Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 1: Glossary

Glossary

<u>Adaptive Management:</u> The process of implementing land management activities in incremental steps and evaluating whether desired outcomes are being achieved at each step. If conditions deviate substantially from predictions, management activities are adjusted to achieve the desired outcomes.

<u>Bike Optimized:</u> A bike optimized trail is designed for bikes that use contours of the land to create a flow like feel which includes features like winding, rolling terrain, banked turns, natural features, jumps and other skill building features. Bike-optimized trails are often designed for downhill travel to reduce collisions and to allow for a variety of bike users to enjoy. May follow the USFS Trail Class Matrix, USFS Trail Design Parameters for Bicycles, and Typical Design standards from IMBA.

Boardwalk: An elevated wooden walkway that extends over wet, marshy, or sensitive ground.

<u>Carsonite Signage post:</u> Carsonite is a fiberglass composite flexible material designed to withstand harsh weather conditions, does not corrode, and will not become brittle with uv rays. The carsonite post is an ideal material to be used in areas of directional bike optimized trail use or in areas where installing wooden posts into the ground is not feasible. Carsonite posts will replace the reassurance markers in trees that mark the summer trail system.

Directional Trail: also known as a one-way trail, is a trail designed to direct users to travel in one direction. This can help reduce congestion and conflict and can also improve safety.

Difficulty Rating system: Trail ratings are based on a variety of factors. Topography, steepness, exposure, natural imbedded features, added introduced features, exertion level, and technical features are all taken into consideration when rating a trail. Green Circle, Blue Square, Black Diamond, and Double Black Diamond are the international symbols for both winter and summer trail difficulty ratings.

Trail rating systems can:

• Help trail users make informed decisions

- Encourage visitors to use trails that match their skill level
- Manage risk and minimize injuries
- Improve the outdoor experience for a wide variety of visitors
- Aid in the planning of trails and trail systems (source: IMBA Trail Solutions)

Developed Recreation Site: Trailheads and parking lots within Tahoe Donner Association are categorized as developed recreation sites. These sites can either be existing which are listed under the Reserve Replacement Fund study, brand new, or in the planning phase as mentioned in the trails master plan. These future projects will be listed under the 10yr and 20yr Development Fund.

Equestrian Optimized Trail: Equestrians need a minimum of 6ft wide, or 3 ft either side of center tread and an overhead height clearance of 10-12 ft. Equestrian trail design may follow the USFS Trail Class Matrix and USFS Trail Design Parameters for Pack and Saddle. Equestrian trails are generally wider with passing zones and provide a clear line of site.

Equestrian allowed trails provide a safer trail experience which eliminates the potential for fast moving traffic around tight bends.

Flow Trail: A flow trail is a mountain biking optimized trail that's designed to be smooth and continuous, with few obstacles so the rider can maintain rhythm and momentum. Flow trails are generally wider, machine-made trails with berms, rollers, and gentle bends, and they can include imported materials or wooden elements creating unique features. Flow trails are easier and calmer to navigate than technical downhill trails, making them suitable for beginners and families with children. However, some flow trails can be more challenging and include jumps and drops.

The term "flow trail" was first used by the International Mountain Bike Association (IMBA) in 2008. Flow trails have become more popular in recent years, possibly because more trails are being built specifically for mountain biking, and because of the popularity of pump tracks. (source: IMBA Trail Solutions)

Inclusive Trail: Smooth surface trails, typically made of native or imported material (such as decomposed granite) that generally conform to ADA standards, designed for people of all ages and abilities. Typically, 4-6 feet wide with grades not to exceed 5%.

Trail Hardening: Trail tread is built to maintain and support the intended use of the trail. To harden a trail is replacing the unsuitable soils by either capping the trail with rock, geotextiles, or a hardened surface such as asphalt.

Trail Tread: The surface of the trail where people walk, bike, run or ride a horse. Generally, 1.5ft to 2.5ft wide and sloped around 5 deg. angle to allow water to run off.

Turnpike: An elevated trail tread surface that is placed above the surrounding water table.

<u>Multiple-Use Trails</u>: To be a multi-use trail in Tahoe Donner, the trail must allow hikers, bikers, and equestrians. To provide a safe and enjoyable experience at Tahoe Donner, we have a variety of singletrack trails that are not multiple use trails.

A common design technique is to make multi-use trails wider and straighter to accommodate equestrian use. These can often be the main artery within a network of trails providing an alternate route to the same desired destination. Tahoe Donner Association is unique in that there are a variety of double-track roads that can be classified as multiple use trails. These roads are generally 12-15 feet wide, have good sight lines, are free of side and overhead branches, and cover a vast majority of TDA's lands and open spaces.

Ebike Classifications:

Class 1: Permitted on all trails where MTBs are allowed. Low-speed pedal-assisted (no throttle) electric bikes with a motor that provides assistance only when the rider is pedaling. Class 2: Not Allowed in TDA trails or fire roads. Low-speed throttle-assisted electric bike with a motor that can be used exclusively to propel the bike without pedaling. Class 3: Not Allowed in TDA trails or fire roads. Speed pedal-assisted electric bike with a motor that provides assistance only when the rider is pedaling.

<u>Sustainability:</u> The ability to be maintained at a certain rate or level. Avoidance of the depletion of natural resources in order to maintain an ecological balance.

<u>Reroute</u>: A trail reroute can happen for many reasons. Some reroutes are temporary and can occur when maintenance on the other end of the trail or road is occurring. For safety, land managers may reroute trails users to keep them away from heavy machinery during

construction. Some trail reroutes are permanent and happen when erosion or tread degradation is causing damage to resources.

<u>Rip and Restore-</u> Ripping refers to the technique of de compacting the trail tread surface either with machinery or hand tools, Restoring the surface refers to the act of planting native seeds, spreading native pine needles or cones, or adding erosion control measures to slow the rate of water flow to repair rutted surfaces and return into its natural state. Management will use the technique of rip and restore to close non sanctioned, or user created trails from being used.

<u>**Restoration-**</u>Refers to the act of returning something to its former condition. Meadow restoration is a common practice when the meadow is restored to improve biological, botanical and environmental health after it has become impacted due to overuse.

<u>**Trail Degradation:**</u> Occurs when a trail or road becomes damaged or unsafe for use. Improper trail design, water not draining from trail, trail use occurring during wet conditions, soil compaction, erosion and excessive soil deposits are examples of how trail degradation can occur.

Single Track Trail: Generally, a trail tread of 1 to 3 feet wide. Trail surface is usually a native surface trail consisting of dirt or grass. Single track trails often wind around obstacles and include features such as berms, switchbacks, and drops. For a single-track trail, an acre of disturbance at 2ft wide trail. On average cut and fill may differ depending on the steepness of the terrain. Bench cut, trail tread, cubic feet is the cut and fill equation. The only thing remaining is 18" of single-track trail. All disturbed soil will be covered and revegetated. put this in the maintenance section of the report! 2ft wide x 21,648 feet long = 43,296 linear feet. **4.1 miles** = 21,648 linear feet.

<u>Seasonal 2-track roads</u>: Double the normal width of a single track. Single track trails can become double track trails when users ride around features or avoid wet areas. They can also be classified as a fire road. Often, double track trails are abandoned logging roads, fire roads, powerline roads or service roads. These roads can accommodate a vehicle, offer a safe place for two equestrians to ride side by side, or hikers to walk side by side.

Recreation Opportunity Spectrum (ROS) – The recreation Opportunity Spectrum is a system for classifying and managing recreation opportunities based on the following criteria: Physical setting, social setting, and managerial setting. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5412128.pdf Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 2: Trail Management Objectives Form



Trail Management Objectives Form

Trail Name: Drifter Wall - EX	AMPLE		Trail Number: <mark>40</mark>
Trail Beginning Termini: Intersection of Crazy Horse and Andromeda Road		Beg. Milepost:	
Trail Ending Termini: Intersection	of lower Crazy Ho	orse and Powerline/Culvert	End. Milepost:
Trail Inventory Length: 2.5	Miles	Trail Mileage Source: Wheel	GPS X Online GIS Unknown
TMO Trail Section -			
Section Beg. Termini:	:		Beg. Milepost:
Sec.# Section End. Termini	:		End. Milepost:
Designed Use Objectiv	ves		
Second Standard Terra Trail Snow Trail Paved Trail (Check one) 1 (Primitive/Undeveloped) 2 (Simple/Minor Developmed) X 3 (Developed/Improved) 4 (Highly Developed) 5 (Fully Developed)	ent)	Constructed Tra (Use Continuation Sheet to Bridge X Boardwalk Culvert Rock Wall Retaining Wall X Banked Turn Steps	Note Details)
Designed Use	Desig (Fill in all the	n Parameters at apply)	Target Frequency Per Year (Fill in all that apply)
 X Equestrian X Bicycle Accessible 	60 2	Tread Width (inches)	1 Trail Opening 1 Tread Repair
ADA compliant Directional travel	2	Short Pitch Maximum (%) (up to 200' lengths)	Drainage Cleanout
Uphill Downhill	2	Target Cross-Slope (%)	1 Logging Out
Cross-Country Ski Snowshoe	6	Clearing Width (feet)	3 Brushing
Snow Bike	8	Clearing Height (feet)	Snow Trail Grooming
Snow Trails outside XC, DH operating areas	8	Designed Turn Radius (feet)	2 Condition Survey
MO Form - Side 1			Page <mark>1</mark> of <mark>4</mark>

ravel Management Strategies	
Managed Allowed Use From Date (mm/dd) To Date (mm/dd) (Fill in all that apply)* To Date (mm/dd) X Hiker / Pedestrian Image: Comparison of the co	Restricted Use From Date (mm/dd) To Date (mm/dd) (Check if applicable) All Use (Sensitive Area) Imm/dd) All Use (Sensitive Area) Imm/dd) Imm/dd) Hiker / Pedestrian Imm/dd) Imm/dd) Equestrian Imm/dd) Imm/dd) Bicycle Imm/dd) Imm/dd) Dogs Prohibited Imm/dd) Imm/dd) Winter Use (Ski Area Ops) Imm/dd) Imm/dd)
Secretion Oportunity Spectrum (Use continuation sheet if needed) 1 (Primitive) 2 (Semi-Primitive Non-motorized) 3 (Semi-Primitive Motorized) 4 (Roaded Natural) X 5 OUrban)	Special Considerations (Check any that apply. Underline appropriate clarifier in parentl Provide specifics and reference information below.) Shared System (shared with other system road or T&E or Sensitive Species Present (Plant / Wildlife) Easement across Non TDA Land (Existing / Needed Existing Permit or Agreement (Trail-Specific / Area) TOS Committee Notes (Use continuation sheet if needed.)

Trail Management Objectives Form

Trail Number: 40



Trail Name: EXAMPLE - Drifter Wall

Remarks / Reference Information (Continuation Sheet)	
EXAMPLE STATEMENT* Heavy maintenance planned for 2027. Realign Drifter Wall trail to connect fro ower crazy horse road/culvert crossing to meet up with the bottom of Willie's Wiggle trail. Add banked urns, limb trees to 10 feet in middle section. Heavy burshing needed, plan brushing maintenance for 202	m :6.

TMO Form - Continuation



Trail Management Objectives Form

Trail Name: EXAMPLE-Drifter Wall

Trail Number: 40

Remarks / Reference Information (Continuation Sheet)



Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 3: Sign Standards



Tahoe Donner's Signage Family





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Wildlife With nastly 3,500 areas of Tahon Danner Association land, you may encounter Coyoles, Black Bear, Mits, Lione, Deve, Belle Saskes, Neropine and Ropters, Please avoid harmong available and provide plotty of space if you











Tier 1 Kiosks/Map Tier 2 Etiquette within Map Tier 3 Road Navigation Tier 4 Wayfinding Tier 5 Regulatory/Etiquette Tier 6 Interpretive



Sign Matrix

Display	Sign Type (what)	Location (where)	Description (why)
	Kiosk Maps	Trailheads with parking, Trail hubs without parking. Location: Highly Developed and Minimally Developed zones. Trail Class 3, 4 & 5	The kiosk map will display the location name as the title, a "you are here" symbol, show your location on a large-scale map of our entire TDA lands and open space, orient you to our surrounding trails and trailheads, describe safety information, share trail etiquette, show an up-to-date map of trail user designations, map key, and a scannable QR code for trail users to donate.
	Vertical Directional Wayfinding/ Guide signs- bright blue for easy readability	Placed at the start of stand-alone single-track trails with no intersecting single-track trails. Signs will be used at road crossings. Location: Highly Developed, Developed, Minimally Developed zones. Trail Class 3,4,5	Directional wayfinding will display trail name, difficulty rating, direction to remaining portion of trail, directional travel (when applicable), mileage remaining, allowed user and land ownership.
	Horizontal Directional Wayfinding/ Guide signs- bright blue for easy readability	Placed at the start of single-track trails that lead to a destination. Horizontal wayfinding is used at intersections where multiple single-track trails can be accessed. Location: Highly Developed, Developed, Minimally Developed zones. Trail Class 3,4,5	Directional wayfinding will display trail name, difficulty rating, direction to remaining portion of trail, directional travel (when applicable), mileage remaining, user allowed land ownership. Signs will display multiple trail names and showcase desired destinations.
	Reassurance Markers - Carsonite with blue wayfinding sign	Confusing intersections along the East Perimeter Trail and along bike optimized trails. Location: Highly Developed, Developed, Minimally Developed zones. Trail Class 2,3	Carsonites with blue wayfinding will take the place of white triangles in trees. Carsonites provide a safer alternative to wood and stand out in color. Will be bright and visible to enhance safety.



Sign Matrix

FOULARE TAHOE DONNER COMMON AREA TALI Image: State and the	Regulatory	Multiple-use or single-use single-track trails where equestrians may be present, dog covenants rules are in effect, or on gates. Location: Highly Developed and Developed zones. Trail Class 3 & 4	Signs state the rules, display etiquette, and set expectations for all trail users.
WATCH FOR CROSS TRAFFIC	Warning/ Caution	Trail intersections in congested areas. Location: Highly Developed and Developed zones. Trail Class 3,4,5	Signs that announce hazards that may be present. Signs that announce upcoming trail and road intersections. Will be used to announce projects, changes, maintenance, machinery present, detours. Yellow with Black letters. May a permanent or temporary sign.
	Temporary	Tahoe Donner Association property. Location: Highly Developed, Developed, Minimally Developed zones. Trail Calss 2, 3, 4, 5	Will be used to announce projects, changes, maintenance, machinery present, detours. Yellow with Black letters will be used during caution/warnings. Red with white letters will be used during hard Closures.
	Interpretive	Hiking trails within Tahoe Donner: Glacier Way and Nature Loop Location: Highly Developed zones. Trail Class 4 & 5	Display colorful graphics and photos. Will provide education and etiquette for all age groups. Single posts or double posts depending upon location and type of trail.



Recreational Opportunity Spectrum selection guide for materials, styles, and locations.

ltem	Minimally Developed (Crabtree Canyon/Frog Lake/Carpenter Valley/Euer Valley)	Developed (further than 1/2 mile)	Highly Developed (The first ½ mile around ACAC, and neighborhoods)
1.Sign Materials	Steel-Lazer Cut or Aluminum	Aluminum/E-Panel	Aluminum/E-Panel
Color and Finish	Partner agency standards Blue with white letters (TDA)	Blue w/ white letters, logo, full color map.	Blue w/ white letters, full color, reflective. Semi-Glossy
2. Sign Support	Steel, Aluminum or Tree	Steel, Aluminum, Lumber	Steel, Aluminum, E-Panel
Color and Finish	Steel, Natural, or Blue w/ white letters.	Steel, Natural, or Blue w/ white letters.	Blue w/ white letters, full color map, reflective.
3. Reassurance Markers	Wooden stakes, rock cairns or None	None – phasing out tree markers in 2025. Wavfinding present.	Carsonite.
Color and Finish	Paint, plastic with logo or natural	Blue w/ white letters. Semi-glossy.	Blue carsonite, blue riveted sign, semi- glossy

Sign support and placement requirements		
Sign Supports	Red wood posts, trees, steel, carsonite	
Minimum mounting height, Trail tread to top of post.	5 Feet, 2 ft buried.	
Minimum lateral distance, Center of trail to edge of sign.	3-foot clearance for Equestrian and Bike handlebars. 5 feet from edge of seasonal road, depending on TDXC grooming proximity.	
Trailhead and Trail hub Kiosks	Winter height (8 ft), Summer height (7 ft)	



TAHOE DONNER Trail Signing- Wayfinding (Wy), Reassurance (Ra), Regulatory (R), Warning (Wr).

Trail Type	Sign Face All Wayfinding signs will Display Name, difficulty, direction, designation, & ownership.	Minimum Sign Size and Post Height. Carsonite (Ra) height will vary based on soil type. Target height is 4ft.	Minimum Font Size on Title	Colors, Shape or Sign Type
1. Multiple-Use Single-track Hiker/Biker	Wy- semi-gloss, color Ra – semi-gloss, color R – semi-gloss, color Wr – Semi-gloss and Reflective (road intersection)	Wy - 4"x 12" & 16" x 9" – 5ft (tread to top of post) Ra- 4"x 12" – 4ft (tread to top of carsonite) R- 9"x9" – (1" below Wy sign) Wr – 12"x 12" – 5ft (tread to top of post)	Wy- ½ " Ra- ½ " Ra- ½ " Wr-3/4"	TDA standard blue background, white letters, Avenir Next Pro font, TDA standard logo, green/blue/black difficulty rating wrapped in white, TDA standard graphics in white.
2. Multiple-use 2-track Roaded Hiker/Biker/Equestrian ok	Wy- semi-gloss, color Ra – None R – semi-gloss, color Wr – Semi-gloss and Reflective	Wy - 4"x 12" & 16" x 9" – 5ft (tread to top of post) Ra- None R- 9"x 9" – (1" below Wy sign) Wr – 12"x 12" – 5ft (tread to top of post)	Wy- ½ " Ra- ½ " Ra- ½ " Wr-3/4"	Rectangular, square with rounded edges. Aluminum, full color heat laminate, weather resistant.
3. Single-track Hiker/Equestrian	Wy- semi-gloss, color Ra – semi-gloss, color R – semi-gloss, color Wr – Semi-gloss, color	Wy - 4"x 12" & 16" x 9" – 5ft (tread to top of post) Ra- 4"x 12" – 4ft (tread to top of carsonite) R- 9"x 9" – (1" below Wy sign) Wr – 12"x 12" – 5ft (tread to top of post)	Wy- ½ " Ra- ½ " Ra- ½ " Wr-3/4"	Font information: Trail Name: Avenir Next Bold 98pt Trail Distance: Avenir Next Medium
4. Single-use – Single-track Bike Optimized	Wy- semi-gloss, color Ra – semi-gloss, color R – semi-gloss, color Wr – semi-gloss, color	Wy - 4"x12" – 5ft (tread to top of post) Ra- 4"x12" – 4ft (tread to top of carsonite) R- 9"x 9" – (1" below Wy sign) Wr – 12"x12" – 5ft (tread to top of post)	Wy- ½ " Ra- ½ " Ra- ½ " Wr-3/4"	98pt Directional Travel: "UPHILL TRAVEL ONLY" or "DOWNHILL TRAVEL ONLY" Avenir Next Bold
5. Single-use – Single-track Hike Optimized	Wy- semi-gloss, color Ra – semi-gloss, color R – semi-gloss, color Wr – semi-gloss, color	Wy - 4"x 12" & 16" x 9" – 5ft (tread to top of post) Ra- 4"x 12" – 4ft (tread to top of carsonite) R- 9"x 9" – (1" below Wy sign) Wr – 12"x12" – 5ft (tread to top of post)	Wy- ½ " Ra- ½ " Ra- ½ " Wr-3/4"	32pt All other text is Avenir Next Bold 22pt Material: Aluminum 4"x12" vertical and Aluminum
6. Single-use Equestrian Optimized – within EQ fenced zone.	Wy- none Ra - None R – semi-gloss, color Wr – semi-gloss, color	Wy- None Ra- None R- 9"x 9" – 8ft (tread to top of post) Wr- 12"x 12" – 8ft (tread to top of post)	Wy- ½ " Ra- None Ra- 1 " Wr-1"	Text: Avenir Next Bold; Color: The blue background color is Cyan: 100C, 0M, 0Y, 0K
				Hexidecimal #00AEEF Pantone 299C

Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 4: Typical Details and Design Specifications

Tahoe Donner 10-Year Trail Implementation Plan Typical Detail Summary

Detail #	Detail Name
1	Fiber Rolls
2	Silt Fence
3	Erosion Ctrl, Seeding & Fertilization
4	Boardwalk
5	Puncheon
6	Bridge Plan
7	Culvert
8	Rolling Dip
9	Rock Dissipater
10	Drainage Lense
11	Turnpike
12	Rock Retaining Wall
13	Rock Stairs
14	In-sloped Turn
15	Rolling Crown Switchback Climbing
16	Turn
17	Grade Reversal & Knick
18	Trail Outslope & Sheet Flow
19	Maintenance Access Road
20	Single Track Trails
21	2-Track Seasonal Roads
22	Roadway Crossing
23	Drainage Designs
24	Grade & Contour



TAHOE DONNER 10-YEAR TRAIL IMPLEMENTATION PLAN

TYPICAL DETAILS

TOWN OF TRUCKEE NEVADA COUNTY, CALIFORNIA

Typical Detail Summary





NEVADA COUNTY, CALIFORNIA

NOTES:	
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- 1. * LEGUMES SHALL BE INOCULATED WITH APPROPRIATE BACTERIA AT ACCEPTED RATES AT TIME OF SEEDING.
- 2. SEED SHALL BE APPLIED USING BROADCAST OR HYDROSEED METHOD.
- 3. IF HYDROSEEDED, SEED RATES SHALL BE INCREASED BY 25% AND LEGUMES SHALL BE PROPERLY COATED TO PROTECT BACTERIA: IF BROADCAST. INCREASE STRAW RATE AN ADDITIONAL 1,000 LBS. ON SLOPES GREATER THAN 2:1, OTHER MEASURES SUCH AS NETTING OR TACKIFIERS SHALL BE UTILIZED TO HOLD MATERIALS IN PLACE UNTIL VEGETATION IS ESTABLISHED.
- 4. STRAW SHALL BE CERTIFIED WEED FREE.
- 5. NATIVE PINE NEEDLE MULCH AND/OR WOODCHIP MATERIAL MAY BE USED AS MULCH OR GROUND COVER.
- 6. FERTILIZER MAY BE USED IN LOCATIONS WHERE IT IS EXPECTED TO PROMOTE NATIVE SPECIES GROWTH.

EROSION CONTR	LBS/ACRE	
SEED MIXES	SPECIES NATIVE TO THE TRUCKEE REGION APPROPRIATE FOR THE SITE SUCH AS:	
	WETLAND PENSTEMON RYDBERGII CINQUEFOIL HAIRGRASS TUFTED WILDRYE CREEPING MANNAGRASS TALL BARLEY MEADOW AGROSTIS SCABRA UPLAND SAGEBRUSH BIG MOUNTAIN RABBITBRUSH DOUGLAS-LOW LUPINE ARGENTEUS - COLLECTED BUCKWHEAT SULFER BROME CALIFORNIA SIERRA HAIRGRASS TUFTED SQUIRRELTAIL WILDRYE BLUE WILDRYE CREEPING FLAX BLUE	0.25 0.10 1.00 3.00 0.50 2.00 0.50 0.50 0.25 0.50 0.25 3.00 0.50 2.00 3.00 1.00 0.50
MULCH	WOOD FIBER (ONLY IF HYDROSEEDED). CLEAN STRAW (IF HYDROSEEDED, BLOW STRAW OVER HYDROSEED)	500 3,000



TAHOE DONNER 10-YEAR TRAIL IMPLEMENTATION PLAN

TYPICAL DETAILS

TOWN OF TRUCKEE NEVADA COUNTY, CALIFORNIA

SEEDING & FERTILIZING

DETAIL 3

EROSION CONTROL

SOURCE: NEVADA COUNTY RESOURCE CONSERVATION DISTRICT (MODIFIED)

















ROCK (FLOW & VELOCITY) DISSIPATER

NOTES:

- 1. *VARY DIMENSIONS UNIFORMLY TO ACHIEVE SQ. FOOTAGE SHOWN ON THE PLAN.
- 2. SUGGESTED USE FOR FLOWS GREATER THAN 2 CFS TO RETURN FLOWS TO SHEET FLOW.

TAHOE DONNER 10-YEAR TRAIL IMPLEMENTATION PLAN

N.T.S.



