- Continued discussions with stakeholders regarding designated snowplay areas

LONG TERM (5 TO 15 YEARS)

The recommended long-term projects include:

- Additional Motorist Wayfinding Signage
- Additional Trailhead Signage
- Soda Springs and Serene Lake Trail connection
- Van Norden Meadow boardwalk and perimeter trail
- Sheep Pens Trailhead development and roadway upgrades
- Castle Peak Trailhead development and restroom installation
- Pacific Crest Trail alternative trail in the Donner Pass Road to I-80 Planning Area, and decommissioning of user- defined trails
- Walkable Soda Springs to include the addition of a pedestrian trail and designated bike path
- Memorial Overland Emigrant Trail to Schallenberger Ridge Segment from near Donner Peak to Donner Lake
- Lytton Lake Lodge to the Pacific Crest Trail (new trail)
- Bridge on existing abutments on the Summit Canyon Trail
- Black Wall campground development
- Van Norden Meadow campground development including Forest Service-required studies and Native American tribal coordination to assess and verify avoidance and protection of biological and cultural resources
- Five Creeks Trail Development

PRIORITIZATION

Prioritization has been established based on current public need, safety, accessibility, environmental stewardship, sustainability, economic development, and stakeholder input and an inventory assessment of need (Section 7). Once funding sources and budgets are finalized, the landowner and operational organizations must develop a detailed prioritization plan.

10.3 FUNDING SOURCES

This section outlines potential funding sources for the projects included in this Plan. Imperative for consideration is funding that supports ongoing maintenance, which may need to be a mixture of public and private funding.

- The National Forest System Trail Stewardship Partner Funding Program: In a joint effort involving the Forest Service, the National Stewardship Wilderness Alliance, and many other organizations, this program provides funding for trail maintenance activities and stewardship organizations (Trail Funding).
- Forest Service Legacy Roads and Trails Program: This Forest Service program provides funding for trail maintenance and road decommissioning in areas where Forest Service roads negatively impact the local environment and water quality (Legacy Roads and Trails Program).
- 3. California Department of Parks and Recreation Recreational Trails Program: This program provides annual funding for trail and trail-associated projects. The program offers \$300,000 maximum funds, and requires that the applicant match 12 percent of the total cost. Applicants must comply with NEPA and the National Historic Preservation Act Recreational Trails Program (Recreational Trails Program).
- Wildlife Conservation Board Public Access Program: This program supports projects focused on conservation, restoration, recreation, and ADA guidelines for accessibility. It offers up to one million dollars annually (Public Access Program).
- 5. **Federal Highway Administration:** Recreational Trails Program: This program provides funding to maintain trails and recreational trail-related facilities, including motorized and non-motorized vehicles. It encourages partnership with youth service programs and conservation corps for maintenance activities (Recreational Trails Program).
- 6. California Department of Parks and Recreation Land and Water Conservation Fund: This program provides funding for development of land for the purpose of creating and expanding recreational opportunities for citizens (Recreational Trails Program).
- 7. Placer County Transient Occupancy Tax (TOT) funds: These tax dollars are collected from hotels, AirB&B, and vacation rental by owners (VRBO) in Placer County and are given as grants to support tourist infrastructure. Trails and recreation facilities and improvements are often the recipient of such funds (TOT Funded Projects).
- 8. Placer County Park Dedication Fees: The intent of this program is to mitigate the effect new neighborhoods have on existing recreational facilities by acquiring, constructing new parks and recreation facilities, and/or rehabilitating existing ones. Park Dedication Fees may be used to pay for capital costs but may not be used for maintenance. Furthermore, the Parks Commission has taken the position that the funds should be used for improvements on the ground, not for master planning efforts, design of projects, etc. (Park Dedication Fee Program).
- Nevada County Recreation Mitigation Funds: As in Placer County, fees are levied on developers in Nevada County to facilitate the development of recreation facilities commensurate with growth (Recreation Planning Division).