DETAIL 9

TYPICAL DETAILS

TOWN OF TRUCKEE NEVADA COUNTY, CALIFORNIA

ROCK DISSIPATER

SOURCE: KEI













Above: An outsloped trail tread allows water to drain in a gentle, non-erosive manner called "sheet flow." Outslope

TAHOE DONNER 10-YEAR TRAIL IMPLEMENTATION PLAN

TYPICAL DETAILS

TOWN OF TRUCKEE NEVADA COUNTY, CALIFORNIA DETAIL 18

TRAIL OUTSLOPE & SHEET FLOW

SOURCE: IMBA


H:\1PROJ\14-05 TAHOE DONNER\CAD\SH	HEET SET\$\IMPROVEMENT PLANS\D.	Single Track	Multi-Use Hike	r and Mountain Biker	Equestrian and Hiker Only	
		Overview	Multi–use single track trails are designed to rneet the needs of one or rnultiple trail user groups. These standards would be implemented along the trail system and included in trail rnapping and signage. Designing trails for user groups in congested areas provides a safer and overall rnore enjoyable trail experience.			
		Photo				
		Cross Section	vice cle	8' ertical parance 2' - 36" Surface Trail	12' vertical clearance 	
		Tread Width	12	." to 36"	18" to 30"	
		Horizontal Clearance	-	3' to 4'	4' to 8'	
	-	Vertical Clearance		8'	12'	
	-	Surface	Native	soil and rock	Native soil	
	-	Average Grade	<	z/= 10%	= 5%</td	
	-	Max Grade		20%	۲۵% ۲۳ ۵۷	
	-	Climbing True Dadies	3	v7	3 to 8%	
	-	Switchback Turn		21 2' to 8'	2 to 8°	
	-	Radius		2 10 0	5 10 0	
	TAHOE DONNER 10-Y	EAR TRAIL IMPLEMENTATION PLAN			DETAIL 2	
	TYPICAL DETAILS TOWN OF TRUCKEE NEVADA COUNTY, CALIFORNIA				SINGLE TRAC	
HOE DONNER"				SOURCE: TDTMP		

SOURCE: TDTMP

H:\1PROJ\14-05 TAHOE DONNER\CAD\SHEET SET\$\!M	PROVEMENT PLANSIDE	Multi-Use 2-Track E	questrian-Allowed	Multi-Use Wider Single-Track		
	Overview	This is a wide, multi-use access road that allows he clear line of sight, passing and grade.	2-track seasonal orses. The 2-track has g zones, gentle slope	This is a wider single-track trail. ADA multi-use trails meet Universal Design trail standards with passing zones.		
	Photo					
	Cross Section	12'vertical clearance		12'vertical clearance		
	Tread Width	8' to	12'	5' to 6		
	Horizontal Clearance	l2' to	16'	9°		
	Vertical Clearance	12' Native soil and rock		12'		
	Surface			Native soil		
	Average Grade	= 5</td <td>i%</td> <td><!--= 5%</td--><td></td></td>	i%	= 5%</td <td></td>		
	Max Grade	109	Хо	15%		
	Outslope	2 to	5%	3 to 8%		
	Climbing Turn Ra d ius	15' to 20'		7' to 15'		
	Switchback Turn	>/=]	0°	3° to 8°		
ТАНОЕ	DONNER 10-YEAR TRAIL IMPLE	MENTATION PLAN		DETAIL 2	21	
	TYPICAL DETAILS			2-TRACK SEASONAL ROADS & WIDER SINGLE-TRACK TRAILS		
TAHOE DONNER"	e Fornia	SOURCE: TDTMP				

Roadway Crossings Recommended Design Discussion Trail crossings present the potential for trail R44(CA or R5-3 user and motorist conflict. It is for this Crosswalk reason that crossing should be designed so Traillines as that trail users and motorists are aware of each other. Signage and pavement marking should be used to heighten this awareness and minimize conflicts. R1-1 R5-3 NCLION Design Summary WarningSigns Warning markings on the path and roadway should be installed. The Bicycle Warning W11-1 see W2-1 Section (Wll-l) sign alerts the road user to V16-7F (if no stop, yield, or 9B.18 unexpected entries into the roadway by trail signal control on path) t € users, and other crossing activities that might cause conflicts. A supplemental D11-1 Intersection traffic control devices might be STOP plaque with the legend AHEAD or XXX M6-4 or YIELD signs facing shared-use path approaches, roadway approaches, or both, depending on conditions (see Section 98.03) FEET may be used with the Bicycle W11-15/ Warning sign. Bicycle Warning signs, when W11-15P/ W16-7P used at the location of the crossing, shall be supplemented with a diagonal downward Roadwa pointing arrow (W16-7p) plaque to show 1001 the location of the crossing. The R10-4 or R62-Csigns may be used where the crossing of a street by bicyclists is controlled by pedestrian signal indications. Pavement Markings A ladder crosswalk and bicycle crossing stencil installed on roadway 100' in advance of trail crossing are recommended. W11-15 W11-15P 32 W11-1 W16-2aP W16-2aP (optional) (opti onal 8.1 Examples of Signing and Marking for Trail Crossing (Adapted from 2012 CA MUTCD) Guidance • Caltrans Highway Design Manual (Chapter 1000) ٠ MUTCD - California Supplement, Parts 2 and 9 • AASHTO Guide for the Development of Bicycle Facilities **DETAIL 22** TAHOE DONNER 10-YEAR TRAIL IMPLEMENTATION PLAN **TYPICAL DETAILS ROADWAY CROSSING**

TOWN OF TRUCKEE NEVADA COUNTY, CALIFORNIA

TAHOE DONNER

SOURCE: TDTMP





Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 5: Road Maintenance Standards

TDA is adopting the road maintenance standards in the enclosed USDA Forest Service document entitled *Guidelines for Road Maintenance Levels.* United States Department of Agriculture

Forest Service

National Technology & Development Program

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Guidelines for Road Maintenance Levels

Guidelines for Road Maintenance Levels

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INTRODUCTION

The Forest Service, an agency of the U.S. Department of Agriculture, classifies maintenance of National Forest System roads by five levels: 1, 2, 3, 4, and 5. Maintenance level 1 roads are closed to motor vehicle use. Maintenance level 2 roads are maintained for high-clearance vehicles. Maintenance level 3, 4, and 5 roads are maintained for passage by standard passenger cars during the normal season of use.

This guide defines, summarizes, and illustrates the five road maintenance levels to help Forest Service line officers, road managers, transportation engineers, equipment operators, field personnel, partners, and cooperators understand and achieve consistent application of road management and maintenance standards.

This Forest Service guidance serves as a tool for educating the public and other resource personnel within the Forest Service about how the agency's transportation system is managed and maintained.

MAINTENANCE LEVELS

Maintenance levels define the level of service provided by, and maintenance required for, a specific road. Maintenance levels must be consistent with road management objectives and maintenance criteria (Forest Service Handbook (FSH) 7709.59, sec. 62.3).

Road management objectives (RMOs) document the intended purpose and standards for an individual road. RMOs are developed from the appropriate resource and management area direction, standards, and guidelines; access management objectives; type and extent of resource activities; and any environmental constraints and mitigation measures. RMOs contain design, operation, and maintenance criteria (FSH 7709.59, sec. 11).

Maintenance criteria describe how a road is to be maintained (FSH 7709.59, sec. 61). The criteria include:

- 1. Requirements for the protection of adjacent resources or improvements, such as streams, lakes, vegetation, and facilities.
- 2. Smoothness required for desired operating speed and for user comfort and convenience. The level of smoothness should be consistent with the road design.
- 3. Acceptability of dust.
- 4. Season of use and approximate volumes and types of traffic.
- 5. Current and future road operation and maintenance strategies.

Maintenance activities planned or performed on a road must be consistent with the RMO.

FACTORS

National Forest System roads should be operated and maintained in a manner that provides for user safety, supports resource programs, and implements management area direction; protects the road investment, the environment, and adjacent resources; and meets applicable air and water quality standards.

Consider the following factors when selecting maintenance levels (FSH 7709.59, sec. 62.31):

- 1. Road management objectives.
- 2. Road investment protection requirements.
- 3. Service life and current operational status.
- 4. User safety.
- 5. Volume, type, class, and composition of traffic.
- 6. Surface type.
- 7. Travel speed.
- 8. User comfort and convenience.
- 9. Functional classification.

Roads may be maintained currently at one level and planned to be maintained at a different level at some future date. The operational maintenance level is the maintenance level currently assigned to a road considering today's needs, road condition, budget constraints, and environmental concerns; in other words, it defines the level to which the road is being maintained currently. The objective maintenance level is the maintenance level to be assigned at a future date considering future road management objectives, traffic needs, budget constraints, and environmental concerns. The objective maintenance level may be the same as, or higher or lower than, the operational maintenance level. The transition from operational maintenance level to objective maintenance level may depend on reconstruction or disinvestment.

TRAFFIC MANAGEMENT STRATEGIES

The section for traffic management strategies has been removed from this guide. Refer to the companion document "Guidelines for Traffic Management Strategies" (Apodaca et al., in preparation) for more information on traffic management strategies.

ROAD STRUCTURE TERMS

Maintenance activities for the entire road template are discussed in this guide. For this guide, the following diagram illustrates and defines the terms used.



Note: Shapes and dimensions will vary to fit local conditions. See drawings for typical sections. X and Y denote clearing outside of the final design cross section.



FOREST SERVICE ROAD MAINTENANCE LEVELS (5 through 1) Road Maintenance Level 5

Road maintenance level 5 is defined in the FSH 7709.59, sec. 62.32 as:

"Assigned to roads that provide a high degree of user comfort and convenience. These roads are normally double lane, paved facilities. Some may be aggregate surfaced and dust abated. "Manual on Uniform Traffic Control Devices" is applicable. The appropriate traffic management strategy is "encourage." "

Maintenance level 5 roads have the following attributes:

- Provide a high degree of user comfort and convenience for prudent drivers in a standard passenger car during the normal season of use.
- Inspire confidence in the traveler that hazards will be few and identified well in advance. The roadway is visually pleasing.
- Follow the requirements of the "Engineering Manual (EM)-7100-15" and the "Manual on Uniform Traffic Control Devices" (MUTCD) for signs and markings.
- · Have high traffic volume and speeds.
- Typically, connect to State and county roads.
- · Provide drainage via culverts.
- · Are usually an arterial or collector.
- · Include some developed recreation roads.
- · Have a smooth road surface, often paved or chip-sealed with lane striping.
- · May be aggregate surfaced and stabilized using a dust abatement product.
- · Have defined shoulders.
- Normally, are double lane.

Level 5

Maintenance level 5 prescription guidelines:

Traveled way and shoulder. Maintain to provide for the protection of investment and resource values, and for a high degree of user comfort and convenience for all motor vehicles including standard passenger cars. Aggregate surfaced roads should be stabilized using a dust abatement product, such as magnesium chloride. Shoulders usually are constructed as a part of the road template.

Drainage. Drain as necessary to keep drainage facilities functional and prevent unacceptable environmental damage while maintaining a high degree of user comfort and convenience.

Roadway. Control vegetation to provide sight distance. Repair and/or remove slides and slumps to provide passage by prudent drivers in all motor vehicles, including standard passenger cars and to control resource damage.

Roadside. Clean up litter in accordance with road management objectives. Remove danger trees and maintain vegetation as required. Cut fallen trees at the clearing limits. Remove logs and debris.

Structures. Maintain all structures to provide for passage of planned traffic and to preserve structures for future use.

Traffic service. Install and maintain appropriate route markers, warning, regulatory, and guide signs, and other traffic control devices as warranted in a sign plan. Maintain signs at features and points of interest along the road that are shown on forest maps or recognized locally. Maintain centerlines, edge stripes, and other pavement and curb markings as needed.



Figure 1—Maintenance level 5 double-lane road with centerlines and edge markings, a hot-mix asphalt surface, and asphalt- and rock-stabilized shoulders. If centerline markings are placed on a road, the no-passing zone markings also shall be placed as determined by an engineering study.





Figure 2—Maintenance level 5 double-lane road with no-passing zone markings, an asphalt surface, and unpaved shoulders. Grass on shoulders is acceptable and helps with stabilization. Leaving vegetation that does not interfere with sight distance helps stabilize the backslope. As potholes and depressions begin to develop they should be corrected to continue providing a high degree of user comfort and convenience. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study. It is acceptable to mark a double-lane road entirely with no-passing zone markings as shown in the photo.





Figure 3—Maintenance level 5 double-lane road with an asphalt surface and grass on the shoulders. Speed limits may be posted as necessary with a Code of Federal Regulations (CFR) order after completion of an engineering study. Grass on shoulders is acceptable and helps with stabilization. Pavement cracking should be monitored so it can be repaired before it has a negative effect on the high level of user comfort and convenience expected on a maintenance level 5 road. Edge markings are not required on a paved road. Ditches are kept clean to facilitate drainage.



Figure 4—Maintenance level 5 double-lane road with no-passing zone and edge markings, an asphalt surface, and asphalt shoulders. The road is free of litter and the maintenance of the roadside vegetation provides adequate sight distance. Remove danger trees as required. It is acceptable to mark a double-lane road entirely with no-passing zone markings as shown in the photo.





Figure 5—Maintenance level 5 double-lane road with no centerline, no edge marking, a chip-seal surface, and unpaved shoulders. Grass on shoulders is acceptable and helps with stabilization. It is acceptable not to place centerline and/or edge markings on a double-lane nonurban road.



Road Maintenance Level 4

Road maintenance level 4 is defined in the FSH 7709.59, sec. 62.32 as:

"Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated. "Manual on Uniform Traffic Control Devices" is applicable. The most appropriate traffic management strategy is 'encourage'. However, the 'prohibit' strategy may apply to specific classes of vehicles or users at certain times."

Maintenance level 4 roads have the following attributes:

• Provide a moderate degree of user comfort and convenience at moderate travel speeds for prudent drivers in a standard passenger car during normal season of use.

- Are subject to the requirements of EM-7100-15 and MUTCD for signs and markings.
- · Have moderate traffic volume and speeds.
- · May connect to State and county roads.
- May include some developed recreation roads.
- Provide drainage via culverts.
- · Usually are collectors.
- Typically, are aggregate surfaced and stabilized using a dust abatement product.
- · May be paved.
- Typically, are double lane.
- · May be single lane with turnouts visible from either direction.

Maintenance level 4 prescription guidelines:

Traveled way and shoulder. Maintain to provide for moderate degree of user comfort and convenience for standard passenger car, and for protection of investment and resource values. Replace surfacing to the depth required for blade maintenance and to prevent wear of the base course. Abate dust when needed for traffic safety and environmental protection. Shoulders usually are part of the designed road-bed, and surfaced with same material as the driving surface.

Drainage. Drain as necessary to keep drainage facilities functional and prevent unacceptable environmental damage while maintaining a moderate degree of user comfort and convenience at moderate travel speeds.

Roadway. Control vegetation to provide sight distance. Repair and/or remove slides and slumps to provide passage by prudent drivers in standard passenger cars and to control resource damage.

Roadside. Clean up litter in accordance with road management objectives. Remove danger trees and maintain vegetation as required. Cut fallen trees at the clearing limits. Remove logs and debris.

Structure. Maintain all structures to provide for passage of planned traffic and to preserve structures for future use.

Traffic service. Install and maintain appropriate route markers, warning, regulatory, and guide signs, and other traffic control devices as warranted in a sign plan. Maintain centerlines, edge stripes, and other pavement and curb markings as needed.





Figure 6—Maintenance level 4 double-lane road with a gravel surface and gravel shoulders. The crown is effective for gravel-surfaced roads to facilitate drainage and maintain a fully functioning surface. This road has been properly bladed to provide a moderate degree of user comfort and convenience. Ditches are kept clean to facilitate drainage. The road is free of litter and the maintenance of the roadside vegetation provides adequate sight distance. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study. Heavy traffic may require dust abatement to maintain standard.





Figure 7—Maintenance level 4 double-lane road with a chip-seal surface and no shoulders. Ditches are kept clean to facilitate drainage. The road is free of litter, and the maintenance of the roadside vegetation provides adequate sight distance. Centerline and edge markings are not required on double-lane paved nonurban roads. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study.



Figure 8—Maintenance level 4 single-lane road with asphalt surface, no shoulders, paved turnouts, and edge markings. It may be desirable to place edge markings when the road has narrow lanes and shoulders as shown in the photo. If it has been determined that edge markings are necessary they should be maintained appropriately. A broken white lane line, with entry and departure breaks, may be used at turnouts to provide continuity of guidance and define the turnout lane. If pavement width is less than required for the travel lane and turnout, mark an uninterrupted uniform lane width without identifying a turnout. The road is free of litter and the maintenance of the roadside vegetation provides adequate sight distance. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study.





Figure 9—Maintenance level 4 single-lane road with a gravel surface and gravel shoulders. Maintain a proper crown, repair potholes, and remove washboarding to facilitate drainage and to maintain a moderate degree of user comfort and convenience at moderate travel speeds. Maintain ditches to facilitate drainage. The road is free of litter and the maintenance of the roadside vegetation provides adequate sight distance. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study.



Figure 10—Maintenance level 4 single-lane road with a chip-seal surface and ditches. Potholes and depressions should be monitored and repaired before they adversely affect the user's comfort and/or convenience expected on a maintenance level 4 road. The ditches in this photo are beginning to become overgrown with vegetation, and they should be maintained properly to facilitate drainage. The road is free of litter, and the maintenance of the roadside vegetation provides adequate sight distance. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study.





Figure 11—Maintenance level 4 single-lane road with a gravel surface and gravel shoulders with ditches. The ditches have been cleaned out to facilitate proper drainage. Maintain proper crown, repair potholes, and remove washboarding to facilitate drainage and to maintain a moderate degree of user comfort and convenience at moderate travel speeds. Replace surfacing to the depth required for blade maintenance and to prevent wear of the base course. The roadside vegetation is becoming overgrown and should be maintained to provide adequate sight distance.

Road Maintenance Level 3

Road maintenance level 3 is defined in the FSH 7709.59, sec. 62.32 as:

"Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. The "Manual on Uniform Traffic Control Devices" (MUTCD) is applicable. Warning signs and traffic control devices are provided to alert motorists of situations that may violate expectations.

"Roads in this maintenance level are typically low speed with single lanes and turnouts. Appropriate traffic management strategies are either 'encourage' or 'accept.' Discourage or prohibit strategies may be employed for certain classes of vehicles or users.

Maintenance level 3 roads have the following attributes:

- Are passable to prudent drivers in passenger cars during the normal season of use.
- · Usually do not consider user comfort and convenience priorities.
- Are subject to the requirements of EM-7100-15 and MUTCD for signs.
- Are typically, single lane with turnouts visible from either direction.
- Typically, must be driven at low speeds.
- May be local or collectors.
- Have low- to moderate-traffic volume.
- Typically, connect to arterial and collector roads or other maintenance level 3 roads.
- · May include some dispersed recreation roads.
- Provide drainage via a combination of dips and culverts.
- · Typically, may have potholes or washboarding.

Maintenance level 3 prescription guidelines:

Traveled way and shoulder. Maintain to provide travel by prudent drivers in standard passenger cars during the normal season of use. Some surface roughness is acceptable. User comfort and convenience is a low priority. Maintain a traveled way crown or cross slope to provide adequate drainage. Replace the base course and surfacing as needed to protect the resources.

Drainage. Drain as necessary to keep drainage facilities functional and prevent unacceptable environmental damage while maintaining passage for prudent drivers in standard passenger cars.

Roadway. Control the vegetation to provide sight distance. Repair and/or remove slides and slumps to provide passage by prudent drivers in standard passenger cars and to control resource damage.

Roadside. Clean up litter in accordance with road management objectives. Remove danger trees and maintain vegetation as required. Remove logs and debris when interfering with drainage or operation of maintenance equipment.

Structure. Maintain all structures to provide for passage of planned traffic and to preserve structures for future use.

Traffic service. Install and maintain appropriate route markers, warning, regulatory, and guide signs and other traffic control devices as warranted in a sign plan.





Figure 12—Maintenance level 3 single-lane road with a gravel surface and gravel shoulders. Road surface should be maintained to provide adequate drainage and to provide for travel by prudent drivers in standard passenger cars and not to increase the user comfort and convenience above that expected for a maintenance level 3 road. User comfort and convenience are not considered priorities. The base course and surfacing should be replaced as needed to protect the resource.





Figure 13—Maintenance level 3 single-lane road with a gravel surface and gravel shoulders. Maintain the crown and keep the drainage functional by properly maintaining the ditches. In the road shown above, removing the berms from the road edge and removing vegetation and other material that would impede the flow of water off the road and through the ditch would improve the drainage. The road is free of litter and the maintenance of the roadside vegetation provides adequate sight distance. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study.



Figure 14—Maintenance level 3 single-lane road with a gravel surface and gravel shoulders. Surface roughness is acceptable if travel by prudent drivers in standard passenger cars is provided. Vegetation up to the road edge is acceptable if it does not interfere with adequate sight distance needed for a maintenance level 3 road. Brushing may be necessary on this road to provide adequate sight distance. The base course and surfacing should be replaced as needed to protect the resource.





Figure 15—Maintenance level 3 single-lane road with a gravel surface, no shoulders, and a cross-drain dip. Drainage facilities, such as drain dips, should be maintained so they are functional to prevent unacceptable environmental and resource damage and to provide travel by prudent drivers in standard passenger cars. Surface roughness is acceptable if travel by prudent drivers in standard passenger cars is provided. Curves and other hazards should be marked with warning signs if advised by a documented engineering judgment or engineering study.



Figure 16—Maintenance level 3 double-lane road with a native surface and shoulders. Maintain road surface to provide adequate drainage. The road is free of litter. Maintenance of roadside vegetation provides adequate sight distance. Surface roughness and rutting is acceptable if maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities.




Figure 17—Maintenance level 3 single-lane road with a gravel surface and no shoulders. Maintain road surface to provide adequate drainage. Surface roughness is acceptable if maintained for travel by a prudent driver in a standard passenger car. Remove berms and vegetation from the middle of the road that would impede travel by a prudent driver in a standard passenger car. Maintain drainage facilities, such as culverts and drainage pipes, so they are functional and prevent unacceptable environmental and resource damage.

Road Maintenance Level 2

Road maintenance level 2 is defined in the FSH 7709.59, sec. 62.32 as:

"Assigned to roads open for use by high-clearance vehicles. Passenger car traffic, user comfort, and user convenience are not considerations. Warning signs and traffic control devices are not provided with the exception that some signing, such as W-18-1 "No Traffic Signs" may be posted at intersections. Motorists should have no expectations of being alerted to potential hazards while driving these roads. Traffic normally is minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level."

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Appropriate traffic management strategies are encourage, accept, discourage, and prohibit.

Maintenance level 2 roads have the following attributes:

- · Are maintained for use by high-clearance vehicles and not suitable for passenger cars.
- Do not consider passenger car traffic, user comfort, and user convenience.
- · Have low traffic volume and low speed.
- Typically, are local roads that connect to collectors and other local roads.
- Have dips or cross drains as the preferred drainage treatments.
- Avoid the use of culverts, arches, and bridges when possible.
- Typically, have very few, if any, signs or other traffic control devices.
- Are subject to the requirements of EM-7100-15 and MUTCD for all signs.
- · Do not consider surface smoothness.
- · Do not always provide motorists with alerts to potential hazards.
- · May not be passable during periods of inclement weather.

Maintenance level 2 prescription guidelines:

Traveled way. Log out and brush only as necessary to provide passage for high-clearance vehicles. Maintain road prism for drainage and to provide for passage of high-clearance vehicles. Traveled way should only be bladed to maintain drainage functionality and not to provide a smooth surface for passenger cars.

Shoulder. Shoulder is usually not defined and maintenance is not required unless necessary to maintain structural integrity of the roadway, drainage functionality, or access by high-clearance vehicles.

Drainage. Drain as necessary to keep drainage facilities functional and prevent unacceptable environmental damage while maintaining passage for high-clearance vehicles.

Roadway. Remove or rampover slides and repair slumps as needed to provide access for highclearance vehicles and to control resource damage.

Roadside. Generally no work is required unless necessary to provide clearance for existing traffic. Fallen trees may be left in place if not an obstacle to safe passage of intended traffic.

Structure. Maintain all structures to provide for the passage of high-clearance vehicles and to protect natural resources.

Traffic service. Install and maintain route markers. Maintain warning, regulatory, and guide signs, and other traffic control devices as warranted in the sign plan to provide for existing traffic and the appropriate traffic management strategy. Generally, few, if any, signs or other traffic control devices are required.





Figure 18—Maintenance level 2 single-lane road with pit-run surface. This road is currently passable by highclearance vehicles at low speeds and there is no evidence of significant erosion. No immediate maintenance is needed and future surface and shoulder maintenance activities should be limited to maintaining passage by high-clearance vehicles and to keep drainage features functional.





Figure 19—Maintenance level 2 single-lane road with native surface. This road is passable by high-clearance vehicles at low speeds even though some rutting of the traveled way is evident. Rutting on the road surface should be corrected at the next scheduled maintenance if it begins to cause unacceptable environmental damage.





Figure 20—Maintenance level 2 single-lane road with pit-run surface. The surface on this road is maintained adequately for high-clearance vehicles at low speed, and there is no evidence of erosion. However, the vegetation on the shoulder is beginning to encroach onto the traveled way and should be maintained to allow for access by high-clearance vehicles and maintenance equipment. The grass growing on the road surface is acceptable since it is not affecting passage.





Figure 21—Maintenance level 2 single-lane road with native surface. While the surface on this road is extremely rough, it is still passable by high-clearance vehicles at low speeds. Generally, no additional surface maintenance is required unless unacceptable environmental damage due to erosion or widening occurs.



Figure 22—Maintenance level 2 single-lane road with native surface. This road surface is passable by highclearance vehicles at low speeds and does not require surface maintenance unless significant erosion is occurring. Rutting on the road surface should be corrected at the next scheduled maintenance if it begins to cause unacceptable environmental damage. There is significant vegetation encroachment that could make the road impassable. The encroaching vegetation should be logged out and brushed to provide passage by high-clearance vehicles.





Figure 23—Maintenance level 2 single-lane road with native surfacing that has motor vehicle use restricted by a gate. The surface and shoulders of this maintenance level 2 road are adequate for access by highclearance vehicles at low speeds, and there is no evidence of significant environmental damage. A gate is an appropriate closure devise for maintenance level 2 roads that temporarily restrict all motor vehicle use or that are managed as administrative use only roads. If motorized or nonmotorized use, such as bicycles, occurs behind a gate, the back side may require signing also.

Road Maintenance Level 1

Road management level 1 is defined in the FSH 7709.59, sec. 62.32 as:

"These are roads that have been placed in storage between intermittent uses. The period of storage must exceed 1 year. Basic custodial maintenance is performed to prevent damage to adjacent resources and to perpetuate the road for future resource management needs. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level."

"Roads receiving level 1 maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open for traffic."

The only traffic management strategy that is appropriate for maintenance level 1 roads is prohibit.

Maintenance level 1 roads have the following attributes:

- They are in a period of storage between intermittent uses for periods exceeding 1 year.
- They are not designated for motor vehicles as a road and not shown as a road on the motor vehicle use map.
- They may be managed and designated as a motorized trail and shown on motor vehicle use maps as a motorized trail.
- They may be available and suitable for nonmotorized uses.
- As a road, motor vehicular traffic is prohibited, including administrative motor vehicle traffic.
- The road entrance is physically blocked or disguised.
- Emphasis is given to maintaining drainage facilities and runoff patterns.
- Culverts may be removed.
- Basic custodial maintenance is performed to prevent damage to adjacent resources and to perpetuate the road for future resource management needs.
- Planned road deterioration may occur.
- Route markers should be installed but need not be visible from an open road at the entrance.
- No road maintenance other than a condition survey may be required if no potential exists for resource damage.



Level 1

Maintenance level 1 prescription guidelines:

Traveled way and shoulder. Generally, no work is required.

Drainage. Drain as necessary to keep drainage facilities functional and prevent unacceptable environmental damage. Culverts and fills may be removed.

Roadway. Perform only that work needed to facilitate restoration of the roadway for future use and to alleviate erosion or sedimentation on or from the roadway or roadsides. Defer the removal of brush and trees from the roadway until the road is opened for traffic at a future date. Repair slides and slumps only if potential for loss of road investment or environmental damage is determined to be at an unacceptable risk. Motor vehicle traffic is not a consideration.

Roadside. Generally, no work is required.

Structure. Repair only those items that cannot be deferred, and that are necessary to protect investment and preserve structural integrity.

Traffic service. Physically block roadway with a barrier other than a gate. Ensure that physical closure devices and/or appropriate signing are in place and are functional at the road entrance. Install and maintain route markers so that National Forest System roads are clearly identified for administrative purposes. Defer the maintenance of all other signs within the closure until the road is opened. Consider removing signs if road is planned for a storage period of more than 5 years. Correct deferred maintenance items prior to opening the road to traffic.



Figure 24—Maintenance level 1 road that has been blocked to motor vehicles by an earth mound. Design closure features to avoid creating hidden hazards to users, such as snowmobilers and bicyclists. An example of a hidden hazard is deep trenching behind the earth mound.



Figure 25—Maintenance level 1 road that has been blocked to motor vehicle traffic by an earth mound. Constructing a berm in a relatively flat terrain (i.e., minimal cut and fill) is a challenge. Periodic maintenance of the closure may be needed to ensure that it is an effective closure. Design the closure features to avoid creating hidden hazards to users, such as snowmobilers and bicyclists. An example of a hidden hazard is deep trenching behind the earth mound.





Figure 26—Maintenance level 1 road that has been blocked to motor vehicles by boulders. Partially bury boulders and arrange them in a nonlinear pattern for a more natural look. Boulders may not be an effective natural barrier if adjacent vegetation is grass and light brush. Vertical route markers may be used but are not prominently displayed.



Figure 27—Maintenance level 1 road that has been blocked to highway vehicle traffic by posts and includes a sign prohibiting motorized vehicles. Use type 2 object markers if the posts present a hazard. Wooden posts are easily cut or damaged and removed and may not be an effective closure. Use posts in areas that are patrolled on a regular basis, or near high-use areas. Road restricted signs, with or without reasons, may be used. Route numbers should be displayed on a separate vertical marker from the restriction sign.





Figure 28—Maintenance level 1 road that has been blocked to motor vehicles by natural vegetative overgrowth. Camouflage is a good alternative when there is limited availability of large rocks or down trees to use as a barrier. Vegetation treatment, such as planting, may be an effective solution in regions with suitable growing conditions.



Figure 29—Maintenance level 1 road with motor vehicles eliminated by a vegetated earth mound, which both disguises and physically blocks the road.





Figure 30 - Maintenance level 1 road with motor vehicle use restricted by a barricade. The road is closed to all motor vehicle use, including administrative use, for a period of more than 1 year. Gates are not appropriate on level 1 roads. Appropriate travel management signs may be placed on the barricade to display restrictions and/or reasons for closures. If motorized or nonmotorized use, such as bicycles, occurs behind a barrier, the back side also will require signing.

USEFUL REFERENCES

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Sign and Poster Guidelines for the Forest Service 2005 edition, Web site <<u>http://fsweb.wo.fs.fed.us/eng/roads_trails/signs_05/</u>>.

Highway Safety Act, Title 23 CFR Web site <<u>http://www.nhtsa.dot.gov/nhtsa/whatsup/tea21/GrantMan/HTML/07_Sect402Leg23USC_Chap4.</u> <u>html</u>>.

ADDITIONAL INFORMATION

For additional information on Forest Service road maintenance levels, contact Vincent Barandino at SDTDC by phone: 909–599–1267, ext. 218, or email <<u>vbarandino@fs.fed.us</u>>.

SDTDC national publications are available on the Internet at <<u>http://www.fs.fed.us/eng/pubs/</u>>.

Forest Service and U.S. Department of the Interior Bureau of Land Management employees also can view videos, CD's and SDTDC's individual project pages on their internal computer network at <<u>http://fsweb.sdtdc.</u> wo.fs.fed.us/>.

Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 6: Bi- Annual Trail Condition Survey Form

Tahoe Donner Association Bi- Annual Trail Condition Survey Form

Trail Name Use Designation:	Survey Date Trail Designed Use:	Surveyor Name Trail Difficulty Rating:	Trail
Condition Description		Comments	Date Action Completed
Hazard Trees Present – YES NO gps location and description of standir tree/ comments:	g dead		
Downed Trees over tread surfa NO Total Number	ce – YES		
Immediate Danger present fror overhead hazard trees or leane NO	n ers – YES		
Culverts plugged – YES NO NA			
Berm or Climbing Turn Condition Needs reshaping, braking bumps prese NO Be specific of location.	ons - ent, YES		
Sluffing Backslope – YES NO			
Missing or Damaged Signs – YE	S NO		
Tread Damage present – YES No	D I		
rutting, cupping, water collecting on tr from horses, present, breaking bumps cutting switchbacks.	ail, damage , are people		
Brush Growth exceeding standa	ards – YES NO		
bushes encroaching on tread surface, handlebars, too narrow for horses. See for designated use standards.	nitting 2 TMP		
Overhead Branches less than 12feet – YES NO			
Drains Clogged or Full – YES NC			
Natural Trail Features Safe and YES NO	Intact		
rock rolls, log rides, plate rock in tread for erosion prevention.	surface		

Constructed Features Safe and Intact YES NO	
Bridges, rock retaining walls, wood fencing, rebar, wood retaining wall.	
Does Trail cross a creek with running water YES NO	
Needs improvements, reroute, trail hardening, visual erosion or sediment movement.	

Tahoe Donner Association Bi- Annual Trail Condition Survey Form

Instructions for Trail Condition Survey

- 1. Fill out trail designation, designed use, difficulty rating based off the TMO's.
- 2. Circle Yes No or NA for each condition survey line.
- 3. Provide photos if needed. Please date and time stamp, be specific of exact location photo was taken. Highlight on map if needed.
- 4. Describe in detail the condition in the comment's column or write "no issue to report" if there is no issue. 5. Date action completed- This will be the date in which the trail crew has completed the necessary maintenance. The trails manager will use this form to document needed maintenance to provide priority lists together for the trail crew.
- 6. If safety is a concern, does maintenance need to happen immediately or placed on the to do list. Comment appropriately and report to the trails manager immediately.
- 7. This form is to be completed twice a year. Once in the spring and once before snow fall.

ADDITIONAL COMMENTS BELOW

Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 7: Environmental Scoping Checklist

8.1 Agency Permitting Overview

The construction and maintenance of hiking trails on private land may be exempt from the California Environmental Quality Act (CEQA) because they typically do not involve discretionary government approvals, public funding, or significant environmental impacts. Under CEQA Guidelines § 15378(b)(5), projects that do not require government agency approval or funding are not considered "projects" under CEQA and are therefore exempt from environmental review. Additionally, if CEQA was applicable, these activities would likely qualify for a Class 4 Categorical Exemption (Minor Alterations to Land) under CEQA Guidelines § 15304(h), which can allow for the creation and maintenance of pedestrian trails where there is no significant environmental impact.

Local regulations further support this exemption. Nevada County's grading ordinance (Chapter 12, Section 14.12.030) states that land disturbance involving the burial of less than 10,000 square feet of vegetation on slopes 10% or steeper, or up to one acre on slopes flatter than 10%, does not require a grading permit. Since the construction and maintenance of hiking trails generally fall within these limits, they would be exempt from additional local grading permit requirements.

Furthermore, these projects are unlikely to have significant environmental impacts on natural resources. Minimal grading and vegetation removal typically ensure that the land remains stable and that ecosystems are not disrupted. However, in cases where potential impacts to natural resources are identified, TDA will implement appropriate resource protection measures to

mitigate any effects. This proactive approach ensures that trail construction and maintenance remain environmentally responsible while preserving access to recreational opportunities. In the absence of significant environmental effects, government funding, or discretionary approvals, most construction and maintenance of hiking trails on private land are exempt from CEQA requirements.

maintenance protocols.

8.2 Environmental Analysis and Protections

The TDA trail standards are based on USFS guidelines, modified for Tahoe Donner's specific needs. They align with the Town's trail design guidelines and incorporate sustainability principles from the International Mountain Biking Association's *Trail Solutions*. This 2025 TIP does not reinvent TMP standards but integrates and, where needed, expands on them in Appendix 4 to ensure sustainable design and construction.

Sustainability is a top priority, emphasizing runoff, erosion control, and environmental sensitivity to create low-maintenance trails. The primary goal is balancing environmental protection with user enjoyment. Water resource protection is central to this approach, as detailed in Section 7. This TIP aligns with the Town of Truckee and Nevada County General Plans, both of which emphasize environmental compatibility in trail and roadway development.

8.3 Type & Scope of Environmental Analysis

The 2016 5YIP found that five specific resource standard categories are applicable TDA trail work (TDA 5YIP, p 7): significant cultural resources, floodplains, rare and endangered species

and their habitat, steep slopes/high erosion potential, watercourses, wetlands, and riparian areas. TDA will continue to acknowledge and protect these resources for the 2025 TIP. Appendix 6 contains the hydrological, biological and archaeological considerations for protecting natural and cultural resources. TDA's intent is that any given impact to the environment is addressed and, when and where necessary, mitigated to less than significant levels. These considerations assess the likelihood of existence and prescribing protections and subsequent courses-of-action needed to insure that implementation of any given project either has 'no impact' (always the preferred approach) or, when an environmental impact may occur, mitigating this impact to a less than significant level as demonstrated and quantified during the construction-level design and permitting necessary for all of the 51 individual projects proposed. These environmental considerations are also intended for use by each of the two jurisdictions in support of the CEQA review process. These considerations are proposed as an integral component of this 2025 TIP, and use with the CEQA assessment and document preparation would be reasonable and expected for the purpose of consistency, ease and comprehensiveness in ensuring that needed permit procedures are followed, specific impacts identified and quantified, and mitigation defined and implemented at the construction and permitting level of project implementation.

8.4 Proposed Protection Measures & Protocols

The Biological Constraints Report, Hydrologic Analysis and Recommendations Report, and Phase 1A Historical and Archaeological Resources Inventory Report were originally prepared to support the 2016 5YIP by assessing environmental, hydrologic, and cultural resource impacts associated with proposed trail improvements. These reports provided the necessary evaluations and compliance measures to authorize trail maintenance, rehabilitation, and new construction while ensuring the protection of biological, water, and cultural resources. As the 2025 TIP is developed, these reports remain highly relevant, as the new plan encompasses the same general project area and involves similar types of trail maintenance and construction activities. The findings, impact assessments, and resource protection measures outlined in these studies continue to provide a critical framework for environmental compliance and sustainable trail development, ensuring that future projects adhere to best management practices and regulatory requirements while minimizing impacts on sensitive natural and historical resources.

8.4.1 Biological Protection Measures

The Biological Constraints Report for the 2016 5YIP was developed to assess potential environmental impacts associated with proposed trail improvements. The report was prepared through a comprehensive process that included a background review of biological data, a series of field assessments, and an analysis of regulatory requirements. Biologists conducted literature reviews, analyzed existing datasets, and performed on-site evaluations to document plant communities, wildlife habitats, and jurisdictional wetlands. The findings were then compiled in alignment with Nevada County Biological Inventory Guidelines and other regulatory standards to ensure the assessment met agency expectations for environmental compliance.

The report was developed in coordination with several regulatory agencies responsible for protecting biological resources. These include the U.S. Army Corps of Engineers (USACE) for wetland and waterway jurisdiction, the California Department of Fish and Wildlife (CDFW) for wildlife protection and habitat conservation, and the Lahontan Regional Water Quality Control Board for water quality and resource management under the Clean Water Act and Porter-Cologne Water Quality Control Act. Local agencies, such as Nevada County and the Town of Truckee, also play a role in the project approval process by ensuring that the trail system complies with regional environmental policies.

To ensure that biological resources are protected during project implementation, the report outlines resource protection measures and best management practices (BMPs) that must be followed. These measures are designed to minimize impacts on sensitive habitats, control erosion, and prevent the spread of invasive species. When the specific procedures are followed, implementation of 2025 TIP should not have a detrimental impact to biological resources (Biological Constraints Report 2016, p 24). Project managers and construction crews will need to integrate these practices into the planning and execution of trail improvements to ensure that work is conducted with minimal environmental disturbance. This approach will help preserve the ecological integrity of the area while still allowing for necessary trail development and maintenance.

Beyond its immediate application, this report serves as a valuable guidance document for future project implementation. The biological assessments and regulatory considerations outlined in the report provide a framework for future environmental reviews, ensuring that any new trail modifications continue to align with conservation priorities. By following the recommended protection measures from this report, TDA can proactively address potential environmental concerns, streamline the permitting process, and promote responsible land management in for the 2025 TIP.

8.4.2 Hydrological Protection Measures

The Hydrologic Analysis and Recommendations Report for the Tahoe Donner 5-Year Trails Implementation Plan was developed to assess the potential hydrologic and drainage impacts associated with proposed trail improvements. The report was created through a combination of field assessments, hydrologic modeling, and regulatory review. Balance Hydrologics, Inc. collaborated with a multidisciplinary project team, including planners, biologists, archaeologists, and engineers, to evaluate existing watershed conditions, identify hydrologic constraints, and propose strategies to minimize environmental impacts. The study incorporated LiDAR-based digital elevation modeling, field reconnaissance, and GIS mapping to analyze drainage patterns, soil characteristics, and floodplain functions, ensuring the findings were comprehensive and data-driven.

To comply with federal, state, and local regulatory requirements, the study aligned with the policies of several key agencies. The U.S. Army Corps of Engineers (USACE) oversees wetland and stream impact regulations under the Clean Water Act, while the California Department of Fish and Wildlife (CDFW) enforces protection of aquatic habitats and stream channels. The Lahontan Regional Water Quality Control Board ensures that water quality standards are met, particularly concerning erosion control and sediment transport to the Truckee River watershed, which is listed as impaired under the Clean Water Act's Section 303(d) for excessive sediment. Local compliance was also required with the Town of Truckee and Nevada County's environmental policies, including stormwater management and resource protection guidelines.

The report outlines essential resource protection measures and best management practices (BMPs) to be integrated into the trail implementation process. These measures aim to prevent erosion, protect water quality, and maintain hydrologic function by minimizing disturbance to streams, wetlands, and groundwater recharge areas. Additionally, the recommendations focus on trail design modifications, improved drainage structures, and restoration efforts to counteract past land use impacts such as logging, grazing, and unregulated trail development. Proper implementation of these practices is crucial for ensuring that the trail system remains sustainable while preserving hydrologic stability and ecosystem health.

Beyond this specific project, the findings and recommendations in this report provide a valuable framework for future trail development and land management decisions. By utilizing the hydrologic assessments, GIS-based drainage models, and best management guidelines outlined in the study, future projects can streamline environmental compliance, enhance watershed resilience, and improve long-term sustainability. The report also establishes a foundation for continued monitoring and adaptive management, ensuring that as climatic and hydrologic conditions evolve, the Tahoe Donner trail network remains environmentally responsible and ecologically sound.

8.4.3 Archaeological Protection Measures

The Phase 1A Historical and Archaeological Resources Inventory Report for the Tahoe Donner Trails Project – Five-Year Implementation Plan was developed to assess historical and archaeological resources within the project area and determine necessary protocols for resource protection. The report was prepared through a multi-step research and assessment process, including archival reviews, consultations with Native American representatives, and field surveys. Archival research was conducted using historical maps, records from the North Central Information Center, and input from local historical organizations. Native American coordination involved outreach to the Washoe Tribe of Nevada and California, who provided insight into potential cultural resources and their significance. Field assessments identified known and potential historical sites, including prehistoric artifacts, early logging infrastructure, and Euroamerican settlement features.

Compliance with state and local agency requirements was a key component of the report. The California Environmental Quality Act (CEQA) mandates that projects consider potential impacts on significant historical and archaeological resources. The Nevada County Zoning Ordinance and Land Use and Development Code also require site-specific evaluations to protect cultural resources. Additionally, the report aligns with the California State Historic Preservation Office (SHPO) and the National Register of Historic Places (NRHP) guidelines for determining resource eligibility and preservation requirements. The report was designed to assist Nevada County and the Town of Truckee, which serve as the lead agencies in reviewing and permitting the project.

To ensure that historical and archaeological resources are preserved during project implementation, the report recommends a set of resource protection measures and best management practices (BMPs). These measures are designed to prevent disturbance to sensitive cultural sites, guide construction activities in historically significant areas, and establish mitigation protocols in the event of unforeseen discoveries. Implementing these protections will allow the Tahoe Donner Trails Project to proceed while maintaining compliance with legal requirements and minimizing impacts on historical sites.

Beyond its immediate application to the Five-Year Implementation Plan, this report provides a long-term framework for cultural resource management in Tahoe Donner. The protocols and research methodologies outlined can be applied to future trail projects, infrastructure improvements, and land management activities throughout the area. By following the recommended protection measures and consultation processes, the Tahoe Donner Association can ensure that future developments continue to respect and preserve the region's rich historical and archaeological heritage.

Decision Memo

2025 Annual Trail Program of Work Tahoe Donner Association Truckee, CA

I. Project Background, Need, and Purpose

The 2025 Tahoe Donner Association (TDA) Trail Program of Work (POW) encompasses maintenance and new construction of system trails approved in the approved 2022 Trail Master

Plan (TMP). This document outlines the decision to authorize the work and outlines the environmental scoping conducted to reach the decision. Figure 1 below shows the location of trail maintenance and construction scheduled in the 2025 Program of Work.



Figure 1. 2025 program of work

Project Need: Trail maintenance and new connections are needed to improve the TDA trail system.

Purpose: The 2022 TMP provides direction for management of recreation. Under the 2022 TMP, trail management is a use consistent with the Recreation Opportunity Spectrum of these Management Areas. The purpose of this annual program of work is to provide a fulfilling trail experience for TDA members and the public that also integrates environmental preservation and restoration.

II. Decision and Rationale

As the TDA Director of Land Management it is my decision to implement the 2025 program of work in accordance with the 2022 TMP.

I have made this decision for the following reasons:

- I am familiar with project area, and I believe the program of work will protect resources and habitat in the project area. At least two long distance unauthorized, user-created trails have been developed in the area, and were not designed to protect resources. As a consequence they erode hillslopes and affect water quality.
- An array of project design elements and resource protection measures were developed to primarily avoid affecting sensitive resources and secondarily minimize unavoidable effects. The program of work, with these measures, significantly improves the impacts of ongoing biking and recreational activities in the TDA trail system.

III. Scoping and Public Involvement

Scoping was initiated with the 2022 TMP process and is completed annually through regularly scheduled open session board and trail and open space committee meetings

IV. Description of Work

Who: TDA trail crew.

Where: Within TDA lands.

When: The 2025 summer operating season

What: trail maintenance and construction as outlined in the annual POW.

The program of work is outlined in Table 1 below.
Name	Status	Planning	Construction	Funding	Cost
Glacier Interpretive Loop	Planned	2024	2025	Development	\$80,000.00
Foot Only Glacier	Planned	<null></null>	2025	Development	\$80,000.00
Dogs in Space	Existing	<null></null>	2025	RRF	\$51,000.00
Whoop it up (Upper spur) - decommission	Existing - decommission planned	<null></null>	2025	RRF	<null></null>
Power Line - Old Wild West	Existing - decommission planned	<null></null>	2025	RRF	<null></null>
Coyote Crossing	Planned - external funding TBD	2010	2025	RRF	\$359,000.00
Chickadee	Existing, potential reroute and restorati	<null></null>	2025	RRF	<null></null>
Chickadee	Existing, potential reroute and restorati	<null></null>	2025	RRF	<null></null>
Chickadee	Existing, potential reroute and restorati	<null></null>	2025	RRF	<null></null>
Chickadee - doubletrack	Existing, potential reroute and restorati	<null></null>	2025	RRF	<null></null>
Nature Loop	Existing	2023	2025	RRF	\$50,000.00
S. Nature Loop	Existing	<null></null>	2025	RRF	\$5,000.00
Fool's Gold Extension	Existing	<null></null>	2025	RRF	\$25,000.00
Cinnamon Twist missing link	Existing	2024	2025	RRF	\$15,000.00
Dogs in Space to Hawk's Peak Trail Connector	Existing	<null></null>	2025	RRF	\$51,000.00
Night Hawk to Silver Streak	Existing	<null></null>	2025	RRF	\$1,000.00
Hidden Gem to Fool's Gold	Existing	2016	2025	RRF	\$15,000.00
White Lightning (Singletrack)-Wild West	Existing - decommission planned	<null></null>	2025	RRF	<null></null>
Restoration	Existing - decommission planned	<null></null>	2025	RRF	<null></null>
Restoration	Existing - decommission planned	<null></null>	2025	RRF	<null></null>
Restoration	Existing - decommission planned	<null></null>	2025	RRF	<null></null>

Table 1. Program of work description

Trail Construction and Maintenance:

• Mechanized equipment usage

Trail construction would take place following Best Management Practices (BMPs) which require adherence to specific construction practices. BMPs are detailed in Appendix B and include requirements for operations. Both mechanized equipment and hand crews would be utilized to construct new trail segments. Mechanized equipment may include trail dozers and mini excavators 30-60" wide and less than 7000 pounds. Chainsaws and standard trail construction tools would be utilized during construction periods. Use of mechanized equipment would be coordinated with a resource specialist to minimize effects on surrounding resources such as potential goshawk or owl habitat.

• Equipment access routes

All trail construction equipment would utilize existing staging areas and routes, no new access routes or staging areas would be constructed. Temporary ATV motorized access may be needed along the new trail corridor to refuel mechanized construction equipment. This access would be limited to trail crews employed in construction efforts. When construction is finished, motorized traffic would be prohibited and all visual or physicals signs of temporary motorized access would be rehabilitated to their desired condition

following guidelines in Resource Protection Measures and per the complete set of National Quality Standards for Trails (Forest Service Handbook 2353.15).