- 10. Placer and Nevada County General Funds: For projects led by Placer and/or Nevada County, there are occasions when general funds may be dedicated to recreation facilities or trail upgrades to supplement other funding sources.
- 11. American Trails Trail Funding Programs: The Trail Fund has now morphed into two programs. The Trail Capacity Program fills the role of what the "Trail Fund" was in 2021, and the Legacy Trail Program now offers Legacy Roads and Trails funding to projects on Forest Service lands.
 - The Trail Capacity Program supports partners to complete trail research, design, planning, stewardship, and maintenance projects that are inclusive, foster improved trail user behavior and connect trail assets to a broader spectrum of users. This program is targeted for non-Forest Service Federal lands, as well as State, local, and private lands. Projects on Forest Service lands should be directed to the Legacy Trails Program.
 - The Legacy Trails Program focuses on creating more resilient and sustainable National Forest System trails, and restoring, protecting, and maintaining crucial watersheds on our national forests and grasslands. It enables project partners (nonprofit organizations and non-Federal agencies) to complete trails projects which improve watershed health, restore aquatic organism passages, preserve access, and decommission unauthorized and previously closed trails.
- 12. Private Funding Opportunities: There may be opportunities for recreation and trail funding from local homeowner associations or individuals that would like to contribute to enhanced recreation in the region.

Additionally, California Assembly Bill 1789, the Outdoor Recreation: California Recreational Trails System Plan, was signed by the California Governor on September 25, 2022. This bill requires that the California Recreation Trails System Plan include recommended priorities for funding to improve and expand, among other things, non-motorized natural surface trails.

Grant opportunities evolve, and to that end in 2020 the State of California launched a single internet portal for funding sources (https://www.grants.ca.gov/). The California Grants Portal (a project by the California State Library) is a single destination to find all grants and loans offered on a competitive or first-come basis by California state agencies (California Grants Portal).

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	FOREST SERVICE TRAIL CLASSIFICATIONS			
	TRAIL CLASS 2: MODERATELY DEVELOPED	TRAIL CLASS 3: DEVELOPED	TRAIL CLASS 4: HIGHLY DEVELOPED	
TREAD AND FLOW	 Tread continuous and discernible, but narrow and rough Single lane with minor allowances constructed for passing Typically native materials Obstacles 	 Structures may be common and substantial; constructed of imported or native materials Natural or constructed fords Bridges as needed for resource protection and appropriate access 	Tread wide and relatively smooth with few irregularities Single lane, with allowances constructed for passing where required by traffic volumes in areas with no reasonable passing opportunities available Native or imported materials May be hardened	
OBSTACLES	 Obstacles may be common, substantial, and intended to provide increased challenge Blockages cleared to define route and protect resources Vegetation may encroach into trailway 	 Obstacles may be common, but not substantial or intended to provide challenge Vegetation cleared outside of trailway 	Obstacles infrequent and insubstantial Vegetation cleared outside of trailway	
CONSTRUCTED FEATURES	 Structures of limited size, scale, and quantity; typically constructed of native materials Structures adequate to protect trail infrastructure and resources Natural fords Bridges as needed for resource protection and appropriate access 	 Structures may be common and substantial; constructed of imported or native materials Natural or constructed fords Bridges as needed for resource protection and appropriate access 	 Structures frequent and substantial; typically constructed of imported materials Constructed or natural fords Bridges as needed for resource protection and user convenience Trailside amenities may be present 	

 TABLE 12-1A, TRAIL CLASSIFICATION, Table adopted from Forest Service trail class matrix (FSH 2353, section 14.2, exhibit 01)