Resource Protection Measures (RPMs) and Management Requirements

Standards and guidelines from the 2022 TMP and CEQA for protecting natural resources will be applied. Potential impacts to natural resources are recorded on Appendix A: Environmental Scoping Checklist.

Soils and Hydrology:

See Appendix B: Best Management Practices.

Nonnative Invasive Plant Management Resource Protection Measures:

The following Management Requirements will be implemented to reduce the risk of invasive plant establishment and spread associated with proposed activities.

- Equipment Cleaning—All equipment and vehicles operating off-road must be free of invasive plant material before moving into the project area. Equipment will be considered clean when visual inspection does not reveal soil, seeds, plant material or other such debris. Cleaning shall occur at a vehicle washing station or steam-cleaning facility before the equipment and vehicles enter the project area.
- Early Detection—Any noxious weed infestations discovered prior to or during project implementation should be flagged and avoided. Report new infestations to resource specialist.
- Project-related disturbance—Minimize the amount of ground and vegetation disturbance. As necessary, reestablish vegetation on disturbed bare ground to reduce invasive species establishment; revegetation is especially important in staging areas.
- Weed-free construction materials—All gravel, aggregate, fill, mulch, topsoil, erosion control materials and other construction materials are required to be weed-free. When possible, use onsite materials such as pine needles, unless contaminated with invasive species. Otherwise, obtain weed-free materials from sources that have been certified as weed-free. Any materials which would be stored on site for an extended period of time (6 months) should be covered by some kind of barrier to prevent the materials to become infested with non-native plants.

Cultural Resources:

The area of potential effects (APE) has been reviewed for cultural resources.

Aquatic and Terrestrial Wildlife and Plant Protection Measures:

TES species: If any TES species (Federally threatened, endangered, proposed, or Forest Service sensitive species) previously unknown in the project area are detected or found nesting or roosting within 0.25 miles of project activities, appropriate mitigation measures would be implemented based on input from the resource specialist. Measures can include, but are not limited to, flagging and avoiding a plant site, implementing a species specific LOP, or designating a protected activity center.

- California spotted owl: Construction of new trail will remain outside a 100-meter buffer to be placed around all known current and historic nest locations. A limited operating period (LOP) from March 1st through August 15th will be in effect for any and all ground disturbing activities planned within California Spotted Owl protected activity center (PAC) boundaries unless the wildlife biologist determines non nesting status.
- Northern goshawk: Construction of new trail will remain outside a 100 meter buffer to be placed around all known current and historic nest locations. A limited operating period (LOP) from February 15th through September 15th will be in effect for any and all ground disturbing activities planned within Northern Goshawk protected activity center (PAC) boundaries unless the wildlife biologist determines non nesting status.
- Raptor nest: If any active Raptor nest is identified within the boundaries of, or directly adjacent to the project area (within 100 meters) during implementation, a buffer would be placed around the active nest and at the discretion of the Biologist a species specific LOP may be put into place for the buffer zone.
- Carnivore nests/denning structures: If any large stick nests or signs of active denning are observed or detected within or adjacent to the project area (within 100 meters), work will cease in the immediate area and the occurrence will be reported to the wildlife biologist to determine any potential need for further review and/or mitigation measures.
- Sensitive Plants: The resource specialist will flag known occurrences of sensitive plant species in areas that could be disturbed by project activities. Efforts will be made to prevent effects to these flagged areas.

Recreation Management:

- Concealing or removing existing user-created trails: Existing user-created routes and unauthorized trails on Tahoe Donner land would be removed from use and concealed in a phased manner after construction of the new trail begins. Materials including needles, rocks, branches and logs would be used to block use of the routes and prevent further degradation of resources. Where sensitive resources exist or significant environmental degradation has occurred due to user created trails, Specialists will be consulted to determine appropriate rehabilitation methods and timing of action to limit disturbance in sensitive resource areas.
- Construction around sensitive Resources: Numerous cultural and environmental sensitive resources were identified during project planning. The new trail corridor has been aligned

to avoid these areas. Resource Protection Measures detailed above also guide the Proposed Action with avoidance measures.

• Maintaining Trail to Design Standards: An operation and maintenance plan should be developed for this trail and include areas identified as potentially sensitive to maintaining trail design features that could affect water quality. As established used continues, modifications to maintain the design tread could include items such as rock lining to reduce tread widening, additional surfacing on areas where wear levels create entrenchment, other additional measures to maintain trail design. Monitoring may identify other needs such as timing of use to maintain trail performance. An "adopt a trail program" for volunteers could be developed for this trail.

V. Reasons for Excluding this Action from CEQA

CEQA applies to projects subject to a public agency's discretionary funding or approval that has the potential to either (1) cause a direct physical change in the environment or (2) cause a reasonably foreseeable indirect physical change in the environment (Pub. Res. Code § 21065). There are no actions in the 2025 Program of Work that receive any public funding, nor any activities that involve a public agency's issuance of discretionary approval. Additionally, an environmental analysis was conducted for this program of work. As a result of that analysis, a determination has been made that the actions will not cause a significant physical change in the environment and are excluded from further documentation in CEQA. Resource specialists did not identify any significant issues during project review, and all concerns were addressed by the resource protection measures and Appendix B BMPs.

This determination is based upon the absence, among others, of adverse effects on the following:

Terrestrial wildlife:

The wildlife review determined that there are no extraordinary circumstances related to the Program of Work for the location, intensity and amount of area affected. The review determined that the actions will have no substantial adverse effect on the TES species.

Aquatic wildlife:

There are no impacts to aquatic wildlife because there is either no habitat, the project is outside of the species historic range, or the species is not present within the aquatics analysis area for the Program of Work.

Sensitive plants:

The Sensitive Plant Biological Evaluation determined that that Program of Work will not impact any threatened, endangered, candidate or sensitive species on TDA lands.

Flood plains, wetlands, or municipal watersheds:

Implementation of the resource protection measures and compliance with Appendix B will avoid impacts to flood plains, wetlands, or municipal watersheds.

- Oil and Grease (other mechanical or hazardous fluids): Protection measures include conducting a daily assessment of equipment function and condition. Fueling areas will be located away from drainages, out of flood plains and wetlands at pre-approved upland sites, and at off- site existing fueling locations.
- Erosion and Sediment Transport and Delivery: New trail construction may increase sediment contributions for one or two seasons following construction until the trail is hardened. Long-term and short-term sediments may be generated from trail tread in focused locations but are expected to be controlled due to the BMPs. As unauthorized use in the area decreases, sediment generated from the existing condition would decrease. Trail design measures were incorporated from construction through the life of the trail to minimize soil erosion and sediment transport and delivery. Monitoring will occur in areas of potential concern. Monitoring may initiate targeted maintenance or trail surface adjustments through an adaptive action process.

The Resource Protection Measures, Erosion control Plan, BMPs, and other protection measures included in the design of the project will protect water resources during construction, and focus areas to ensure function is maintained are provided for the long-term operation of this proposed system trail as described in the BMP's and other measures designed to minimize and mitigate effects to water resources are detailed in Appendix B. No risks of extraordinary circumstances related to cumulative adverse effects were identified.

VI. Administrative Review and Implementation Date

This decision is not subject to administrative review (Pub. Resources Code, § 21080(a); CEQA Guidelines, § 15002(i)).

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John Groom Director of Land Mangement

Resource	Reviewed	No Impacts	Mitigated
Terrestrial Wildlife			
Aquatic Wildlife			
TES Species			
Sensitive Plants			
Cultural			
Floodplains			
riooupianis			
Wetlands			
Watersheds			
1		1	1

Appendix A: Environmental Scoping Checklist

Appendix B: Best Management Practices (BMPs)

Potential Pollutant Sources:

Potential sources of pollution from the project site are anticipated to result primarily from storm water discharges and snowmelt runoff. The anticipated primary pollutant constituents are sediment and to a significantly lesser degree, hydrocarbon petroleum products from equipment use. These potential source areas include areas of raw or unvegetated soil disturbed in the course of trail construction activities and segments passing through wet areas, erosive soils, and steep slopes. Additionally, long-term trail use can lead to a widened trail tread and the loss of trail drainage features, resulting in additional potential for erosion. Trail use during times of dry substrate conditions may result in wind erosion when dry soils are pulverized and become available for wind and water transport. Conversely, use during excessively wet periods may result in the premature failure of drainage features, and the formation of ruts or gullies. The highest potential for sediment mobilization and subsequent delivery to waters of the United States exists where seasonal or perennial streams intersect trails. Construction activities also create the potential for sediment mobilization through air or water transport. Spills of hydrocarbon petroleum products may occur from the use of construction equipment (where applicable), and represent an additional potential pollutant source. The Best Management Practices (BMPs) described below will be implemented in order to minimize the risk to waters of the United States from the aforementioned potential pollutant sources. The following descriptions incorporate the following National BMPs, Rec-1, Rec-4, Fac-2. Non-Point Storm Water Discharges Storm water discharges are expected to be from non-point sources.

Construction and Design BMPs:

This section addresses measures used to implement the proposed action and are considered the elements of the Erosion Control Plan used to meet water quality standards and soil protection measures. If a Storm Water Construction Permit is required the certified Storm Water Pollution Prevention Plan (SWPPP) will be followed.

HS-1: Limit Timing of Construction Activities.

Trail reconstruction activities will occur between June 15 and October 15 each year to avoid the period of highest runoff, streamflow, and erosion potential. Expanded time frames can be considered where appropriate conditions are present after consultation and agreement from resource area specialists. While it is crucial to avoid saturated soil, it is also desirable to implement reconstruction activities while adequate soil moisture exists to minimize construction related dust generation and associated erosion and to create a stable trail surface. For this reason, if unseasonable conditions allow for earlier implementation (soil conditions meet dryness criterion for access), the starting day may precede the June 15 date to take advantage of favorable soil conditions for trail building. According to the operable soils description.

Operable Soils. Guidelines for determining soil moisture conditions that can be used as a guide is included in the chart below. Determining conditions at the very moist condition can prevent unnecessary impact to avoid the wet soil condition. These guidelines can prevent unacceptable impacts by limiting access to the site until soils are operable. Soils should be freely drained (no water available in excess of field capacity). Unacceptable wet soil conditions mean that site conditions are sufficiently wet that soil is displace on the road, staging areas or areas under construction and could cause sediment transport to be discharged downstream. Similarly soils that are worked while wet can have undesired effects to soil conditions particularly along temporary access routes/sites. Manipulation of soils where wet conditions result in excessive deformation/disturbance should be halted.

Operability of Soils Protocol/Erosion Control Plan

	Coarse Soils	Light Soils	Med. Soils (<35% clay)	Heavy Soils (>35% clay)
Soil Moisture % Increases Downward	Loamy sands, fine sandy loam, very fine sands, coarse sands	Fine sandy loams, sandy loams, very fine sandy loam	Sandy clay loam, loam, silt loam, sandy clay loam, clay loam	Clay loam, sandy clay, silty clay loam, clay
Dry soils	Dry, loose, single grained flows thru fingers	Dry, loose, flows thru fingers	Powdery, dry, sometimes slightly crusted but breaks down into powdery conditions	Hard, baked, cracked sometimes has loose crumbs on surface

Protocol for determining operability of soils within the compaction zone*. (Dry Operability is designated by the white area of the chart below)

Moist soil	Still appears dry, will not form a ball with pressure	Still appears to be dry; will not form a ball	Somewhat crumbly, but will hold together from pressure	Somewhat pliable; will form ball under pressure. At plastic limit.
Moist soil	Still appears dry, will not form a ball with pressure	Tends to ball under pressure but seldom will hold together	Forms a ball and is very pliable, sticks readily if high in clay.	Easily ribbons out between fingers, has a slick feeling. At plastic limit.
Very moist soil	Tends to stick together slightly, sometimes forms a very weak ball	Forms a weak ball breaks easily, will not stick. Plastic limit or nonplastic.	Forms a ball and is very pliable, sticks readily if high in clay. Exceeds plastic limit.	Easily ribbons out between fingers, has a slick feeling. Exceeds plastic limit.
Wet soils	Upon squeezing, free water may appear. Wet outline is left on hand. Nonplastic.	Upon squeezing free water may appear. Wet outline left on hand.	Can squeeze out free water. Wet outline left on hand.	Puddles and free water forms on surface. Wet outline left on hand.
	Recommended not ope	rable by USFS Regional	Soil Scientist	

On roads and staging surfaces or construction locations this wet condition may be evidenced by (a) reduced traction by equipment as indicated by spinning or churning of wheels or tracks in excess of normal performance, (b) inadequate traction without blading wet soil, (c) soil displacement in amounts that cause visible movement (not allowing for controlled construction), (d) free water or (pumping) of worked surface materials by traffic, or (e) creation of ruts.

In wet (i.e. free water is observed) or moist soil conditions, vehicle, tractors, and other equipment used on or off road should cease operations before the activity creates ruts greater than or equal to two inches in depth and 25 feet in length. No ruts exceeding three inches in depth should be allowed.

Resume operations only when conditions have dried sufficiently to support equipment operability without excessive displacement. Additionally displacement, and ponding of staging areas should be limited to small areas within the staging area. Continued growth of these wet area conditions would result in shutdown of operations. Access routes used to meet construction needs should not cause disruption of road surfaces and drainage features. Determinations of operability will be made by the project lead with consultation of a soils specialist.

HS-2: Construction Dry Periods.

Dry period construction leads to increased pulverization of soils and an associated increase in the potential for air or water transport, as soils tend to be less cohesive when overly dry. Adequate water must be both made available for, and applied to, dry at risk soils during construction to increase cohesion thereby minimizing these potential impacts.

HS-3: Minimize Ground and Vegetation Disturbance.

Ground and vegetation disturbance will be minimized to those areas needed to achieve implementation of the approved trail and proposed action.

HS-4: Storm Precipitation Action Plan.

Stop operations during periods of inclement weather (runoff producing rainfall or wet soil conditions) that create erosion or soil deformation (rutting) and implement temporary erosion control measures as needed until the site is dry enough to resume work. Provide erosion control measures on completed sections of trail or decommissioned sections of trail. See HS-1 for rutting guidelines.

HS-5: Control sediment and re-vegetate.

All disturbed non-trail surface areas will be mulched with native material or weed-free straw (e.g., rice straw) and seeded in order to minimize sediment mobilization, and promote the revegetation of disturbed areas by endemic species. Areas of soil disturbance caused by the proposed action will be mulched with available forest materials such as pine needles, tree bark, slash, branches and logs, or with imported mulch (certified weed-free straw).

HS-6: Stabilize stream banks.

Along the stream-trail interface, the trail approach and egress, a combination of structural and vegetative control methods will be used to improve trail stability and reduce erosion. The specific methods used will vary 6 depending on site conditions, but could include one or more of the following: adjustment of stream bank slopes; installation of rock or log slope protection (riprap); installation of biodegradable erosion control devices; vegetation of the bank and stream zone (using transplants, pole cuttings, container stock, and/or native seed) trail water diversions/drainage prior to entering the channel.

HS-7: Drainage features for water quality preservation.

Contour trail surfaces to shed water in order to discourage ponding and the concentration of flow resulting in ditch and/or rut formation. Wherever possible do not concentrate flows along inside ditches and avoid in-sloped trail design. In addition, the following design criteria must be adhered to:

- Create undulating surfaces to aid promotion of shedding water.
- Plan diversion ditches to avoid run-on to downhill trail locations where possible.
- Design overlapping switchback sections such that drainage features capture and divert flow prior to run-on.
- Design and construct drainage features before and after every embanked/trenched turn and/or switchback.
- Should an inside ditch and in-sloped trail design be needed for safety or as a design limitation increase frequency of the relief ditch pattern.

- Upstream flows and concentrated runoff will be directly passed across the trail surface as applicable.
- Trails should cross drainage features, natural or otherwise, perpendicular to flow. Design drainage approaches to eliminate water from the trail prism prior to elevation loss outside of the stream embankments. Stream crossings should be designed such that the length of the approach is minimized in order to reduce the potential for sediment delivery to the channel. Elevational changes should be adequate to prevent stream capture onto trails or other design features will need to be incorporated. Areas downslope of the trail surface will be provided with sediment control measures in HS-5.

An area of specific concern for this issue is Segment D, which consists of overlapping switchbacks on a steep slope. The soil type is considered highly erosive and rated as "somewhat limited," indicating that the soil has features that are moderately favorable for non-motorized trail construction. These limitations can be overcome or minimized by special planning, design, or installation as described in this document. In addition to the points listed above, trail grade in this segment will not exceed 3%.

HS-8: Decommission abandoned staging areas.

Existing disturbed areas will be used as equipment staging areas. Those that are not permanent features will be restored to near natural conditions. This will be achieved by loosening or scarifying compacted soils, seeding and/or planting with native species, and mulching with native 7 and/or weed-free material. Expanded areas will be reduced to their prior extent using these procedures.

HS-9: Rehabilitate all access routes.

Loosen/scarify compacted soils, and restore the natural configuration of temporary routes. Install drainage structures so water does not concentrate on traveled way. Mulch and/or re-vegetate denuded areas with native material/plants.

HS-10: Fish Bearing Perennial Streams.

No routes or access across or through perennial or fish bearing streams will be constructed.

HS-11: Stream Crossing Construction.

Construction of the stream crossing must be carried out during a time of no flow. The crossing construction should result in minimal changes to channel morphology. Areas of specific concern are Segment C found on the attached project map. The proposed crossings will be designed to slightly modify the existing channel without significantly changing capacity or channel form. The proposed design will be constructed to maintain flow capacity and only minor changes, rearranging in channel rock for ingress and egress are proposed.

This should result in no need for 401or 404 permits. If the trail design is amended such that the channel capacity is changed or results in infilling the channel and affecting capacity all necessary permits will be obtained. Segment C includes a stream crossing on which legacy activities combined with downed large wood, in proximity to the proposed crossing, results in erosive velocities up-gradient of the crossing. Consequently, the proposed crossing are recommended for removal from the seasonal drainage to stabilize the crossing by encouraging less erosive flow velocities. The crossing monitoring and maintenance goal is to maintain channel morphology and precluding widening of the channel.

HS-12: Trail-Road System Connectivity.

Portions of new trail constructed in proximity to the existing road network must take into consideration the drainage network of the road system. Trail segments must be designed to incorporate existing drainage networks, and manage any concentrated flows that might be delivered from the road network to the trail network, or vise-versa. If possible, rather than attempting to manage energetic and erosive concentrated flows, new drainage features should be constructed to preclude their delivery to the trail system from the road network. If the management or preclusion of delivery of these flows is impractical, either the portion of the road network in question, or the problem trail segment, must be relocated. 8 One specific point of concern is Segment A as found on the project map. In this area concentrated flows run down approximately 100 feet of road before flowing into a swale. After leaving the road surface significant sediment deposition occurs through the proposed trail corridor. There is concern about ground saturation as a consequence of the stream corridor. Flows from the stream and runoff from the road will need to be managed in order to protect the trail and surrounding resources. This will pose maintenance concerns and need to be monitored regularly as described in M-1.

HS-13: Low Gradient Trail Segment Proximal to Perennial Stream.

Ground surface saturation and/or inundation along some trail segments is anticipated to occur annually and likely to coincide with periods of peak snowmelt and runoff. These segments are characterized by both proximity to a perennial stream, and a relatively low trail gradient (i.e. < 3%). While trail access is anticipated to be a limiting factor likely to preclude use of the trail during the peak of these annual periods, it is nonetheless anticipated that some trail use will occur when soils moisture content is beyond optimal trail use conditions. • The design will be constructed with the aim of traversing as many local topographic high points to create an undulating surface and allow for drainage. • The portions of trail constructed through locally lower areas prone to saturation will use design methods to prevent the deepening and widening of the trail prism, to minimizing sediment mobilization during

saturated periods. Monitoring the topographic lows may lead to a need to import aggregate or hand place local rock materials.

HS-14: Refueling and Maintenance of Equipment.

Refueling and maintenance of equipment should be carried out in areas removed from drainages and riparian vegetation and in designated locations away from riparian systems where accidental spills can be controlled.

HS-15: Permanent Erosion Control Measures.

Permanent erosion control measures to be implemented at trail segments include the following

- Specific trail maintenance to clear brush and deadfall from approved trail surfaces (no trail migration around downed trees).
- Trail surface design improvements applied to permitted trail segments are maintained regularly. Maintenance will be carried out with a particular emphasis on sustaining the integrity and function of constructed drainage features.
- Stabilize streambanks and adjust trail design when impacts within the riparian system and RCA trends toward resource degradation. Bank stability condition 9 assessments and associated design recommendations will be conducted periodically with consultation and agreement from pertinent resource area specialists.
- Outreach efforts would be made to encourage persons recreating to utilize approved System trails

Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 8: TDA Trail Classification Examples

Tahoe Donner Association Trail Classes

The trail classes range from 1 - 5 with 1 being rough and rugged and 5 being smooth and ADA accessible. The following photos are courtesy of the USDA US Forest Service and provide visual examples of typical Trail Class scenarios. These classes are not definitions but rather represent an abstract spectrum of ruggedness.





Trail Class 1: Tread—The tread is intermittent and indistinct.



Trail Class 1: Obstacles—Obstacles are common, naturally occurring, and often substantial.





Trail Class 1: Constructed Features—Constructed features are minimal to nonexistent.



Trail Class 1: Signs—Route identification signing is limited to junctions. Route markers are present when the trail location is not evident.





Trail Class 1: Typical Recreation Environment/Experience—The typical recreation environment/experience is natural and unmodified.



Trail Class 2: Tread—The tread is continuous and discernible, but narrow and rough.





Trail Class 2: Obstacles—Obstacles may be common and substantial. Blockages are cleared to define the route and protect resources. Vegetation may encroach into the trailway.





Trail Class 2: Constructed Features—Constructed features are of limited size, scale, and quantity.



Trail Class 2: Signs—Route identification signing is limited to junctions. Route markers are present when the trail location is not evident.



Trail Class 2: Typical Recreation Environment/Experience—The typical recreation environment/experience is natural and essentially unmodified.



Trail Class 3: Tread—The tread is continuous and obvious.



Trail Class 3: Obstacles—Obstacles may be common. Vegetation is cleared outside of the trailway.





Trail Class 3: Constructed Features—Constructed features such as walls, steps drainage, and raised trail, may be common and substantial.



Trail Class 3: Signs—Route identification signing is present at junctions and as needed for user reassurance. Destination signing is likely outside of wilderness areas.



Trail Class 3: Typical Recreation Environment/Experience—The recreation environment/experience is natural and primarily unmodified.



Trail Class 4: Tread—The tread is wide and relatively smooth, with few irregularities.



Trail Class 4: Obstacles—Obstacles are infrequent and insubstantial. Vegetation is cleared outside of the trailway.



USFS Trail Class Photo Examples



Trail Class 4: Constructed Features—Constructed features are frequent and substantial. Trailside amenities may be present.



Trail Class 4: Signs—A wide variety of signing is likely present. Informational signs are likely and interpretive signs are possible.



Trail Class 4: Typical Recreation Environment/Experience—The recreation environment/experience may be modified.



Trail Class 5: Tread—The tread is wide, firm, stable, and generally uniform. Trails are commonly hardened with asphalt or other imported material.



Trail Class 5: Obstacles—Obstacles are not present. Grades are typically less than 8 percent.



Trail Class 5: Constructed Features—Constructed features are frequent or continuous. Structures may include bridges, boardwalks, curbs, handrails, trailside amenities, and similar features.



Trail Class 5: Signs—A wide variety of signing is present. Informational and interpretive signs are common.



Trail Class 5: Typical Recreation Environment/Experience—The recreation environment/experience may be highly modified.

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Appendix 9: Multi-use Trails Handbook

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Chapter 9. Multi-Use Trails

To be considered "multi-use", a trail must be designated for cyclists, equestrians, and pedestrians. Trails that allow cyclists and pedestrians or trails that allow equestrians and pedestrians are not considered "multi-use". (See Chapter 6, *Mountain Bike Trail Design*, and Chapter 7, *Equestrian Trail Design*.) Multi-use trails are designed to accommodate a variety of user groups on the same trail. The planning, layout, design, and construction discussed in Chapters 5, 6, and 7 apply to multi-use trails. However, there are additional criteria outlined in this chapter.



Photo 9.1 - Multi-Use Trail Users

9.1. Multi-Use Trail Limitations

Multi-use trails accommodate three different use types. Each has its own design needs and user expectations. (See Chapter 6, *Mountain Bike Trail Design*, and Chapter 7, *Equestrian Trail Design*.) When all of these groups share the same trail, not all of the design needs and expectations can be met. Multi-use trail design and construction represent a compromise between the different groups. This compromise can often result in less user satisfaction and greater difficulty in the design and construction of a sustainable trail.

The most significant safety concerns are between cyclists and equestrians. These safety concerns center on the reaction of horses to the movement of cyclists. The physical and behavioral characteristics of horses make them susceptible to flight when cyclists approach unexpectedly. (See Chapter 7, *Equestrian Trail Design*.) The size, shape, sound, and speed of the bike and rider can startle a horse, which can lead to the

horse rearing up, kicking, or bolting. Safety concerns can be partially mitigated by posting speed limits and designing trails that slow the cyclist, giving the horse more time to recognize the rider and react appropriately. See Chapter 6, *Mountain Bike Trail Design*, for information on the use of pinch points and tread texturing to control user speeds.

Another design technique is to make the multi-use trail wider and straighter, with longer sight distances and broader turning radii than are typically employed. These characteristics allow users to see and hear each other sooner, giving them more time to stop and get off the trail and providing more passing room. Unfortunately, these characteristics also conflict with the design needs and expectations of users. The resulting trails have more structures, less sinuosity, and less intimacy with the surrounding environment. In addition, making trails wider and straighter with greater sight distances and broader turning radii can encourage cyclists to ride faster, which diminishes the effectiveness of design elements intended to slow users.

Multi-use trails are appropriate when the landbase is insufficient to support trails specifically designated for hiking, equestrian, or bicycle use, or when the trail is used as a main artery of a larger trail system. As discussed in Chapter 6, *Mountain Bike Trail Design*, and Chapter 7, *Equestrian Trail Design*, pedestrian, cyclist, and equestrian trails can connect to other similar loops or loop back to the multi-use artery. (Figure 9.1.)



Figure 9.1 - Shared and Separate Trails with Loops

When planning a multi-use trail or improvements to an existing network, it is essential to involve the potential user groups. Their input and problem resolution strategies can ease future complaints and trail use issues. Some approaches to problem resolution include "trail etiquette" signage, park-sponsored multi-use trail rides, user group self-enforcement, and trail problem resolution workshops.

Many trail systems use backcountry roads as adjunct trails to connect trails and expand user circulation. Properly designed and constructed backcountry roads with increased width, sight distance, and turning radii can be very effective multi-use routes.

9.2. User Protocols

When different user groups share the same trail, cyclists and hikers on a multi-use trail must yield the right of way to equestrians and cyclists yield to pedestrians. All multi-use trails should have signage that identifies the right of way protocol as described in Chapter 6, *Mountain Bike Trail Design*, and Chapter 7, *Equestrian Trail Design*.

9.3. Design Requirements

Design for multi-use trails should be based on the highest standards for the intended user groups. Equestrian trails have the highest design and construction standards, so those are the minimum standards for any multi-use trail. (See Chapter 7, *Equestrian Trail Design.*)

9.3.1. Trail Length and Circulation

Since multi-use trails accommodate horses and bikes, the recommended trail length, connecting loops, and circulation patterns identified in Chapters 6 and 7 should be applied whether the entire trail system is designed for multi-use or as a connecting artery. (See Chapter 6, *Mountain Bike Trail Design,* and Chapter 7, *Equestrian Trail Design.*)

9.3.2. <u>Tread Width</u>

Multi-use trails have a minimum tread width that is consistent with the Class 1 equestrian standard of 36 inches. Where the hillslopes are steep and hikers and cyclists may have difficulty stepping off the trail, passing areas a minimum of 60 inches wide and 60 inches long should be provided. The frequency of passing areas along the trail is determined by site conditions, including sight distance, percent of hillslope, stability of the parent soil, and characteristics of the terrain.

9.3.3. <u>Trail Layout and Tread Construction</u>

The general layout and design for multi-use trails follow those identified in Chapter 5, *Principles Trail Layout and Design*. In addition, layout of multi-use trails should avoid low gradient hillslopes (less than 20%) and flat ground. If flat ground cannot be avoided, elevate the trail tread by constructing a turnpike or causeway. (See

Chapter 16, *Drainage Structures.*) On hillslopes, multi-use trails should have a full bench for greater durability and sustainability. Since horses and cyclists have a tendency to use the outside portion of the tread, full bench construction is a must. Construction practices should follow those outlined in Chapter 11, *Principles of Trail Construction*.

If parent or native soils are not suitable for long-term sustainability, strengthen the trail tread by adding crushed rock aggregate. (See Chapter 11, *Trail Construction*.) Mixing native soil into the top layer of aggregate helps bind the aggregate, softens its appearance, and reduces the impact to horses' hooves. Hard and smooth trail surfaces, such as concrete, soil cement, asphalt, and non-permeable soil stabilizers, should not be used for multi-use trails. These surfaces are slippery and can cause horses to lose traction and fall. They also can injure the bottom of the horse's hoof (frog).

9.3.4. <u>Grade Uniformity</u>

When laying out and constructing multi-use trails, it is important to avoid sudden changes in linear grade to avoid the additional mechanical wear caused by trail users when they encounter a sudden grade pitch. The need for a sustainable grade is discussed in Chapter 5, *Principles of Trail Layout and Design*, Chapter 6, *Mountain Bike Trail Design*, and Chapter 7, *Equestrian Trail Design*.

9.3.5. <u>Sinuosity</u>

Unless a multi-use route is placed on a well designed and constructed backcountry road, the trail alignment will need sufficient sinuosity to slow down cyclists. Alignment techniques include curving the trail around native trees, brush, and rocks, or installing pinch points. Multi-use trails should be designed wide enough to accommodate hikers, horses, and bicycles. This increased tread width may allow for increased bike speed and associated safety concerns. Thus, slowing cyclists is critical to designing a safe and sustainable multi-use trail. These design techniques are discussed in Chapter 5, *Principles of Trail Layout and Design*, and Chapter 6, *Mountain Bike Trail Design*.

9.3.6. Low Trail Structures

Low trail structures, such as steps and water bars, cause problems for horses and cyclists, and should not be used in multi-use trails. Elimination of these structures will also reduce the barriers to users with mobility challenges. In most cases, water bars are not an effective drainage solution and should be avoided. (See Chapter 5, *Principles of Trail Layout and Design.*)

9.3.7. <u>Switchbacks and Climbing Turns</u>

Switchbacks and climbing turns should be designed and constructed as discussed in Chapter 12, *Topographical Turn, Switchback, and Climbing Turn Construction*.

When designing switchbacks and climbing turns, the design and construction standards should be for equestrian trails, which are the highest standards of the three user groups. (See Chapter 7, *Equestrian Trail Design*.)

9.3.8. <u>Watercourse Crossings</u>

For the layout and design of multi-use trails, dry crossings are preferable to wet crossings. Culverts, puncheons, and bridges on multi-use trails should be designed to equestrian trail standards. All approaches to watercourse crossing structures are constructed at trail grade. (See Chapter 6, *Mountain Bike Trail Design*, Chapter 7, *Equestrian Trail Design*, and Chapter 14, *Drainage Structures*.)

The process for selecting crossing sites is discussed in Chapter 5, *Principles of Trail Layout and Design.* All wet crossings, even those across ephemeral swales, need to be armored to protect soil and stream gravel, reduce erosion and sediment delivery, and provide a sustainable crossing. (See Chapter 16, *Drainage Structures.*)

Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 10: Project Descriptions


Trail Management Objectives Form

Trail Name: Alder Creek Trai	l	Trail Number: 2
Trail Beginning Termini: End of ACAC driveway		Beg. Milepost: 00
Trail Ending Termini: Tahoe Donner Association Campground		End. Milepost: 1.81
Trail Inventory Length: 1.81 Miles Trail Mileage Source: Wheel		eel GPS X Online GIS Unknown
MO Trail Section		
2 Section Beg. Termini	Fjord	Beg. Milepost: <mark>.5</mark>
Sec.# Section End. Termini: Campground		End. Milepost: 1.8
esigned Use Objectiv	/es	
Standard Terra Trail Snow Trail Paved Trail (Check one) X 1 (Primitive/Undeveloped) X 2 (Simple/Minor Developmed) X 3 (Developed/Improved) 4 (Highly Developed) 5 (Fully Developed)	ent)	Trail Features et to Note Details)
X Hiker / Pedestrian Equestrian Bicycle Accesible ADA compliant Directional travel Uphill Downhill Cross-Country Ski Snowshoe Snow Bike	Design Parameters (Fill in all that apply) 24" Tread Width (inches) Target Grade (%) Short Pitch Maximum (%) (up to 200' lengths) Target Cross-Slope (%) Clearing Width (feet) Clearing Height (feet) Designed Turn Radius (feet)	Target Frequency Per Year (Fill in all that apply) Trail Opening 1 Tread Repair Drainage Cleanout 1-2 Logging Out 1 Brushing Snow Trail Grooming 1 Condition Survey

Managed Allowed Use	Restricted Use From To Date
(Fill in all that apply)' (mm/dd) Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in all that apply)' Image: milling in al	Date ID Date (Check if applicable) (mm/dd) All Use (Sensitive Area) (mm/dd) (Or, fill in all that apply) Hiker / Pedestrian Equestrian Bicycle Dogs Prohibited Dogs on Leash Winter Use (Ski Area Ops) Image: Check any that apply. Underline appropriate clarifier in parenther Provide specifics and reference information below.) Shared System (shared with other system road or traditional decessible per Current ADA Guidelines Mechanized Tools or Equipment Prohibited T&E or Sensitive Species Present (Plant / Wildlife) Heritage Resource Present Easement across Non TDA Land (Existing / Needed Existing Permit or Agreement (Trail-Specific / Area) Tos Committee Notes (Use continuation sheet if needed.) Image: Continuation sheet if needed.)

TAHOE DONNER Trail Management Objectives Form

Trail Name: Alder Creek Trail	Trail Number: 2
Remarks / Reference Information (Continuation Sheet)	
(Type notes over this message. To insert spaces between lines of text in Excel, pr	ress Alt and Enter.)
Soft costs and biological analysis began in 2024. Balance Hydrologics did a str	reambed and flood plain analysis.
For the 2025 construction season the objectives are to repair/replace existing b unsustainable sections of trail.	poardwalks and realign
MO Form - Continuation	Page of





Trail Name: Cinnamon Tw	st	T	rail Number: <mark>20</mark>
Trail Beginning Termini: ACAC north boardwalk, left spur			Beg. Milepost: 00
Trail Ending Termini: Alder crk road, So. Prosser crk crossing/railcar bridge		ilcar bridge	End. Milepost: 2
Trail Inventory Length: 2 Miles Trail Mileage Source: Wheel		age Source: Wheel	GPS X Online GIS Unknown
1 Section Beg. Term	ni:		Beg. Milepost:
Sec.# Section End. Term	ni:		End. Milepost:
Designed Use Object	ives		
 Standard Terra Trail Snow Trail Paved Trail (Check one) 1 (Primitive/Undeveloped) 2 (Simple/Minor Developed) 4 (Highly Developed) 5 (Fully Developed)) ment)	Scontinuation Sheet to Note Bridge Boardwalk Culvert Rock Wall Retaining Wall Banked Turn - add bottom key hole on Steps	Details) Vater Bar Note: No
Designed Use Hiker / Pedestrian Equestrian Bicycle Accesible ADA compliant Directional travel Uphill Downhill Cross-Country Ski Snowshoe Snow Bike	Design Paral (Fill in all that apply) 24" Tread Wi 5 Target Gi Short Pite (up to 200' Target Ci 3 Clearing T	meters dth (inches) rade (%) ch Maximum (%) lengths) ross-Slope (%) Width (feet)	Target Frequency Per Year (Fill in all that apply) 1 Trail Opening Pread Repair Drainage Cleanout 1 Logging Out 1 Brushing

50

TAHOE DONNER Trail Management Objectives Form

Trail Name: Cinnamon Twist	Trail Number: 20
Travel Management Strategies	
Managed Allowed Use(Fill in all that apply)*From Date (mm/dd)To Date (mm/dd)XHiker / PedestrianIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Restricted Use From Date (mm/dd) (Check if applicable) Imm/dd) All Use (Sensitive Area) Imm/dd) (Or, fill in all that apply) Imm/dd) Hiker / Pedestrian Imm/dd) Equestrian Imm/dd) Bicycle Imm/dd) Dogs Prohibited Imm/dd) Winter Use (Ski Area Ops) Imm/dd)
Secretation Oportunity Spectrum (Use continuation sheet if needed) (Image: provide the symplectrum of th	Special Considerations (Check any that apply. Underline appropriate clarifier in parenthesis Provide specifics and reference information below.) Shared System (shared with other system road or trail Accessible per Current ADA Guidelines Mechanized Tools or Equipment Prohibited T&E or Sensitive Species Present (Plant / Wildlife) Heritage Resource Present Easement across Non TDA Land (Existing / Needed) Existing Permit or Agreement (Trail-Specific / Area)
Land Manager: Name	Signature
Title	Date
IO Form - Side 2	Page 2 of 4



Trail Management Objectives Form

Trail Name: Cinnamon Twist	Trail Number: 20
Remarks / Reference Information (Continuation Sheet)	
(Type notes over this message. To insert spaces between lines of text in Excel, pres	s Alt and Enter.)
Staff began scouting the missing link section during the 202 plan to construct the new connection in 2025. A small portion exisiting trail leading down to South Valley rd will be decom- providing one continuous trail. This will eliminate the 1/4 se road.	4 season. We on of the issioned action on the

TMO Form - Continuation



ravel Manager	nent Strategies	
Managed Allow (Fill in all that apply) [*] X Hiker / Pedestria X Equestrian X Bicycle Class 1 E bike Other (see notes Cross Country S Snowshoe Snow Bike	ed Use From To Date (mm/dd) n June 1 Nov 15 June	Restricted Use From Date (mm/dd) To Date (mm/dd) (Check if applicable) Imm/dd) Imm/dd) All Use (Sensitive Area) Imm/dd) (Or, fill in all that apply) Hiker / Pedestrian Equestrian Imm/dd) Bicycle Imm/dd) Dogs Prohibited Imm/dd) Understand Imm/dd) Specjal Considerations Imm/dd)
(Use continuation sheet i Wet in the spring, nee exisiting trail base. ne to all vehicles (includi rutted and needs to b and propper drainage Connection to Hawk trail user confusion a single track connect Trailhead. This trail realignmen black diamond to a b	f needed) eds trail tread hardening on eds to be permanently closed ng UTV's). Upper section is very e realigned to allow for better . planned for 2025 's Peak trail would eliminate and provide single track to on just up from Hawk's Peak t would turn the trail from a alue sqaure.	(Check any that apply. Underline appropriate clarifier in parenthe Provide specifics and reference information below.) X Shared System (shared with other system road or the Accessible per Current ADA Guidelines Mechanized Tools or Equipment Prohibited T&E or Sensitive Species Present (Plant / Wildlife) Heritage Resource Present Easement across Non TDA Land (Existing / Needed Existing Permit or Agreement (Trail-Specific / Area) TOS Committee Notes (Use continuation sheet if needed.)



Stalloo May

TDA_boundary Trail network Doubletrack Singletrack Ten year projects Decommission Further analysis needed

Hawk's Peak

Maintenance

New construction

Restoration

Alder Creek 0.02 0.04 0.07 Miles

ownhill

Ski Slope Way

Dogs in St Peak to Hawk's Peak to Hawk's Peak





Trail Management Objectives Form

Trail Name: Glacier Interpreti	ve Loop	Trail Number: 31
Trail Beginning Termini: Glacier Way Parkinglot		Beg. Milepost:
Trail Ending Termini: Glacier Way Parkinglot		End. Milepost:
Trail Inventory Length: .5	Miles Trail Mileage Source: Wh	eel GPS X Online GIS Unknown
MO Trail Section -		
Section Beg. Termini:		Beg. Milepost:
Sec.# Section End. Termini:		End. Milepost:
esigned Use Objectiv	es	
 Standard Terra Trail Snow Trail Paved Trail (Check one) 1 (Primitive/Undeveloped) 2 (Simple/Minor Developmer 3 (Developed/Improved) 4 (Highly Developed) 5 (Fully Developed) 	t) t) t) t) t) t) t) t) t) t)	et to Note Details)
Designed Use	Design Parameters (Fill in all that apply)	Target Frequency Per Year (Fill in all that apply)
Equestrian	60 Tread Width (inches)	1 Trail Opening
X Accesible	2 Target Grade (%)	3 Tread Repair
X ADA compliant Directional travel	2 Short Pitch Maximum (%) (up to 200' lengths)	Drainage Cleanout
Uphill Downhill	2 Target Cross-Slope (%)	1 Logging Out
Cross-Country Ski Snowshoe	6 Clearing Width (feet)	Brushing
Snow Bike	8 Clearing Height (feet)	Snow Trail Grooming
ow Trails outside XC, DH operating areas	5 Designed Turn Radius (feet) 2 Condition Survey

TAHOE DONNER Trail Management Objectives Form Trail Name: Glacier Way Interpretive Loop Trail Number: 31 **Travel Management Strategies Restricted Use** Managed Allowed Use From To Date From Date To Date (Check if applicable) (mm/dd) Date (mm/dd) (Fill in all that apply)* (mm/dd) (mm/dd) All Use (Sensitive Area) Х Hiker / Pedestrian (Or, fill in all that apply) Equestrian Bicycle Hiker / Pedestrian Equestrian Class 1 E bike Х Bicycle Х Other (see notes) Х Cross Country Ski Snowshoe Dogs Prohibited Snow Bike Dogs on Leash Winter Use (Ski Area Ops) **Special Considerations Recreation Oportunity Spectrum**



TMO Form - Side 2

Page 2



Trail Name: Glacier Way Interpretive Loop	Trail Number: 31	
Remarks / Reference Information (Continuation Sheet)		
This trail is designed to ADA standards based on California State Parks Accessible trail guidelines. Constructed of 3/4" aggregate base and topped with Decomposed Granite. Compacted Surface. This trail is only open to hikers and mobility devices.		






























































































Mother Lode (Upper Section)

Mother Lode (uppersection hike and b)

ction hike and bikely

Mother Lode upper section

TDA_boundary Trail network Doubletrack

Mother Lode (Upper Section)

– – – Singletrack

Ten year projects

----- Decommission

—— Further analysis needed

— Maintenance

----- New construction

- Restoration

Sundance Hut to Hawk's Peak

Hawk's Peak Upper

15 PEALURA

drom

0 0.02 0.04 0.07 Miles






















Sidewinder to East Mustang Sally Connection

East Mustang Sally

TDA_boundary
Trail network
Doubletrack
Singletrack
Ten year projects
Decommission

— Further analysis needed

— Maintenance

- New construction

- Restoration

Sidewinder North Eder Valley Road Event Valley Rd Event Valley Rd

0 0.02 0.04 0.07 Miles

























West Mustang Sally Extention and Maintenance

lustang

West Mustang

West Mustang Sally

TDA_boundary Trail network Doubletrack Singletrack

Ten year projects

---- Decommission

— Further analysis needed

---- Maintenance

---- New construction

- Restoration

0.02 0.04 0.07 Miles

S

West Mustang Sally

West Mustang Sally West Mustang Sally Extention and Extention and Maintenance











Tahoe Donner Association 2025 Trails Implementation Plan

Appendix 11: 2022 Trails Master Plan



TRAILS MASTER PLAN

PREPARED FOR TAHOE DONNER ASSOCIATION DECEMBER 7, 2022





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Acknowledgments

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Definitions

Trailhead – A starting point that has parking, signage, and other amenities to introduce trail users to the Tahoe Donner trail system

Access Point – A starting point to a trail that does not have parking, but at a minimum has signage to introduce users to the Tahoe Donner trail system.

Doubletrack – Most doubletrack trails in Tahoe Donner are old logging dirt roads that are now used for recreational purposes, maintenance access, and emergency vehicle access. They are normally double the width (or more) of a typical singletrack trail with enough room for two bikes, horses or multiple people to ride/walk side-byside.

Open Space – The combination of both Common Area and Other Association Real Property within Tahoe Donner.

Paved Class I Path – Also called a bike path or shared use path, this is a paved path with exclusive right of way for bicyclists and pedestrians, completely separated from the roadway. They are typically 8'-12' wide.

Singletrack Trail – Single lane dirt tread trails where users generally travel in single file, the majority of singletrack trails within Tahoe Donner should be constructed and managed as a Trail Class 3 as defined by the USFS.

Universal Design – Universal Design is designing programs and facilities to be usable by all people, to the greatest extent possible, without separate or segregated access for people with disabilities. For more information refer to the Accessibility Guidebook for Outdoor Recreation and Trails by USFS.

Acronym List

AASHTO – American Association of State Highway Transportation Officials ACAC – Alder Creek Adventure Center CEQA – California Environmental Quality Act NEPA – National Environmental Policy Act

TD – Tahoe Donner TMP – Trails Master Plan TOS – Trails and Open Space Committee TDLT – Truckee Donner Land Trust USFS – United States Forest Service

USGS – United State Geologic Survey

Partnerships

U.S. Forest Service Truckee Donner Land Trust Town of Truckee Nevada County Truckee River Watershed Council Sierra Nevada Conservancy California Department of Fish and Wildlife California State Parks CAL FIRE Truckee Fire Protection District



Executive Summary

Purpose and Scope

The purpose of the Trails Master Plan Project (TMP) is to create a plan that affirms Tahoe Donner's commitment to land management, open spaces and trail systems while acknowledging evolving use patterns and the Association's desire to offer a spectrum of familyfriendly recreational opportunities for hikers, equestrians, and mountain bikers, while providing year-round opportunities for outdoor recreation. With community and stakeholder input, the new plan highlights areas where Tahoe Donner (TD) can increase the quality of user experiences and provide project recommendations that bring value to the homeowner experience.

This Plan covers the trails, dirt roads, Class I paths, and open space within the boundaries of Tahoe Donner, including possible connections with other area trails. Any newly acquired properties will be included in the TMP boundary and subject to the standards and guidelines set forth in this Plan.

Plan Outcomes

Within this document, trail recommendations are set within five focus areas:

- Culture & Values
- Safety & Civility
- Popularity & Density
- Connected Network
- Zonal Land Use

This document builds upon the 2013 Trails Master Plan and subsequent 2016 5-Year Implementation Plan.

It also aligns the work prepared in the 2020 Trails and Open Space Subcommittee Findings & Recommendations document. It builds upon those documents with updated recommendations.

The Plan will be reviewed by TD staff every year in order to remain current with the needs of the membership, accommodate changes in use, and to allow for adaptive management.

The Plan does not provide nor attempt to address solutions to all of the issues facing the trail system; rather, it provides a general guideline for the long term that allows for detailed planning from year to year.

Design and Planning Process

The consultant team worked in collaboration with Tahoe Donner staff while incorporating and confirming feedback from members, clubs, and the Trails and Open Space Committee (TOS) input through the process. This feedback was coupled with outside buy-in for the master plan from the major adjacent land managers including the Town of Truckee, Truckee Donner Land Trust, and U.S. Forest Service. The process created an all-encompassing approach to the recommendations outlined in this document.

Next Steps

Tahoe Donner staff will create a management, prioritization, and implementation plan based on the recommendations in this document. Staff will align prioritized projects based on member and TOS input.





Vision

Tahoe Donner's multi-use trail system **connects its users to nature, the region, and each other; builds a culture of stewardship and inclusion; and cultivates vitality** by expanding opportunities for wellness, exploration, and recreation.

The trail system vision statement was developed in 2020 by the Trails and Open Space Subcommittee, as part of their Findings & Recommendations document. The statement has resonated strongly throughout the master planning process and is in-line with what was heard from trail users.



Trail Master Plan - Compiled Map of Improvements



Figure 1: Compiled Map of Improvements



Alder Hill ☐ Miles

A variety of new trails and improvements are proposed throughout Tahoe Donner to provide enhanced experiences for all users. More details of the recommendations can be found in Section D, Trails Plan.

Legend

EXISTING

- External Connections
- --- Singletrack Trail
- === Doubletrack Trail
- --- Class I Path
- Improved Existing Trail
 - Primary Road
 - Secondary Road
- Improved Trailhead
- Existing Trailhead
- Existing Neighborhood Access

PROPOSED

- External Trail Connections
- Class I Paved Path
- Multi-use Trail
- 🚥 Equestrian Trail
- Bike Optimized Trail
- Inclusive Trail
- Boardwalk
 - New Trailhead
 - Zonal Land Use

Goals and Objectives

The following goals and objectives for the Tahoe Donner trail system were informed by input from staff, stakeholders, and members.