	FOREST SERVICE TRAIL CLASSIFICATIONS				
	TRAIL CLASS 2: MINIMALLY DEVELOPED	TRAIL CLASS 3: DEVELOPED	TRAIL CLASS 4: HIGHLY DEVELOPED		
SIGNS	 Route identification signing limited to junctions Route markers present when trail location is not evident Regulatory and resource protection signing infrequent interpretive signing not common Destination signing typically infrequent outside of wilderness; generally not present in wilderness Information and interpretive signing not common 	 Route identification signing at junctions and as needed for user reassurance Route markers as needed for user reassurance Regulatory and resource protection signing may be common Destination signing likely outside of wilderness; generally not present in wilderness Information and interpretive signs may be present outside of wilderness 	 Route identification signing at junctions and as needed for user reassurance Route markers as needed for user reassurance Regulatory and resource protection signing common Destination signing common outside of wilderness; generally not present in wilderness Information and interpretive signs may be common outside of wilderness Accessibility information likely displayed at trailhead 		
ENV. AND EXPERIENCE	 Natural, essentially unmodified Recreation Opportunity Spectrum (ROS): Typically Primitive to Roaded Natural Wilderness Recreation Opportunity Spectrum (WROS): Typically Primitive to Semi- Primitive 	 Natural, primarily unmodified ROS: Typically Primitive to Roaded Natural WROS: Typically Semi- Primitive to Transition 	 May be modified ROS: Typically Semi-Primitive to Rural WROS: Typically Portal or Transition 		

 TABLE 12-1B, TRAIL CLASSIFICATION, Table adopted from Forest Service trail class matrix (FSH 2353, section 14.2, exhibit 01)

STAKEHOLDER MEETING #1

ATTENDEF LIST

Location: Forest Service Truckee Ranger District Offices

Date: October 16, 2019

NAME ORGANIZATION/GROUP

Nathan Wieler Douglas Sierra

Garv Allan Truckee Donner Land Trust/Truckee Climbers Coalition

Truckee Trails Foundation Connor Swift Allison Pedley

Katie Mansfield Forest Service, Truckee Rachel Westaby Forest Service, Truckee Cecilia Reed Forest Service, Yuba River Lisa Carnahan Placer County Parks Truckee Dirt Riders Steve Davis

Forest Service. American River Mary Sullivan DSA/Sugar Bowl/Royal Gorge Chris Parker

Pat Malberg DSA

Cheryl Paduano Soda Springs Store

Greg Dallas Sugar Bowl

Tim Kustic Serene Lakes Property Owners Association

Brian Brega Climbing Guide/DSCC

Rachel Hutchinson South Yuba River Citizens League Alecia Weisman South Yuba River Citizens League

John Groom Forest Service, Truckee

Bill Oudegeest DSA/SLPOA/Historical Society

Alice Harten Clair Tappaan Lodge

John Svahn Truckee Donner Land Trust

Jeffery Thorsby **Nevada County**

Amy Ohran Boreal

Mike Spain Soda Springs Janet Tuttle Donner Ski Ranch Town of Truckee David Tirman Bill Clark Auburn Ski Club

Byron Lee Palisades

Ted Beedy North Fork Association Charlie Jones Charlie Jones and Family

Chris Peatross Rainbow Lodge

Nick Chickering





Meeting Notes

Donner Summit Public Use and Recreation Master Plan

Stakeholder Meeting #1

Date/Time: October 16, 2019 / 9:00 a.m. to 11:00 a.m.

Place: USFS, Truckee Ranger District office

Next Meeting: Next Meeting Date
Attendees: Sign-in Sheet attached

Distribution: Attendees

Presentation:

Introductions

Reviewed the Donner Summit Public Use and Recreation Master Plan presentation.

General items reviewed: Project study boundary, general/preliminary goals, existing and proposed trail maps, opportunity areas and initial needs, and timeline.

The stakeholders contributed many topics to consider for the master plan development. The general discussion items are noted below:

Steps moving forward

- Identify the various user groups.
- · Identify priorities and needs of the users.
- Identify specific goals for the Master Plan and prioritize.
- Discussed a possible need to create guidelines and rules for snow parks, cleanup, trash, camping, etc.
- Document short- and long-term planning including identifying other possible future trends and uses,
- Create open communication between stakeholders for projects and grant opportunities.
- Add available existing information to study map (rest areas off I-80, other trailheads, businesses, etc.).