	GOAL		OBJECT
1	Maintain and enhance Tahoe Donner trails culture and values.	٠	Build community with shared values around the trails
		٠	Provide additional winter recreational open space acce
			Provide accessible trails, meeting universal design stan
2			Inform funding, operations, and maintenance
	Plan and design for increased usage and popularity.	٠	Look at trail related off-season uses for the downhill ski
		•	Develop trail system organization guidelines (Goals 2&
		•	Create new and enhance existing trailheads and trail ad
3	Cultivate trail etiquette that honors all users groups.	•	Implement sustainable and safe trail design (Goals 2&3
		•	Encourage sustainable and safe trail usage
		•	Provide more and better signage/wayfinding
		•	Clarity with a policy for dogs on trails
		•	Develop trail system organization guidelines (Goals 2&
		•	Create new and enhance existing trailheads and trail ad
4	Provide mutually beneficial connectivity for the community.	•	Expand the trail system: new multi-use trails, shared us
		٠	Work with adjacent land managers to provide regional
		٠	Address areas for potential agreements with adjacent l
		•	Provide additional Class I paved trails to better connec

IVE

ess ndards

i area

3)

ccess points (Goals 2&3)

3)

ccess points (Goals 2&3) se, and designated trails trail connections land managers ct destinations within Tahoe Donner and Truckee

The following plans were reviewed at the beginning of the project process, they provide guidance for the planning, design, operation, and/or maintenance of the Tahoe Donner trail system and connecting regional trails. Summaries, related goals, actions, and key takeaways were derived from each document.

Tahoe Donner Plans

2013 Tahoe Donner Trails Master Plan (2013 TMP)

The purpose of the Tahoe Donner 2013 TMP is to provide longterm guidance for summer trails planning, management, maintenance, and funding. The 2013 TMP: provides recommendations for design, planning, development, management, and maintenance of the summer trail system; incorporates recommendations from Tahoe Donner members gained during the 2013 TMP; planning process; and establishes a process for implementation of the plan. It was intended for the plan to be updated every five years in order to remain current with the needs of the membership, accommodate changes in use, and to allow for adaptive management.

2016 Tahoe Donner Land Management Plan (LMP)

The Tahoe Donner Association Land Management Plan provides goals and objectives to manage the Association's lands for conservation, restoration, mitigation, recreation, and memberserving amenities. The LMP applies to all Association-owned and managed lands within the Tahoe Donner subdivision and the Beach Club Marina on Donner Lake. The LMP guides

future development activities, resource conservation, and management within seven zones:

- 1. Residential
- 2. Residential-Wildlands Interface
- 3. Amenities
- 4. Greenbelt
- 5. Open Area
- 6. Stream Corridor
- 7. Ancillary Facilities

The LMP addresses biological resources, water quality, cultural resources, and hazardous areas in the context of existing, surrounding, and future land uses within these seven zones and identifies and prioritizes management activities and land uses by zone.

2016 Tahoe Donner 5-Year Trails Implementation Plan

Approved by Nevada County in 2016, the 5-Year Implementation Plan (5YIP) identified 22 specific trail projects that included necessary improvements and expansion of the Tahoe Donner trail system to provide a connected and sustainable network of trails available for a wide range of non-motorized users. Of those 22 projects, only two major trail projects are not started: the proposed Sunrise Trail and the Glacier Way Trailhead expansion. The three remaining minor road repair projects are being addressed as routine maintenance issues. All other 5YIP projects have been completed, are in-process, or have been deferred for reconsideration and review (Eagle Rock Trail, Hillside Trail).

2020 Tahoe Donner Trails and Open Space Subcommittee Findings & Recommendations

The General Plan Committee established a Trails and Open Space Subcommittee in 2018 to assist staff with the development of an updated Tahoe Donner's Trails Master Plan (TMP). The subcommittee met monthly for several years. This document compiles the subcommittee's TMP findings and recommendations. It is based on these primary sources:

- The 8/4/2019 Commentary on the 2013 Tahoe Donner TMP
- Draft updated TMP chapters produced by the subcommittee in 2020
- Subcommittee survey report
- Subcommittee meeting minutes

In 2021, with the General Plan Committee dissolving, the Board of Directors established the Trails and Open Space Committee to continue the work of its predecessor subcommittee.

The findings and recommendations served as the framework for this TMP and was referred to throughout the process, even adopting the same vision statement.

2021 Tahoe Donner Strategic Plan

The Tahoe Donner Association board adopted the five-year strategic plan on January 22, 2021, preceded by months of gathering information and encouraging member discussion. The outreach process included online member feedback sessions and a member survey as well as several board workshops and individual meetings. The

Strategic Plan affirms Tahoe Donner's commitment to upholding its vision of a vibrant and desirable mountain community with attractive and wellmaintained facilities, leading customer service, and healthy and accessible natural surroundings, for its members, quests, and the public. Yearly, the management team and board sets annual goals and work plans that create the metrics and timelines to accomplish these initiatives. These annual goals drive the budget process, which begins in the prior summer of each year.

Tahoe Donner Policies & **Covenants**

Public Use

Though Tahoe Donner builds and maintains its trail system for the sake of member enjoyment, Tahoe Donner's trails are a public amenity with free, non-commercial use permitted to both Tahoe Donner members and the general public.

This long-established policy is consistent with Tahoe Donner's 1993 filing for 501(c)(4) tax exemption, which emphasized unrestricted trail system public access as a critical component of the application. It is also consistent with conservation easement deeds held on certain Tahoe Donner properties, which require public access to the lands subject to the easements. Historically, Tahoe Donner has also afforded public access through its properties to the Tahoe National Forest lands that are either fully enclosed within Association property or adjacent to Association property.

By virtue of this policy, Tahoe Donner has improved its access to grant funding for trails, open space, and



fire protection. Additionally, the Association has been able to take advantage of liability protections afforded by California law to private landowners who permit free recreational public use and enjoyment of private lands. Finally, this policy has benefited Tahoe Donner with improved goodwill from the regional community, non-governmental partner organizations, and local, regional, and national governments.

Recommendation

Given the practical and financial advantages afforded to the Association by its current policy, and considering the disadvantages and costs associated with attempting to limit public use of the trail system through fees or prohibitions, this plan recommends that Tahoe Donner continue to permit free, noncommercial use of the trail system to both Tahoe Donner members and the general public.

In keeping with the goal of raising the social and physical quality of the trail system, future trail system updates should strive to balance continued general public use of the trail system with the quality of membership experience. Where trail or other physical improvements to the land may attract significant use and otherwise diminish the quality of the physical or social setting for the membership, Tahoe Donner may consider geographical/operational areas that could include a public pricing structure for the impacted areas.

Finally, this plan recommends improved member communication to clarify Tahoe Donner's trail system public use policy, its basis, and its advantages for the Association.

Dog Management

Tahoe Donner "Open Space" consists of two distinct land designations. Under the governing documents, lands planned for open space and trail development were designated as Common Area. Open Space lands acquired more recently, with no intent to develop, such as Bucknam Tract and Euer Valley are designated as other Association-owned property.

Under Existing Covenants Rules, all dogs in designated Common Areas must be leashed. (See Figure 4: Land Use Designation and Significant Ownership Map, page 21)

Tahoe Donner Covenants Rules – 2.13 Animal Control¹

No animal or pet may be tethered or tied to a stationary object on any Common Area, or other Associationowned property. Dogs shall only be allowed within any portion of the Common Area when they are leashed and otherwise under the supervision and restraint of their Owners or other person accompanying the dog.

On other Association-owned property such as Bucknam Tract and Euer Valley, the following Nevada County ordinance applies:

Nevada County, California Code, Title 2, General Code, Chapter **IV: General Regulations, Article 1** Humane Animal Control, Sec. G-IV 1.47 Animals Running at Large **Prohibited**²

No person owning or having possession, charge, custody, or control of any animal shall cause, permit, or

https://www.tahoedonner.com/members/

allow the animal to be in any building or enclosure or to stray, run, or in any other manner to be at large in or upon any public street, sidewalk, park, school ground, or other public place, or upon any private place or property without the permission of the owner or person in control of such private place or property.

An animal shall be deemed at large anytime it is off the premises of its owner/custodian and not under direct control of the owner/custodian by means of leash, chain, tether, adequate fence, or other effective device.

The provisions of this Section shall not apply to:

- A. Any hunting dog during such time it is being used for the purpose of lawful hunting, or during such time it is being trained to be a hunting dog, provided such hunting or training is on land or premises to which the person hunting or training such dog has a legal right to be upon.
- B. Working animals during those periods when the animal is working.
- C. Animals in the immediate presence and under direct control of the owner/custodian. This means the animal is in the close proximity of the owner/custodian, and the owner/custodian can demonstrate effective control of the animal.

Current State

In the Tahoe Donner Common Areas the Tahoe Donner Covenant rules apply and in the Other Associationowned property Nevada County rules apply.

Recommendation

Staff may consider engaging TOS and the Covenants Committee to develop a comprehensive and clearer dog management and etiquette plan.

Equestrian Use

Current State

Member input during the TMP revision process highlights equestrians concern for safety and trail etiquette.

Members and public have unvetted access to the designated equestrian center which raises concerns for animal and member safety. Equestrians acknowledge using all trails which may increase negative interactions with other users.

Recommendation

Staff may consider engaging TOS and the Covenants Committee to develop a comprehensive and clearer equestrian management plan. This plan could designate equestrian trails and develop rules for the equestrian center as outlined in Covenants 2.16:

Tahoe Donner Covenants Rule – 2.16 **Equestrian Use.**³

Except for use at the Equestrian Center, on designated trails, and at specially installed hitching posts, horses may not be used on or hitched at Common Areas or other Association-owned property.

Trail Events

Recommendation

On occasion, trail events are requested at Tahoe Donner by clubs and outside groups wishing to engage membership. Staff may consider working with TOS to develop a formal application which outlines expectations for event requests. Some elements that have been used in the past and may be applicable:

- Events that focus on membership enjoyment and celebration of TD trails.
- Events occurring in off peak timeframes.
- Events supported and backed by TD clubs.
- Events that do not unnecessarily hinder member enjoyment of trails for long periods of time.
- Events that reinvest in trail maintenance.

Regional Plans

2015 Town of Truckee Trails and **Bikeways Master Plan**

Updated in 2015, this plan's goals are as follows:

- The trails and bikeway system should provide a full range of safe and convenient recreation and active transportation opportunities for multiple users.
- The system should link the Town's historic downtown, residential and commercial areas, and recreational, educational, natural and historical resources utilizing public and private lands as necessary and appropriate.
- 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.
- The Town, appropriate public agencies and community groups should work collaboratively and cooperatively with affected private



homeowner-guidelines/covenants/covenants-rules/ https://library.qcode.us/lib/nevada_county_ca/

pub/county_code/item/title_2-chapter_iv-article_1sec_g_iv_1_47_animals_running_a

https://www.tahoedonner.com/members/ homeowner-guidelines/covenants/covenants-rules/

and public agency landowners to effectively implement the goals of the Plan.

- The system should be planned to minimize land use and user conflicts to provide a safe and enjoyable experience for the user.
- The system should seek to access, protect and enhance the natural and historic resources of Truckee.
- All available funding sources should be identified and diligently pursued for all projects implementing the goals of the Plan.
- Careful project-specific planning is necessary to ensure consistency with the goals of the Plan and should be made a mandatory element of all dirt trail, bikeway, and walkway construction projects.
- Cooperation and coordination with both public and private entities should be established to ensure the careful and responsible management of the system.
- Quality and consistent long- and short-term maintenance of the active transportation system is paramount to its success.

Nevada County Active Transportation Plan (2019)

This plan defines active transportation as human-powered travel, including walking and bicycling. The plan was developed in light of previously adopted Nevada County Bicycle Master Plan (2013), which was amended in 2016 to incorporate the Town of Truckee's updated Town of Truckee Trails & Bikeways Master Plan (2015), and the Nevada County Pedestrian Improvement Plan (2010) along with input from local jurisdictions and the public. The plan establishes the following five goals:

- Enable all to move safely on the bicycle and pedestrian networks.
- Increase walking and biking.
- Improve bicycle and walking mobility for residents and visitors by connecting destinations to the bicycling and pedestrian networks.
- Keep bicycle and pedestrian networks well-maintained.
- Implement regular bicycle and pedestrian facility maintenance and monitoring programs in each jurisdiction.

Adjacent Land Managers

U.S. Forest Service (USFS)

Tahoe Donner's boundary is contiguous with several USFS properties. The USFS also owns one inholding within Tahoe Donner's borders. In some areas, Tahoe Donner maintains Special Use Permits (SUPs) with the USFS to extend the Association's winter XC trail system across USFS property. However, no SUPs exist between Tahoe Donner and the USFS pertaining to the summer trail system. Numerous unsanctioned, irregularly maintained user-created trails connect USFS land to the Tahoe Donner trail system. The Commemorative Overland Emigrant Trail is a USFS sanctioned and maintained singletrack trail running between its terminus on Alder Creek Drive just outside Tahoe Donner and Prosser Reservoir.

Truckee Donner Land Trust (TDLT)

With its partners, this regional land conservation non-profit holds title to several Tahoe Donner adjacent properties, including Johnson Canyon, Lower Carpenter Valley, and Frog Lake. The TDLT intends and expects to open all of these lands for public recreational use and to equip them accordingly with trails. To facilitate access to Lower Carpenter Valley, the TDLT obtained a land use agreement with Tahoe Donner to build a bridge and a trailhead with parking, restroom facilities, and a trail in the northeast corner of Tahoe Donner's Crabtree Canyon property.

The TDLT's Donner Lake Rim Trail (DLRT) also passes through several Tahoe Donner properties under an existing recreational easement. Existing easements with the DLRT also provide public access through Tahoe Donner in order to access the DLRT and Crabtree Canyon. Easements also allow passage through Tahoe Donner property for the purpose of accessing other adjacent TDLT properties.





2013 Trails Plan Policies incorporated into 2022 Trails Plan as Best Management Practices

	POLICY DESCRIPTION	STATUS IN
GOAL 1	MANAGEMENT. ESTABLISH MANAGEMENT PRACTICES AND PROTOCOL FOR A COMPREHENSIVE TRAIL SYSTEM UTILIZED BY	A DIVERSE
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.	Retained as
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, XC skiers, snowshoers, and dog owners.	Retained as
Policy 1.3	Trail System Rules. Management will work to establish and communicate trail system rules to reduce user conflict, effectively manage risk, and improve user experience.	Retained as
Policy 1.4	User Conflict. Management will work to reduce user conflict through trail design and maintenance, as well as working with users to establish and promote communication for trail sharing.	Retained as
Policy 1.5	Stewardship. Management of the trail system will make every effort to sustain the trail system and the surrounding environment through sound management practices and community involvement.	Retained as
Policy 1.6	Resource Conservation. Tahoe Donner will strive to practice resource conservation through its trail system, future development, and programs established for the trail system.	Retained as
Policy 1.7	Communication. Tahoe Donner will effectively communicate this Plan, projects, and programs, and welcome user feedback.	Retained as
New Policy	e-bikes. Class I e-bikes will be managed as mountain bikes and provided access to trails and roads open to standard mountain bikes.	Incorporate
GOAL 2	PLANNING. CREATE A FRAMEWORK AND FOCUS FOR TRAIL DESIGN, CONSTRUCTION, AND MAINTENANCE OF THE TRAIL S	YSTEM THR
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.	Retained as
Policy 2.2	Trail Standards. Development, construction, and maintenance of the trail system will conform to the recommended trail standards.	Retained as
Policy 2.3	Trail Type. The trail system should include multi-use and user-preferred trails of varying levels of difficulty and provide the opportunity to connect to other trail systems which may offer more trail class types.	New plan re achieve higl
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.	Retained as
Policy 2.5	Easement Use. Reasonable attempt will be made to avoid utilizing the recreation easements on private property for the trail system.	Use of recre recommend
Policy 2.6	Connectivity of Tahoe Donner Community. Tahoe Donner trail system will attempt to connect to landmarks, vistas, and other locations within the Association.	This plan red neighborho of these cor Donner Arc
Policy 2.7	Connectivity to Regional Trail Systems. Focus will be given on connecting the trail system with trail systems and points of interest in the region to the benefit of the membership.	Carried into

2022 TRAILS PLAN

POPULATION.

Best Management Practice.

ed into new plan.

OUGH DEFINED STANDARDS AND PRIORITIES.

Best Management Practice.

Best Management Practice.

ecommends multi-use and designated use trails to her quality and safer experience of user groups.

Best Management Practice.

eational easements on private property is not ded in this plan.

commends using common areas to connect ods to amenities and key destinations. Development mmon area access points should conform to Tahoe hitectural and Covenants guidelines.

new plan with mutual benefit as a consideration.

2013 Trails Plan Policies incorporated into 2022 Trails Plan as Best Management Practices

	POLICY DESCRIPTION	STATUS IN
GOAL 3	DEVELOPMENT. ESTABLISH GUIDANCE FOR TRAIL DEVELOPMENT AND CONSTRUCTION TO ACHIEVE BEST PRACTICES AND	PRUDENT F
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.	Retained as
Policy 3.2	Evaluation Process. All projects will be evaluated individually for safety, feasibility, cost analysis, and environmental impact.	Retained as
Policy 3.3	Trail System Phasing. Phasing of trail system improvements will be based on project priority and funding availability. Project priority will be based on safety needs, environmental impact, member input, and the ability of the project to add immediate value to the existing trail system.	This plan red designated improvemen for both ind system.
Policy 3.4	Construction Best Management Practices. Trail and ancillary facility construction will be consistent with best management practices to ensure goals and policies are achieved as well as minimize natural resource and neighbor impacts for the short- and long-term.	Retained as
Policy 3.5	Project Management Best Practices. Every effort will be made to plan, implement, and execute each project thoroughly.	Retained as
Policy 3.6	Agency Approval. Trail construction will be compliant with all relative land use and development regulations.	Retained as
Policy 3.7	Tahoe Donner Association Funding. Funding will be considered for the development, construction, and maintenance of the trail system.	Retained as
Policy 3.8	Outside Funding. Federal, State, and private grant funds will be reviewed for the benefit of the trail system.	Retained as
New Policy	Adaptive Management: These recommendations represent the current needs and desires for trail improvements at Tahoe Donner, through adaptive management practices, changing use patterns, and developments will be addressed with ongoing management by Tahoe Donner staff and advice from the TOS Committee.	Incorporate
GOAL 4	MAINTENANCE. PROVIDE FOR STANDARDIZATION OF TRAIL SYSTEM MAINTENANCE.	
Policy 4.1	Asset Preservation. Tahoe Donner will strive to maintain the trail system, ancillary structures, and the surrounding recreation space for sustainability.	Retained as
Policy 4.2	Regular Maintenance. This Plan will serve as strategic guidance for the standard and type of maintenance to occur on the trail system.	Retained as
Policy 4.3	Inspection. Regular systematic inspections of the trail system will occur to prevent and mitigate degradation of use, minimize hazards and risk, and promote general trail activity, and feedback through trail presence by staff and the membership.	Retained as



2022 TRAILS PLAN

UNDING MECHANISMS.

Best Management Practice.

Best Management Practice.

commends implementation of multiple use and use trail improvements. Recommend prioritizing trail ents that add immediate value, quality enhancements dividual user groups and broader multiple use trail

Best Management Practice.

d into new plan.

Best Management Practice.

Best Management Practice.

Best Management Practice.

Previously Prepared 2016 Five-Year Implementation Plan



Figure 2: Previously Prepared 2016 Five-Year Implementation Plan 12 | Introduction
Project Status of the 2016 Five-Year Implementation Plan

Project 1: S. Euer Valley Road

Description: Rehabilitation and improvement to an existing approximate 12' wide rough graded dirt roadway known as S. Euer Valley Road, the primary access route to the valley floor from Alder Creek Road. Road bed and surface degradation over time caused by seasonal and year-round drainages exacerbated with vehicular and recreational use. Important arterial trail system connection as well as both winter and summer time vehicular use for emergency and fire suppression access. Status: Ongoing, potential 2023 completion

Project 2: Wild West

Description: New trail providing an off-roadway trail route as an alternative to the westerly portion of the S. Euer Valley Road (Project 1). The proposed route utilizes the top of a bank overlooking the Euer Valley and S. Prosser Creek to the north and approximately 20' vertical feet higher than the valley floor. Status: Complete

Project 3: Sidewinder

Description: New trail, although roughly established, providing an offroadway trail route as an alternative to the N. Euer Valley Road. Trail has been informally used and roughly established, but considered to be a new trail proposal factoring the tread improvement and drainage crossings necessary for use as a sustainable trail. **Status: Complete**

Project 4: East Mustang Sally

Description: New trail providing usable and sustainable grade to a popular hiking and biking destination in lieu of the steep rough graded roadway. Project also includes needed drainage improvement to address fall-line erosion to the existing rough graded roadway utilized for winter grooming and XC skiing. Status: Complete

Project 5 Name: West Mustang Sally

Description: New trail and decommissioning of existing trail providing usable and sustainable grade to a popular hiking and biking destination in lieu of the steep fallline trail. Implementation reliant and commensurate upon approval for connecting link to Project 4 (East Mustang Sally) by, and utilizing the lands of, the USFS. **Status: Complete**

Project 6: Upper Motherlode

Description: New trail from the top of Hawks Peak, commencing at the end of the existing Hawks Peak trail and connecting with the existing Lower Motherlode trail by way of a short section of the lower existing dirt roadway. Connects with Project 7 mid-project, providing an alternative trail route continuing to the northeast. Status: Complete

Project 7: Upper True Grit

Description: Northeasterly continuation from Upper Motherlode (Project 6) providing trail connection to a main roadway intersection at Project 10 near the Sundance Hut and beginning of Project 8. Status: Complete

Project 8: Lower True Grit

Description: New trail providing alternative to existing rough graded dirt roadway utilized for past mastication activity. Provides trail alternative to the existing rough and fall-line roadway from the Sundance Hut to the Alder Creek Road extension known as Project 1. Also a northeasterly extension of proposed trail Projects 6 and 7. Status: Complete

Project 9: Whoop It Up

Description: Rehabilitation and realignment of a small segment of an existing trail to create sustainable grades, prevent erosion and reroute around an impacted riparian area. Includes decommissioning and rehabilitation of the existing trail through lower riparian area as well as a new trail extension. Status: Ongoing, potential 2023 completion

Project 10: Sundance / Crazy Horse

Description: Rehabilitation and improvement of an existing rough graded roadway commonly utilized for maintenance vehicular access and recreational use as a connective link within the larger trail system. Improvement involves re-surfacing with crushed gravel to stabilize roadway surface and many new, and improvement to existing, rolling dips. Limited regrading will be necessary in some locations to achieve either an inslope or outslope surface dependent upon the existing roadway condition and goal of limiting grading activity. All rolling dips will utilize a rock lined bottom and rock dissipaters will be utilized where necessary to shed and manage runoff from the roadway and disperse evenly on the downhill side to prevent runoff channelization and erosion. Status: Ongoing

2016 Five-Year Implementation Plan Progress Summary

PROJECT #/NAME

Project 1: South Euer Valley Roa Project 2: Wild West Project 3: Sidewinder Project 4: East Mustang Sally Project 5: West Mustang Sally Project 6: Upper Motherlode Project 7: Upper True Grit Project 8: Lower True Grit Project 8: Lower True Grit Project 9: Whoop It Up Project 10: Sundance / Crazy Ho Project 11: Home Range Road Project 12: Rust Never Sleeps Project 13: Eagle Rock Trail

Project 14: Sunrise Trail Project 15: Glacier Way Trailhea Project 16: Broken Chain (Teewi Project 17: Hillside Trail Project 18: Bermgarten (McGlas Springs) Trailhead Project 19: Nature Loop South Project 20: Nature Loop North Project 21: Clubhouse Trail Project 22 A+D: Eastern Perimer (North Segments A+D)

Project 22 B+C: Eastern Perimer (South Segments B+C)



	STATUS/NOTES
ad	Ongoing, potential 2023 completion
	Complete
	Ongoing, potential 2023 completion
orse	Ongoing, potential 2023 completion
	Complete
	Complete
	Not Built, shown in new MP with additional proposed trails in the ski area.
	Not Started
d	Not Started
inot)	Complete
	Not Complete
shan	Ongoing, potential 2023 completion
	Ongoing, potential 2023 completion
	Ongoing, potential 2023 completion
	Ongoing, potential 2023 completion
ter Trail	Ongoing, addressed in MP as FS encroachment
ter Trail	Ongoing, potential 2023 completion

Project Status of the 2016 Five-Year Implementation Plan

Project 11: Home Range Road

Description: Rehabilitation and improvement of an existing rough graded roadway commonly utilized for vehicular maintenance access and recreational use, including both summer and winter time use. Status: Complete

Project 12: Rust Never Sleeps

Description: Rehabilitation and improvement of a short existing rough graded roadway commonly utilized for vehicular maintenance access and recreational use. Most commonly used by equestrians and winter time use, including grooming for XC skiing. Status: Complete

Project 13: Eagle Rock Trail

Description: New trail providing connection from Glacier Way Trailhead (Project 15) to the base of the downhill ski area. Includes a signed and striped crossing of Skislope Way and utilizes the northeasterly aspect of the downhill ski area runs after it wraps around the top of the ski area at Eagle Rock. Status: Not Built, shown in new MP with additional proposed trails in the ski area.