Restrooms

 Human waste is a health and safety and environmental issue that needs to be addressed. This was a common strong need for most user groups. October 16, 2019 Donner Summit Public Use and Recreation Master Plan Page 2 of 5

- There is an existing portapotty at the China Wall parking area that was donated by Granite Chief, at the Soda Springs Store that is managed by the store owners, and at the TDLT Summit Station trailhead that is managed by the TDLT.
 - China Wall portapotty is heavily used by climbers and hikers and an alternative, more permanent solution is being sought, possible location at the Rainbow Bridge. The Truckee Climbers Coalition is working with the non-profit: Do Good Shit to fundraise for permanent toilet system, possibly a Toilet Tech system, for which a leach field would be necessary. Nevada County Environmental Health will need to review and permit the system.
 - Soda Springs portapotty is used extensively in the winter and summer. It is the only portapotty on the summit that is left through the winter, which creates challenges for snow removal and is costly and time consuming to maintain.
 - TDLT portapotty is currently working for the amount of use; however, a more permanent solution may be necessary if the area sees more summer recreation use.
- Donner Summit Association (DSA) is exploring the possibility of installing a permanent restroom at Donner Pass Road crossing. This may be the most reasonable location to focus efforts for first restroom installation, instead of one at PCT and Rainbow Bridge.
- Need signage to indicate where existing restrooms (including rest areas) are located.
- It would be ideal to combine with camping and other season activity for cost/maintenance efficiency.

Camping

- Roque campers (tents and cars) were discussed. Need to address how to control, enforce, and develop a solution to illegal camping.
- Climbers tend to camp near China Wall.
- Possibility of prohibiting dispersed camping; however, a buffer around the PCT would have to be identified.
- Need to educate campers with respecting the environment and environmental impacts.
- The camping van phenomenon has brought more campers to the area and it is hard to police in all seasons.
- Need camping alternatives: Billy Mack Flats, below Black Wall.
- Potential additional camping opportunities in Castle Valley.
- Potential campground opportunities identified around Van Norden Meadow; however, the meadow restoration underway will change the meadow and it may not be an ideal camping location due to mosquitoes as well as the cultural and biological sensitivity of the meadow.
- Identify and review existing camping areas to the west (Indian Springs and Hampshire Rocks).

October 16, 2019

Donner Summit Public Use and Recreation Master Plan

Page 3 of 5

Restoration

- Dam removal and meadow restoration were discussed. Berms will likely be removed in the next five years.
- Van Norden restoration received new funding and will be more active within the next year. The
 restoration design has changed.
 - Meadow areas will be wetter and more mosquitos so it could be a conflict for uses like camping.
 - Possible parking enhancements at the lower end could be beneficial for flow into the meadow.
- Camping at the rim and floor of the meadow will be challenging due to cultural and environmental sensitivity.
- Area was heavily used by Washoe Tribe and there are a lot of sensitive cultural resources.
- Dam berm will likely be removed and used as fill, will open up views.
- When the berms are removed possible location for recreation (trailhead, restroom, park, snow park).
- Possible boardwalks could be installed in the meadow for access.
- Need to define meadow restoration goals for the Master Plan.

Graffiti Management

- Develop an education campaign to convey the impacts, costs, possible signage and try to keep graffiti in the tunnels.
- · Discussed fake cameras.
- Taggers are a wide mix from individuals to families.
- Some stakeholders said they have talked to the railroad in the past for enforcement, but they were not very helpful.
- Tunnels at the PCT is the most popular tagging location.
- Volunteers and forest service manage most of the cleanup.
- Possible outreach to the high schools for education.

Snow Park

 Possible location west of Van Norden: Snow park and camping mixed use with parking, snow removal will be needed. October 16, 2019 Donner Summit Public Use and Recreation Master Plan Page 4 of 5

- Snow parks generate a lot of trash and broken sleds, require a lot of maintenance and cleanup. There is a need to educate users on trash environmental impacts.
- Wayfinding signage with pictures/graphics is helpful with language barrier challenges.

Trails

- Control and deter using other undefined user created trails.
- Determine systemized trails with best use, sustainable and least impact to the environment and cultural resources.
- Access funding and engage advocacy groups to cleanup trails.
- Hole in the Ground trail is in bad condition for biking and needs a lot of maintenance.
- Currently no published trails at Sugar Bowl because heavy use will create damage and maintenance.