Project 14: Sunrise Trail

Description: New trail traversing the Sunrise Bowl area situated below an existing dirt roadway. The proposed trail provides a superior alternative to this steep roadway, particularly a steep incline/decline roadway segment which is avoided with the new trail alignment, and creating a much gentler trail grade for trail users. The proposed trail provides a key northsouth trail linkage currently lacking within the larger trail system. Status: Complete

Project 15: Glacier Way Trailhead

Description: Improvement and expansion of the Glacier Way Trailhead, including additional paved parking area and drainage improvements. Heavily used trailhead with parking spill-over into the adjacent Glacier Way public roadway during peak usage. Expansion and formalizing of parking area results in 23 parking spaces, including 1 accessible space adjacent to the existing paved accessible path. Trailhead provides access to many existing Tahoe Donner trails, the Donner Lake Rim Trail and proposed Projects 13, 14 and 16. Status: Not Started

Project 16: Broken Chain (Teewinot)

Description: New trail connecting Glacier Way Trailhead (Project 15) to the existing Teton Way Trailhead (no project). Provides both new trailhead-to-trailhead connection, but also an alternative to use of the existing dirt roadway (lower reach). Includes needed drainage and erosion improvement of a spur connection to Skislope Way. Status: Complete

Project 17: Hillside Trail

Description: Numerous improvements to an existing narrow hiking-only trail, primarily in areas degraded by runoff directed from the adjacent uphill roadway (Hillside Drive) and perennial drainages. Includes the decommissioning and rerouting of a small existing trail segment that is eroding due to its close proximity to Alder Creek. Status: Not Complete

Project 18: Bermgarten (McGlashan Springs) Trailhead

Description: Improvement to an old logging deck to be known as the Bermgarten Trailhead, including new paved parking area and driveway access, drainage improvement and trailhead facilities (kiosk, dog bags/disposal). Existing 14' wide dirt access road to be widened to a 24' wide paved driveway with a maximum slope of 8%. New paved parking area will accommodate 14 vehicle parking spaces, including 1 accessible parking space. Trailhead provides access to many existing dirt roads and trails as well as the planned Donner Lake Rim Trail. Status: Ongoing, potential 2023 completion

Project 19: Nature Loop South

Description: One of the oldest TD trails with numerous needed improvements and rehabilitation to various existing trail features. Known as the Nature Loop (consisting of this Project 19 and Project 20, Nature Loop North) this looped hiking trail has a close association with the adjacent riparian environment of Trout Creek and related resources. Heavily used and popular trail loop causing degradation of the environment and user experience (muddy and wet sections of trail) and safety (failing trail tread/ edge, failing boardwalk). In contrast to the road-bed character for much of Project 20, this Project 19 portion of the Nature Loop is a true trail with a smaller typical tread width, particularly on the easterly end.

Status: Ongoing, potential 2023 completion





Project Status of the 2016 Five-Year Implementation Plan

Project 20: Nature Loop North

Description: One of the oldest TD trails with numerous needed improvements and rehabilitation to various existing trail features. Known as the Nature Loop (consisting of this Project 20 and Project 19, Nature Loop South) this looped hiking and biking trail has a close association with the adjacent riparian environment of Trout Creek and related resources. Heavily used and popular trail loop causing degradation of the environment and user experience (muddy and wet sections of trail). In contrast to the narrower typical trail character of Project 19, this Project 20 typically has a road-bed-type tread and character so it is available to more user types, but does also have segments of less wide trail. Status: Ongoing, potential 2023 completion

Project 21: Clubhouse Trail

Description: Improvement of existing trail and new trail continuation to connect to the paved Trout Creek Recreational Trail. Improvements to the existing trail involve a range of fixes all centered around runoff and erosion management for the benefit of the trail user and surrounding environment, particularly the adjacent meadow environment known as Bennett Flat. Status: Ongoing, potential 2023 completion

Project 22 A+D: Eastern Perimeter Trail (North Segments A+D)

Description: Improvement to two of four segments of an existing trail (see also Project 22 B+C). Segment 22A involves two reroutes and decommissioning of the existing trail, both intended to address unsustainable steep trail grades. Segment 22D involves the rehabilitation and addition of rolling dips with rock dissipaters to control and manage runoff and resultant erosion.

Status: Ongoing, addressed in MP as FS encroachment

Project 22 B+C: Eastern Perimeter Trail (South Segments B+C)

Description: Improvement to two of four segments of an existing trail (see also Project 22A+D). Segment 22B involves trail rerouting and decommissioning for sustainability purposes by addressing the lack of grade reversals and existence of small radius switchbacks causing trail degradation and erosion. Segment 22C also involves the trail rerouting and decommissioning for sustainability purposes exacerbated by the narrow width of the available project area and steep condition of the existing slope and trail as it descends to Brookstone Drive. Segment 22C also involves the installation of rock steps on the north side of Brookstone Drive. Status: Ongoing, potential 2023 completion









Existing Conditions

Background

Brief History of the Trail System

One of the earliest records of human interaction at Tahoe Donner dates back to the Washoe people. In summertime, members of the Washoe tribes explored the Tahoe Donner area to fish its waters, hunt local species and gather natural resources. Once colder weather arrived, the Washoe people moved to the milder climate and stayed below the mountains. During the fall period of each year, members would travel over the crest of the summit to collect acorns. Acorns were a valuable food source over the winter months within Tahoe Donner. Remnants of a bedrock mortar have been found where acorns were ground in bowl-shaped holes. The Washoe people took a firsthand approach when it came to wildfire, creating manageable fires for the benefit of the land and its uses. In this way, Tahoe Donner's land was used for generations as a resource and haven for the Washoe people. This same land, however, became a commodity to migratory Europeans following the gold and silver rushes in the 1850s.

Tahoe Donner Association was originally developed with the intention of building a family resort with vacation amenities for its members. The first home was built in 1971. The original trail system was constructed for equestrian use and consisted of approximately 15 miles. It was maintained by Multi-Use Management (M.U.M.), an outside contractor. In 1982, Tahoe Donner Association acquired the 2,000 Acres, which contains many forest roads and skid trails created to facilitate the late 1800's logging operation to support the railroad and the salvage logging

operation after the 1960 Donner Ridge Fire. Doug Smith, the first forester for Tahoe Donner (from 1988 until 1993) created the basis for today's trail system. There were 16 miles of multiuse trails in 1994. Since that time, there has been the creation of the Trails Department and the establishment of a Director of Land Management leading the planning and construction of new and improved trails.

Since 2002, Tahoe Donner has acquired an additional 1,142 acres, including two Euer Valley purchases, the Bucknam Tract, the McGlashan Springs parcel, and an additional 20 acre property. The acquisitions included documented XC skiing access to the Euer Valley floor through a previous recreational license, timber harvest and other access roads, and equestrian trails. Today, the trail system varies in development, a mix of singletrack and doubletrack trails following a system of old logging and access roads. Many of the existing trails were developed as logging and access roads which do not provide a varied user experience or do not connect to vistas or other points of interest. Others were built with steep grades or along creeks and experience regular problems with erosion.

Overview of the Existing Tahoe Donner Trail System

At present, Tahoe Donner comprises over 7,000 acres, with over 4,000 acres of recreation space, and 1,300 acres of common area interspersed among the more than 6,000 homes.

The trail system currently consists of more than 60 miles of multi-use trails. Since approximately 2011, Tahoe Donner has sought to construct and maintain trails based upon those

standards used by the United States Department of Agriculture Forest Service (USFS). However, legacy trails built in Tahoe Donner before the adoption of these standards do not generally conform to currently accepted trail building best practices. These legacy trails include historical logging and fire access roads, equestrian trails, and user-created trails adopted into the system as a result of repeated use.

The existing trail system includes major and minor trailheads, as well as a number of official and unofficial neighborhoods access points.

The trail system also includes associated signage, kiosks, restroom facilities, dog waste stations, and various other ancillary infrastructure.



Washoe People Europeans following the gold and silver rushes in the 1850s.



Logging

Tahoe Donner's land was used for generations as a resource and haven for the Washoe people. This same land, however, became a commodity to migratory

Many of the forest roads and skid trails were created in the late 1800s and early 1900s to accommodate logging and then raising dairy cows after deforestation.

Land Management

Today, a Department of Land Management, trail crew and management team work to mimic the effects of fire cycles. This is done by mechanically reducing vegetation that would have been consumed in low-level surface fires. Brush is masticated, planted conifer seedlings quickly grow in the newly created bed, and maturing trees are thinned as necessary to reduce competition. Large and properly spaced trees can shade out the understory and prevent excess brush to grow, creating a living fuel break. The Department's goal is always to try to balance the protection of the Association and the promotion of natural ecology by mimicking lowintensity fire. A Forest Management Plan is visited on a five-year basis.

A large part of what makes Tahoe Donner great is the flora and fauna that also call it home. The towering trees that wind along roads and trails include:

- Sugar pine
- Lodgepole pine
- Western white pine
- Jeffrey pine
- Red fir
- White fir
- Mountain hemlock

Chaparral and brush are among other native and natural plant species within the Association. These earlysuccession species once created a large fire risk, but with proper mastication techniques, chaparral and other shrubs can safely offer a home to deer, squirrels, grouse and other forest species. Tahoe Donner's many streams and wetlands include Prosser Creek, Trout Creek, Alder Creek, the area surrounding Alder Creek Adventure Center and the land along the Nature Loop Trail.

Tahoe Donner's land is a home for flora, fauna, families and communities that date back centuries. To learn more about the land management, visit <u>tahoedonner.com/forestry</u>. To learn more about the history of Tahoe Donner, visit <u>tahoedonner.</u> com/50years.



Overview

Tahoe Donner has a diverse landscape of mature forests, meadows, and replanted areas from the 1960 Donner Ridge Fire as shown in the foreground of this photo from Hawk's Peak, looking towards the Alder Creek Adventure Center (ACAC).

ABCD

Regional Ownership



Figure 3: Regional Ownership Map



Overview

As of 2022, the Tahoe Donner Association has land management oversight responsibilities across 7,376 acres. This includes 5,018 acres owned by Tahoe Donner, which is comprised of over 4,000 acres of recreation space and 1,300 acres of common area interspersed among the community homes.

The TMP covers the Association trails within the boundaries of Tahoe Donner and possible connections with other trail systems in the area. Any newly acquired properties will be included into the TMP boundary and subject to the standards and guidelines set forth in this Plan.

Legend



Tahoe Donner Property

National Forest Property

Truckee Donner Land Trust Property

California State Park

Land Use Designation and Significant Ownership



Figure 4: Land Use Designation and Significant Ownership Map



Overview

The Association's undeveloped property is under two different ownership designations:

Common Area and Other Association Real Property (Open Space). Under deed restrictions maintained by the Association, different uses are allowed within each of these designated areas.

Lands designated as **Common Area** are real property owned by the Association and identified for the common use and enjoyment of the owners.

"The Common Areas shall be preserved as open space except where, improved for recreational purposes or other purposes incidental and ancillary to the use of Lots or administration of the Association." (TDA C&R Article VIII, Section 1(b))(TDA 1992)

Other Association Real Property refers to certain parcels of real property now owned or to be acquired in the future by the Association which are not dedicated as Common Area. According to the Tahoe Donner Association Covenants and Restrictions:

"The use, enjoyment, and development of Other Association Real Property shall be in the sole discretion of the Board of Directors except that:

a. Such use, enjoyment, and development shall always be at the advantage and in the best interests of the association and its Members..." (TDA C&R Article VIII, Section 4) (TDA 1992)

Legend

- Tahoe Donner Other
- Association Real Property
- Tahoe Donner Common Area
- National Forest Property
- Truckee Donner Land Trust

Miles

Existing Conditions - Slope



Figure 5: Existing Conditions Slope Map



Overview

Slopes range from flat to 80%, although the majority of slopes are less than 35%. The site generally slopes toward the east and south, with the exception of Euer Valley. Elevation ranges from approximately 6,200 feet at the south end of the property near I-80 to a high point of 7,825 feet at the top of Donner Ridge above Sunrise Bowl.

Legend

0 - 10%
10.1 - 20%
20.1 - 30%
30.1 - 40%
40.1 - 50%
50.1 - 60%
60.1 - 70%
70.1 - 80%
80.1% +

Opportunities and Constraints



Opportunities

- Some existing cart paths (identified on a case by case basis) can be plowed to offer winter use.
- ACAC could be better utilized in the summer and be used for member events and become a hub for summer trail users.
- New trail connections could be improved along the southwest part of Tahoe Donner.
- Downhill ski area could be utilized in the summer with the addition of new trails and connections.
- Create a Class I trail through the subdivision connecting the community between ACAC and downtown Truckee.
- Provide neighborhood connectors to connect neighborhoods that are farther from the main trail network.
- Programmatic offerings that drive volume to underutilized facilities to increase value through member enjoyment.
- Trail connections could be more direct to Euer Valley and other destinations.

Constraints

- Trail network is dense and concentrated around ACAC.
- Trail network concentrated on the northeast side of Tahoe Donner.
- Some Tahoe Donner trails are encroaching outside of Tahoe Donner land.
- Trail access points are limited and are not easily visible.
- Gaps in trail connectivity exist. For instance, many equestrian trails do not easily connect to other equestrian trails.

ABCD



Site Conditions Imagery



Many trails are connected through dirt roads, there is an opportunity to connect trails to trails to aid in navigation and enhance user experience.



Remnants of ranching operations remain in Euer Valley and provide an opportunity for interpretation along the trail system.



Trails located in wet areas have dense vegetation requiring more maintenance with brushing and water crossings.



The equestrian center can be enhanced and welcoming to the public by the creation of a dedicated equestrian zone.



The existing Nature Trail offers a smooth surface, all access trail. There is potential to create new trails similar to this in other areas within easy access to trailheads and parking.



Forestry operations and fuels reduction projects can utilize the trail system for easier access to the land.

Site Conditions Imagery - Navigation



At west end of Euer Valley a formal crossing of the meadow and Prosser Creek is planned with a new boardwalk and bridge. Currently the area lacks a connection in the spring when the meadow is wet.



This is an example of a signage family that could be developed for Tahoe Donner. It is recommended to create such a signage plan in the future for consistency in wayfinding, branding, and messaging.



Small arrows and fiberglass carsonites are bolted to trees in some places to aid in wayfinding, this could be improved with a consistent signage family.



Winter trail signage stays in place year-round but is inconsistent with summer trail names and signs. Summer and winter trails could be better coordinate with names and signs.



Trailhead kiosks are inconsistent in summer and winter maps. This trail user is looking at the winter map, which does not show the summer trails.





Existing summer trail signs consist of a 4x4 wood post with a bolted fiberglass carsonite and stickers, there is an opportunity to enhance wayfinding with a consistent signage family.

Trends and Community Comparisons

General Statements per Growth

Growth has become a ubiquitous trend in Northern Lake Tahoe over the past ten years, driven by a buoyant economy and desire for outdoor recreation experiences. Additionally, the COVID Pandemic has driven new trends allowing for "remote work" status, coupled with even stronger desire to build community close to recreation that has become elevated in importance in a balanced work and home life.

The Tahoe Donner community has undoubtedly followed the same trends for the past ten years. This has been demonstrated recently by a heated real estate transaction market, and very limited sales or rental inventory. Many rental units have been migrated toward the "short term rental" (STR) marketplace, allowing owners to maximize rental revenues with limited occupancy. This in turn has driven some new visitation patterns. The Town of Truckee has stringent quidelines over STR uses.

2020 Median household income in Truckee (including Tahoe Donner) was \$98,587, compared to the national average of \$67,712 and the California average of \$78,672. Truckee is made up of approximately 16,600 residents, 6,070 households, of which about 53% are used for seasonal or recreational use. Unemployment rates are low at about 2.8%. Truckee's age demographics map similarly to those of the state, with the exception of a slightly lower population of 18-24 years and slightly heavier population of 41-64 years. Truckee lacks racial and ethnic diversity in comparison to the state as a whole.¹

Recent Trends in Tahoe Donner (2019-2021)

The Tahoe Donner member survey, conducted in December of 2021. points to some very important points noted in the "key findings".

Several indicators point to the likelihood of more crowding in Tahoe

Source US Census Bureau, American Community Survey, latest 5-year averages. (Data excludes nonresident)

Donner. There are now more full-time members living in their homes than ever before, second home owners are spending an additional 20 days each vear (+24%) at Tahoe Donner, and there is growth in intention by second home owners to become full time residents in the future.² See graph below.

In addition, new buyers tend to be younger than current ownership, with 60% under age 50. New buyers are predominately from the Bay Area with some from Sacramento and the Northern Central Valley. There is strong motivation toward use of amenities, particularly the trails network.³ See graphs to the right.

Recent usage and popularity trends of the Tahoe Donner trail network suggest that a review of maintenance metrics would be wise. In particular, reviewing head count and equipment hours dedicated to trails upkeep. Current resource allocations do not align with the importance noted by membership around trails.

Source 2021-member survey 3 Source 2021-member survey



Time Spent at Tahoe Donner by Season (Second Homeowners)

Number of Days









Tahoe Donner Home Ownership by Age

Trends and Community Comparisons

Mid/Post COVID Outdoor **Recreation Trends**

Recreation offerings in the Northern Lake Tahoe area have become incredibly popular, whether resort delivered or self-administered. Anecdotes related to popularity of recreational equipment have floated through industry production companies since the pandemic and demand does not seem to be calming. Furthermore, interest in e-bike recreation is closely following trends in other developed countries, and so growth of this segment is highly anticipated in all US markets. More boutique devices like One Wheel, are also gaining traction as modes or transport and recreation on paved and native surfaces.

Of particular note in a recent data review¹, it is noted that spending on recreation expenditures in the Bay Area (up to 240 minutes from Truckee) far outstrips local spending (0-60 minutes from Truckee). See map to the right.

Locally, we see spending on many recreation vehicles and fees below the national spending potential index of 100 (SPI) and slightly above the SPI on recreation equipment, with particular interest shown to bikes, camping equipment and winter sports equipment.

Broadly, including the Bay Area, we see spending on many recreation vehicles and fees and on recreation equipment substantially above the national SPI, with particular interest shown to camp fees, bikes, camping equipment and winter sports equipment.

These data points suggest that though a local market has access to many recreation networks, actual spending enthusiasm lies with those further afield in urban and suburban living situations. This seems to align with many of the existing, and particularly new resident, profiles of the Tahoe Donner community. This suggests that there could be enduring growth potential and interest in improved offerings within the trails master plan network (including programmatic offerings noted in the Elements Matrix.

Tahoe Donner Growth Differentiators

Differentiators help separate a community, business, or experience from the pack or competition. Some differentiators for the Tahoe Donner community include:

- Recreation centric community culture and values.
- Excellent recreation facilities as a foundation.
- Large holdings of land with recreation access as an allowable use.
- Underutilized facilities and land for future recreation expansion.
- Facilities that could host events and generally manage much more volume from a business perspective.
- Proven monetization models from winter operations that may be applied to summer recreation.



Recreation Expenditures in the Bay Area (up to 240 minutes from Truckee)





Truckee, California Drive Time Band: 0 - 60 minute radius

Demographic Summary		2021	2026
Population		571,184	611,662
Households		225,826	242,128
Families		140,140	150,024
Median Age		39.4	39.5
Median Household Income		\$72,252	\$80,716
	Spending Potential	Average Amount	
	Index	Spent	Total
Recreational Vehicles and Fees	94	\$106.50	\$24,049,545
Docking and Landing Fees for Boats and Planes	93	\$8.70	\$1,964,714
Camp Fees	83	\$25.51	\$5,761,684
Payments on Boats/Trailers/Campers/RVs	96	\$48.74	\$11,006,520
Rental of Boats/Trailers/Campers/RVs	107	\$23.54	\$5,316,628
Sports, Recreation and Exercise Equipment	106	\$190.76	\$43,077,544
Exercise Equipment and Gear, Game Tables	106	\$58.34	\$13,175,558
Bicycles	109	\$32.45	\$7,327,617
Camping Equipment	118	\$24.59	\$5,552,037
Hunting and Fishing Equipment	99	\$48.14	\$10,872,072
Winter Sports Equipment	106	\$7.81	\$1,762,658
Water Sports Equipment	100	\$8.36	\$1,886,968
Other Sports Equipment	108	\$7.70	\$1,738,877
Rental/Repair of Sports/Recreation/Exercise Equipment	107	\$3.08	\$696,483

ecreational	Vehicles	and	Fe	es		
Docking and	Landing	Fees	for	Boats	and	1



Truckee, California

Demographic Summary		2021	2026
Population		10,147,951	10,451,877
Households		3,615,051	3,720,076
Families		2,391,342	2,459,423
Median Age		38.6	39.2
Median Household Income		\$96,241	\$108,621
	Spending Potential	Average Amount	
	Index	Spent	Total
Recreational Vehicles and Fees	142	\$160.48	\$580,142,542
Docking and Landing Fees for Boats and Planes	141	\$13.15	\$47,550,350
Camp Fees	163	\$50.37	\$182,082,156
Payments on Boats/Trailers/Campers/RVs	119	\$60.54	\$218,851,564
Rental of Boats/Trailers/Campers/RVs	166	\$36.42	\$131,658,473
Sports, Recreation and Exercise Equipment	145	\$262.14	\$947,637,920
Exercise Equipment and Gear, Game Tables	149	\$82.17	\$297,031,692
Bicycles	149	\$44.28	\$160,070,717
Camping Equipment	151	\$31.50	\$113,880,566
Hunting and Fishing Equipment	131	\$63.67	\$230,169,026
Winter Sports Equipment	181	\$13.36	\$48,280,776
Water Sports Equipment	139	\$11.55	\$41,764,814
Other Sports Equipment	148	\$10.55	\$38,141,563
Rental/Repair of Sports/Recreation/Exercise Equipment	157	\$4.50	\$16,264,176

* Data Note: The Spending Potential Index (SPI) is household-based, and represents the amount spent for a product or service relative to a national average of 100. Detail may not sum to totals due to rounding. Source: Esri forecasts for 2021 and 2026; Consumer Spending data are derived from the 2018 and 2019 Consumer Expenditure Surveys, Bureau of Labor Statistics



Recreation Expenditures

Prepared by Esr

Latitude: 39.32612 Longitude: -120.21215

Recreation Expenditures

Drive Time Band: 120 - 240 minute radius

Prepared by Esri

ongitude: -120.21215







Stakeholder Engagement Summary & Benchmarking

Stakeholder Engagement Summary

Summary of Engagement **Efforts**

The consultant team along with Tahoe Donner staff worked collaboratively with many listening sessions to engage the membership, clubs, and the Trails and Open Space Committee throughout the process. Consultants and staff also engaged key external partners and stakeholders to ensure a cohesive link between the Truckee Donner Land Trust, USFS, Nevada County and the Town of Truckee.

Survey results and feedback from the scheduled planning meetings informed the ideation process, and the general ideas gathered were compiled into focus areas. Focus area topics were discussed at scheduled meetings and analyzed for potential social and environmental opportunities and challenges. Alternatives were then developed out of the analysis and presented back to the membership and TOS for further feedback. Draft plan recommendations were based on the alternatives and membership input.

In depth engagement information is located on the Tahoe Donner Website.

Summary of 2021 Member **Survey**

The 2021 Member Survey was conducted before the start of the Trails Master Plan and provided a baseline in which subsequent outreach efforts could build upon. The purpose of the survey was to measure opinions among Tahoe Donner homeowners to understand who the new residents are, member attitudes toward amenities, satisfaction and value of TD, and opportunities for improvements. The key findings of the 2021 Member

Survey that informed the TMP are:

- Several indicators lead to the likelihood of more crowding in Tahoe Donner. Significantly more members now live full time in TD and second homeowners spend more time in TD now than in 2019.
- New buyers (past 2 years) are similar to existing members. 60% of new members are under the age 50. 70% from the Bay Area. 79% were motivated to buy because of trails.
- Trails rank as the most important amenity to members.
- Members desire more access to amenities.