Maintenance Funding

Grants don't usually provide funding for maintenance. May have to discuss funding with various involved agencies and groups for sustainable maintenance solutions.

Grants

- Create priorities for grants.
- Research other wayfinding and recreation grant opportunities.

Truckee Dirt Riders

- Very few off road designated areas in Donner Summit area.
- Not a need to increase motorized usage in the boundary and not the desired environment for this use.
- Cisco Grove provides off-road access and Cold Stream Canyon area is a legal off-road use area.
- Indian Springs might be a proposed area.

Soda Springs

- Study year-round walkability solution for the community and Norden.
- New commercial and visitor center is envisioned.
- Make it a vibrant hub.
- Take into account the Historical Society, gas station, and soda springs businesses.

October 16, 2019 Donner Summit Public Use and Recreation Master Plan Page 5 of 5

Others

- Consider possible public transportation solution and stops continuing up the summit.
- Include Loch Leven trailhead and trails for review.
- Forest Service has very limited resources but will place health and safety (restrooms and parking) towards the top of the list and the nice to do/enhancements (trails) much lower. There are many projects to assist on and need to prioritize.

Communication:

DSA is leading the Master Plan – ideas, individual discussions/meetings or questions shall go through Chris Parker first and he will pass on to Stantec. Data sharing can be sent to Stantec and copy Chris.

The foregoing is considered to be a true and accurate record of all items discussed. If any discrepancies or inconsistencies are noted, please contact the writer immediately.

Kate Gray

Environmental Planner





Donner Summit Public Use, Trails and Recreation Facilities Plan Survey Results

We received 21 responses out of 37 survey recipients.

Ranked priorities

- 1. Public restrooms
- 2. Trail connectivity and variety
- 3. Wayfinding
- 4. Outdoor gathering area
- 5. Camping
- 6. Trailhead/parking
- 7. Winter recreation (snow park)
- 8. Indoor gathering area

Restroom:

- At least a porta-john at each trailhead.
- Definitely needed at PCT crossing.
- Others: Cascade Lake, Castle Peak Road, Sheep pens.

Trails

- Trail connectivity is a high priority
- · Looping trails.
- · Branch trails.
- Wider trails people can walk side by side.
- · Options for different abilities.
- ADA compliant trails (Maybe in Van Norden Meadow?).
- · Decommission undesirable user created trails.
- Soda Springs to Serene Lakes connection.

Wayfinding and Maps:

- Need better wayfinding on trails, especially at PCT crossing. Also need trailhead sign at Long Lake parking area.
- Map private property so people know not to access.
- · Needs to be standardized and coordinated with landowners/managers.

February 3, 2020

Donner Summit Association

Page 2 of 2

Outdoor gathering area/park

- Very desirable need to determine site (a few people mentioned sheep pens).
- There is some interest in a park but it would need to survive the elements.

Camping

- People are currently camping illegally, need a designated campground with trash collection and contained firepits.
- Black wall?
- Encourage use of existing campgrounds:
 - o Indian Springs
 - o Cisco Grove RV
 - o Sterling Lake
 - o Big Bend Group
 - Hampshire Rocks

Trailheads/Parking/Maps

- Make sure users understand boundaries (i.e. private property, motorized vs. non).
- Educational signage (i.e. leave no trace, including tollet paper and pet waste).
- Scan labels (allows for additional info and different languages, digital maps).
- Trash collection/recycling at each trailhead.
- · At least a porta-john at each trailhead.
- Parking signage.

Winter Recreation

- Snow Park needed NEEDS TO BE FREE. Need to determine site with parking, restrooms, trash
 collection, and signage.
- Possible Snow Park permit area at Cisco Grove.
- Should contact Caltrans about sledding issues and discuss options.
- · Should be located west of the Summit.

Indoor Gathering area

Low priority – ski areas can host.

Potential sites

- Brost property Interested in accommodating winter camping.
- TDLT Van Norden dam –would be a good location for major trailhead and bathrooms.
- Placer County Parcel?
- FS property?
- Old snow mountain property?

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