Process







IDEATION

OCT 2021 - JAN 2022

Outreach Efforts:

- Preliminary Trails Survey
- TOS Meetings Board Update

October 2021

- Request for Proposal (RFP) for Trail • Master Plan (TMP) revision release
- RFP response review by staff ٠ and Trails + Open Space (TOS) Committee chairs

November 2021

- Consultant contract awarded to • Design Workshop Team (DW)
- Consultant introduction at TOS • Committee meeting

December 2021

- Research existing work including trail files, recent member survey results, etc.
- Preliminary online survey launch; • closing date January 28, 2022

VISION + FOCUS AREAS

JAN - FEB 2022

Outreach Efforts:

- Webinar #1 (February 2)
- March Members Trails & Open Space Survey
- TOS Meetings & Board Update

January 2022

- January 5 TOS Committee meeting
- Consultants and TD staff develop • focus areas of analysis based on member, club, TOS meetings and survey results; focus areas identified areas of opportunity/ concern and alternative development
- TD manager input and DW to discuss overlap of TMP and land management activities with amenities such as ski areas, youth camps, food and beverage outlets, golf course, etc.
- External partner meetings with TD staff and consultants; discuss opportunities for collaboration, areas of concern and how updated TMP ties into town, county, USFS and Truckee Donner Land Trust (TDLT) trail plans

ALTERNATIVES

MAR - APR 2022

Outreach Efforts:

- In-depth Member Survey
- TOS Meetings & Board Updates
- Adjacent Land Manager Meetings
- January 28 regular board meeting to share TMP progress to board and members

February 2022

- February 1 Equestrian Club meeting
- February 2 First Member Webinar
- February 2 TOS Committee meeting
- February 10 Hiking Club meeting
- February 15 Mountain Biking Club meeting
- February 25 regular board meeting • to share TMP progress to board and members

March 2022

- TOS Committee meeting
- Focus area alternatives developed, and reviewed with TOS and staff
- March 25 regular board meeting to share TMP progress to board and members

April 2022

• April 21 regular board meeting to share TMP progress to board and members



RECOMMENDATIONS

MAY 2022

Outreach Efforts:

- Webinar #2 (May 5)
- TOS Meetings & Board Updates
- Through May: Alternatives narrowed into draft plan
- Second online survey May 2022
- May 5 Second Webinar







JUN - OCT 2022

Outreach Efforts:

TOS Review & Board Presentation

- Revise master plan recommendations draft based on feedback
- Prepare master plan document

June/July 2022

• Draft document prepared for staff and TOS review

August 2022

- TOS Review
- Plan development and revisions

September/October 2022

- TOS Review
- Master Plan Revisions
- Master Plan adoption

Tahoe Donner Staff and Adjacent Land Manager Engagement

Staff Feedback

Tahoe Donner staff was integrally involved in every step of the creation of this document. Multiple meetings were held online and in person with key staff from each department at Tahoe Donner. In most cases, the views of staff aligned with those of the TOS, Clubs and members.

Key Points:

- Cross Country Center in the winter is the benchmark for successful programs at TD, could be a model for summer programs and use.
- ACAC could be reconfigured to better accommodate summer use.
- Corral at ACAC is not in an ideal location for operations.
- Parking at ACAC could be expanded and reconfigured without impacting sensitive natural resources.
- Outdoor spaces at ACAC should connect better to the summer trails.
- Opportunities for summer and winter use of Sunrise Bowl.
- Providing snowshoe trails in the winter is an easy win.
- Process should be created to permit events that provide a benefit to TD.
- Need to address non-sanctioned trails.
- Provide suggested loops for each user (equestrian, hike, mountain bike) on future public trail maps.
- Validate the value the trail system adds to the community/homes. additional value of health and wellness, not just home values.

- Connections to external lands needs to be mutually beneficial to the public and members.
- Concept of more trails, more trailheads, more connections, more options to accommodate for increased use.
- All user groups have a shared vision, need to work together.
- Trail network for all user types, that is easy to use, connects to housing and all sides of TD with expanded external connections.
- Places for therapeutic trail use, leverage Achieve Tahoe.
- Potential to tie Pines to Mines to Glacier Trailhead.
- Equestrian trails should access water sources.
- Potential for equestrian, bike and hike ambassador programs.
- Signage needs to be adaptive for snow and winter time use, there should be consistency between winter trails and summer trails. signage can color code loops and directional trails.
- Perceptions of user conflicts driving concern.
- Greater usage and popularity.
- Utilize downhill ski area for summer trails.

Adjacent Land Manager Feedback

Meetings were held with staff from the Town of Truckee, USFS and Truckee Donner Land Trust after draft alternatives were developed. At these meetings, maps were shared that showed external connections to adjacent lands.

Town of Truckee Key Points:

The Town of Truckee is most interested in the Class I paved path connections through TD, these alignments are also shown in the 2015 Truckee Trails & Bikeways Master Plan. There is a need to further coordinate these projects with the Town of Truckee for funding and approval.

U.S. Forest Service Key Points:

The USFS has limited capacity to build and maintain new trails, but supports the external connections with potential partnerships and agreements.

- USFS has vegetation management plans in the area, there is no protection for non-system trails, however, there is the potential to replace them with new managed trails.
- Need to address non-system trail connections and TD trails that encroach onto USFS land with agreements or realignments.
- USFS priority is to fix non-system trails from Lions Leap to Carpenter Valley for water quality issues.

Truckee Donner Land Trust Key Points:

The TDLT has plans underway that will provide connections from TD to Froq Lake, Red Mountain, Carpenter Valley and Independence Lake.

- Resources in Carpenter Valley are too valuable and difficult to build new trails.
- There is mutual benefit to partner with TDLT and USFS.
- Connect Drifter to Summit Lake
- Improvements to Red Dot Trail are needed, it's a historic system trail.
- Connect TD to Carpenter Valley trailhead.



- Proposed improvements by TDLT at Johnson Canyon including a vault toilet and improved access.
- Trout Creek paved trails provides a popular connection to the Donner Lake Rim Trail, a safer connection across Northwoods is needed.

Focus Areas



Culture & Values

Addresses

- Shared emotional connectedness
- Shared values and culture .
- Multi-use network that will include • user designated trails
- Trails oriented community
- Sustainable-design, build & use •
- Inclusion of universal design trails ٠



Safety & Civility

Addresses

- Tahoe Donner's values as stated in the vision, sets the expectation and etiquette for the trail system
- Improved signage/wayfinding in key areas and all trailheads
- User separation in congested areas due to conflicts
- Multi-use trails persist
- Slow zones and some one way trails •
- Education over enforcement



Popularity & Density

Addresses

- Single user type trails in dense areas
- Monetization models for some use
- Sustainable design
- Increase maintenance and funding for the trail system
- Restrooms added in key locations (Euer Valley, select trailheads)
- Facilities close to density
- Ownership use trends
- Member & public, 501(c)(4)



Addresses

- Class I connection points •
- Dirt trail connection points •
- New and improved trailheads
- Connection to other land owner network-regional
- Connection to destinations
- Neighborhood connections















- Focused zones close to facilities
- Focus user types in zones where • appropriate
- Separate new or distinct types of users into zones and/or designated use trails
- Use of downhill area for bike



Trails & Open Space (TOS), Clubs, and Member Engagement Process

Summary of TOS **Engagement Efforts**

The Trails and Open Space Committee (TOS) was engaged for feedback and input from the beginning to end of the trails master plan. Starting in November 2021, the consultant team was introduced to the TOS members. Following that meeting individual interview questions were sent out to each TOS member in January to gain deeper insight into their thoughts on the current and future trail system. This input was consolidated and helped inform the Focus Areas in the TMP. Throughout the process TD staff would attend all TOS meetings including more frequently scheduled meetings, at key periods, the consultant team would attend and present at TOS meetings to gain feedback on focus areas and alternatives. In addition, the consultant team read through the TOS recommendations document compiled in large part by the TOS Chair and leveraged key points. The TOS Chair was also involved in many additional meetings with TD staff and the consultant team to keep the larger TOS informed of the process. The TOS has played an important role in guiding the direction of this document.

TOS Key Points

- Trail system should offer a wide variety of experiences for all users.
- Strong and cohesive stewardship.
- Strong and reliable financial support.
- Integrate with regional trail network.
- Trail system should enhance TD's reputation and be a point of pride for members.
- Sustainable in every meaning.
- Continue to include the TOS in decisions as a voice for the larger membership.

Summary of Clubs **Engagement Efforts**

Tahoe Donner members have created several clubs catering to various interests. TD staff and the consultant team held virtual interviews with key clubs in February 2021. Findings from these interviews informed the development of the focus areas and TMP.

Hiking Club Key Points

- Expand trails into USFS and TDLT lands, specifically Frog Lake and Carpenter Valley.
- Provide hiker only trails or advisory days for hike only.
- Desire tranquility.
- Civility on the trails, enforcement and education needed.
- Curb illegal trails.
- Continue the ambassador program.
- Need for a restroom in Euer Valley.

Equestrian Club Key Points

- Need to hold on to the equestrian history at Tahoe Donner.
- Desire to expand non-wheeled trails.
- Expand the equestrian center while keeping it as a member amenity.

Mountain Bike Club Key Points

- Desire for more trails to accommodate increased use.
- Expand external connections to USFS and TDLT lands.
- Link singletrack to singletrack.
- Family friendly trails, encourage more kids to use the trails.
- Use the ski area for summer trails.
- Process for new trails to be proposed by members.
- More trailheads, utilize existing parking areas.
- Host volunteer trail maintenance days for buy-in and stewardship.
- Provide inclusive trails for people with disabilities.

Summary of Member Engagement Efforts

Member Engagement #1

In January 2022, an online survey was conducted to test ideas for the focus areas of the TMP. The content of the survey was based on what was heard from the TOS and TD staff. Following the survey was an online webinar where ideas were shared and interactive polling questions were asked. Many of the interactive questions were ranking of objective statements and helped inform the direction of the TMP and the development of the focus areas.

Member Engagement #2

In late April through early May 2022, a comprehensive online survey was conducted to dig deeper into the membership for their input on the direction of the TMP. The content of the survey was created to test the draft alternatives within their respective focus areas and other key points that were created during this time. Following the survey was an online webinar where the findings were shared and the draft plan and maps were shown with the opportunity for interactive feedback from the attendees.



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- regulatory, administrative)
- Are there areas of safety concern?

Amenities and Trends 10 minutes

- Are there current trends that impact how people use the trail system?
- What do you not want to see included?
- 5 minutes Engagement What existing networks can you help leverage to engage with the most people?

Follow Up 10 minutes Is there anything else you would like to share with us or that we should know?



January 2022 Trails and Open **Space Survey Highlights**

Confirmation of support for multiple trail types for various users

> Glacier Way, Mother Lode. & Euer Valley are a few of the favorite trails that respondents value

87%

of respondents chose "Connection to Nature" as their most favored experience

544 responses

47 general public, 497 Tahoe Donner members

58%

respondents believe better trail connections to external lands would improve the trail system

respondents believe improved maps and signage would improve the trail system

March 2022 Trails and Open **Space Survey Highlights**

mathing a situation of the street

3,100 responses

742 full-time members, 2,237 part-time members

Diverse trails and trail uses

are desired in Tahoe Donner Trails, as well as connections to other regional open space



of respondents feel that connections to neighboring trail networks would be desirable for them and their families

80%

respondents used Tahoe Donner trails and open spaces to go hiking in the last 12 months

83%

of respondents use Tahoe Donner trails very often or often during the summer

Exercise and connection to nature

are the top two reasons respondents seek in natural landscapes











From bikers to horseback riders and residents to visitors, the majority of survey respondents say that a connection with nature and exercise and well-being are the experiences they're seeking in the outdoors.

Culture & Values

Hypothesized trail use "experiences" were offered for community resonance utilizing the March 2022 Trails and Open Space Survey, with a sample size of 3,100.

The survey revealed that user groups share common desired experiences. It is in fact striking how similar those desires are for each group and how they mimic trend lines of interest. This showcases common values within the community and a culture that is very focused on 'exercise and wellness' as primary interest and 'connection with nature' a close second. It is also noted that while there may be user groups of separate interest, it is also true that many hikers and runners are also bikers, and many bikers are also hikers and equestrians.

To have this shared alignment in a community is a cornerstone foundation that allows for clarity of vision, and to make infrastructure or program recommendations that support such a vision.

There is also clear and strong support for three values questions.: 1. trail maintenance to maintain high standards of sustainability; 2. for tangible value increase in home value provided by trails; and 3. for non tangible value created by how the trails network improves time spent on property. All three of these questions support the general member survey which anchors trails as the most appreciated amenity.

Recommendation: Areas further out in the landscape offer a strong connection to nature. Signage and improvements should allow for a sense of moving through the natural environment.



What experiences are you seeking when you enter natural landscapes? (Select all that apply)

What experiences are you seeking when you enter natural landscapes? (Select all that apply)



















Safety and civility on trails is a concern for many user groups. Respondents agreed overall that improved trail etiquette signage would be a key **improvement** to keep trails safe and civil.

Safety & Civility

Hypothesized trail solutions to improve "safety and civility" were offered for community resonance utilizing the March 2022 Trails and Open Space Survey, with a sample size of 3,100.

There was strong affirmation for the solutions suggested to help improve trail use "safety and civility". Of greatest interest to respondents was "improved trail etiquette signage" to communicate expectations for users.

This also ties directly to an opportunity to brand the expectations of behavior and etiquette, to the extent that a campaign including web, social, and trailhead signs would reinforce a way of doing and being that would set Tahoe Donner apart.

Other suggested solutions such as single user trails, or skills zones for user groups have good segmented interest indicating that they are viable for consideration as recommendations for implementation in the 2022 plan.

There is no threshold percentage of popularity of solution that determines which or how many are to be recommended for implementation, simply that they resonate with segments of user groups.

Recommendation: Education to all trail users should be the primary focus for safety and civility. Limited user designated trails will improve safety and civility.



Consolidated

Please select the trail system improvements that you believe will create a safe and more civil trail user environment (Select all that apply).



Please select the trail system improvements that you believe will create a safe and more civil trail user environment (Select all that apply).















Trail systems across the region are experiencing increased use. Survey responders indicated that the same tools for improving safety and civility could help mitigate trail popularity at Tahoe Donner.

Popularity & Density

Hypothesized trail solutions to mitigate "popularity and density" were offered for community resonance utilizing the March 2022 Trails and Open Space Survey, with a sample size of 3,100.

The most popular solution is noted as "improved trail etiquette signage", which supports a culture/values message of expectation setting promoting "safety and civility" on the trail network.

When the results are combined, all solutions suggested in the survey resonated with the participants, and would suggest the need to separate users in key focus areas, (e.g. bike skills zones, hike or equestrian only trails), to aid with density in addition to etiquette education for all trail users.

There is no threshold percentage of popularity of solution that determines which or how many are to be recommended for implementation, just that they resonate with segments of users.

Recommendation: There is a need for increased staffing and resources (including etiquette education) to sustain the trail system in the future.



Consolidated

Please select the trail system improvements that you believe will mitigate the effects of trail popularity and user density on the user experience. (Select all that apply)





Please select the trail system improvements that you believe will mitigate the effects of trail popularity and user density on the user experience. (Select all that apply)















Connecting the Tahoe Donner trail system to regional trails and external public lands has strong support from survey respondents. Access to trails by foot from members' homes is also highly desirable.

Connected Network

Hypothesized options around a "connected network" were offered for community resonance utilizing the March 2022 Trails and Open Space Survey, with a sample size of 3,100.

The survey data showed strong support for all kinds of trail connections that create a network. The most resonant interest pointed to connections to neighboring trail networks, e.g. USFS or Truckee Donner Land Trust. Connections to Tahoe Donner amenities, Truckee and neighborhoods to trail had strong support.

There was also considerable desirability for connections to trails near home to avoid using vehicular transport to drive to a trailhead.

There was an interest spread from extremely interested to not at all interested in winter use of plowed trails. There is relatively more interest in this type of winter access option in the full time resident pool versus the part time resident pool.

Recommendation: Seek opportunities to better connect the neighborhood trail system and work with regional land managers to achieve external connections.



trail networks (e.g. U.S. Forest Service, Truckee Donner Land Trust) and more distant destinations (e.g. Frog Lake, Carpenter Valley)

parcels to create improved neighborhood access to trails

amenities

Please select the trail system connections that are MOST desirable for you and your family. (Select all that apply)

If new non-motorized transportation opportunities like paved trails were available in Tahoe Donner, how interested would you be in keeping them plowed and open for use during the winter?

637 556 536 487 458 118 Slightly interested VerVinterested Don't know hot sure Notatallinterested Extremely interested ModerateWinterested

How desirable is having trail access near your home so you don't need to travel in a car to get on trail?

1,739













Zonal and Designated Land Use

use-specific zones is an important trail system improvement.

Hypothesized use of lands for specific "zonal and designated land use" were offered for community resonance utilizing the March 2022 Trails and Open Space Survey, with a sample size of 3,100.

The concept of using specific zones of land or designated trails to focus use was tested and received reasonable resonance as a partial solution to density, and also in relation to desired additions to the network portfolio. Support was strongest with bikers and equestrians, who possibly benefit most from skills or learning zones, and designated trails, though there was still resonant interest from hikers and runners. Preparing zones for growth trends in the future is considered a good way to separate user groups. (zones can include single user designated trails concentrated into a defined area).

Recommendation: Creating userspecific zones and designated use trails will improve the experience for everyone by generating new opportunities beyond the multi-use trail system.



Please select the trail system improvements that are MOST desirable for you and your family. (Select up to 5 improvements)



Concentrating trail uses, especially beginner or skills-learning areas, had strong support in webinar meetings and surveys. Respondents indicated that

Please select the trail system improvements that are MOST desirable for you and your family. (Select up to 5 improvements)



Equestrians







Element Matrix, Possibilities

Based on what was heard from TOS, Clubs, Members, Staff, and Adjacent Land Managers, the Element Matrix was developed to suggest many possibilities to improve access to new trail concepts, programmatic activations, and general improvements.

Not all elements listed here evolved to become recommendations.

Consultants and staff recommend strengthening and further developing programmatic offerings through Bikeworks and the Equestrian Center to activate the summer season of the Alder Creek Adventure Center facility (ACAC). The fiscal engine of ancillary program offerings would support Food & Beverage services, increase employee opportunities such as staff retention, and support maintenance and development of the summer trail system. Tahoe Donner may consider developing small geographical/operational areas that are in alignment with this plan including items outlined in the Elements Matrix.

Potential Programmatic Opportunities

ITEM	DESCRIPTION		
EQUESTRIAN			
New Signage	Behavioral, etiquette, wayfinding		
Overnight Camping	Equestrian adventures combined with a catered overnight		
Skills and Etiquette Camps	How to ride and how to ride around others		
Stabling	Expand stabling options to grow participation and offerings- need in- depth study to review fiscal viability		
Equestrian Only Network	Small equine trail network for those wanting to avoid all other users		
Fenced Equestrian Zones	Consolidate stables, training, teaching areas into a fenced zone		
Equestrian Events	Invite greater use patterns and possible revenue streams with equestrian events,. <u>https://www.tahoedonner.com/events/wild-west-fest/</u>		
Trail Maintenance	Equestrian community trail days to maintain hoofed trails		
HIKING			
New Signage	Behavioral, etiquette, wayfinding		
Hike to Camping	Hike adventures combined with a catered overnight stay		
Hike Camps	Gear, technique, mapping and basic survival program, and hiking with other users		
Guided Hikes	Weekend guided hikes to destinations		
Hike Only Trails	Small selection of hike only trails for those wanting to avoid all other users		
Hike/Run Events	Dirt trail hike or running events to invite greater use patterns with revenue streams. <u>https://olympicvalleyhalf.com/</u>		
Trail Maintenance	Hike community trail days to maintain hiked trails		
Interpretive Hikes & Signs	Learn about the natural environment or local history on an interpretive hike with explanatory signage		

Potential Programmatic Opportunities

ITEM	
BIKING	
New Signage	Behavioral, etiquet
Skills and Etiquette Camps	How to ride and ho
Bike Only Trails	Small number of on wanting to avoid ot
Bike Packing to Camping	Bike adventures co
Interpretive Signs	Showing how to ma
Skills Zones	A zone to build skill beginner users to a
Progression Park	The next step in lea balance and air
Pump Track	Small to medium size of balance, stance a
Bike Park	Build a progression
Bike Events	Dirt trail bike event https://adventuresp bike-race/
Trail Maintenance	Bike community tra
XC-TOURING	
Touring 101	The basic skills of sk
Backcountry Guiding	Guided touring expe
Backcountry to Camping	Guided experience
Snow safety Courses	Sanctioned AIRE co
Touring Events	Touring and Skimo streams. <u>https://ww</u>
SNOWSHOEING	
Trail Signage	Designate routes w difficult routes
Guided Shoe Tours	Guided touring exp etc.
Snowshoe to Camping	Guided experience
Snowshoe Events	Snowshoe race eve

DESCRIPTION

te, wayfinding

w to ride around others

ne-directional bike trails, climb and downhill for those ther users

mbined with a catered overnight stay

aster a skill and/or master etiquette

ls in a progression, mitigating risk and focusing specific zone

rning more complex skills like cornering, flow, pump,

ze to attract a kid/family audience, teaching the basics and pump

bike park and own the family segment of the market

s to invite greater use patterns with revenue streams. portsweektahoe.com/compete/lake-tahoe-mountain-

il days to maintain worn bike trails

ki touring, with basic snow safety

eriences, include equipment, training on snow safety etc.

into overnight catered camping experience

ourses on site

race events to invite greater use patterns with revenue www.usaskimo.org/guide-to-ski-mountaineering/

rith permanent (non snowpack affected) signs, easy to

periences, include equipment, training on snow safety

into overnight catered camping experience

Snowshoe race events to invite greater use patterns with revenue streams. <u>https://donnerpartymountainrunners.com/snowshoe-races/</u>

Element Matrix







Tranquility









Mountain Biking



Regional Connections







Neighborhood Connectivity



Hiking Destinations



Winter Trail Use








Trails Plan Summary

Trails Plan Summary

The following series of maps show preliminary assumptions for new improvements to the Tahoe Donner trail system. These recommendations are to be used as a resource for future development and redevelopment of the trails, trailheads, access points, and associated facilities of the trail system.

Throughout the trail planning process several methods were utilized to craft the plan and the preliminary alignments shown. Methods included:

- On site reconnaissance of the existing trail system, trailheads, access points, gaps, and potential connections.
- Drone photography
- Online mapping, including ArcGIS and mobile apps such as Caltopo.
- Review of existing heatmaps from user aggregated data from Strava and Trailforks.
- Site analysis mapping, including natural and cultural resources.
- Future trend.
- Historic uses.
- Member survey results.
- Input from the TOS.
- Input from the Clubs.
- Input from Tahoe Donner staff.
- Alignment with Focus Areas and goals.

THIS PLAN



Big-picture vision for a connected, high-quality, trail network.

Next Steps

- Align projects with annual TD budget process for funding needs.
- Update 2016 Land Management Plan to include acquisition and restoration opportunities.
- Potentially create Timber Harvest Plan.
- Integrate adopted TMP recommendations with LRPC recommendations.



NEXT STEPS

Proposed Improvements Standards and Descriptions

Trail Standards

Tahoe Donner utilizes the USFS Trail Class Matrix in the construction of new and existing trails. This is intended to provide consistency with adjacent land managers, while providing best management practices consistent with national standards.

In the implementation of the TMP, Tahoe Donner staff may identify the appropriate USFS Trail Class for each trail or trail segment based on the intended use. Please note these trail classifications differ from those defined by Caltrans for paved paths and roadway bike lanes.

In addition, Tahoe Donner staff may use the USFS Trail Design Parameters as a technical guideline for the survey, design, construction, maintenance, and assessment of trails based on their designated use (hike/pedestrian, bike, equestrian).

The following Trail Classes are represented at Tahoe Donner, refer to USFS Trail Class Matrix (FSH 2353, Section 14.2, Exhibit 01¹) for full descriptions:

Trail Class I	Minimally Developed
Trail Class 2	Moderately Developed
Trail Class 3	Developed
Trail Class 4	Highly Developed
Trail Class 5	Fully Developed

Proposed Improvements Descriptions

Below defines the proposed improvements shown on the following maps.

ITEM	DESCRIPTION	
External Trail Connections	Potential trails leaving Tahoe Donner property providing larg Destinations, design elements, and allowable uses will be de adjoining land owners and land mangers.	
Class I Paved Path	Off-street paved shared use paths, minimum of 8' wide with g standards. Users may include but are not limited to, bicyclists walkers, runners, people with strollers, and people walking d	
Multi-use Trail	Native surface "single track" trails, designed to accommodate the USFS Trail Class Matrix and USFS Trail Design Parameters	
Equestrian Trail	Native surface "single track" trails, designed for equestrian u USFS Trail Design Parameters for Pack and Saddle.	
Bike Optimized Trail & Flow Trails	Trails built from native or imported dirt trails, designed for mo banked turns, rolling terrain, jumps, and other skill building fo and USFS Trail Design Parameters for Bicycles.	
Inclusive Trail	Smooth surface trails, typically made of native or imported m generally conforms ADA standards, designed for people of a grades not to exceed 5%.	
Boardwalk	Elevated wooden walkway that sensitively crosses over a wet	
New Trailhead	Formalized access point to the trail network that may include navigation and etiquette.	
Zonal Land Use	Areas that are designated for the optimized use of certain use	

ABCD

ger regional connections on adjacent public lands. Atermined through collaborative planning with

gradual slopes, consistent with Town of Truckee s, wheelchair users, pedestrians, including logs. Can serve as emergency vehicle access.

e a variety of users on the same trail. May follow s.

se. May follow the USFS Trail Class Matrix and

ountain bike use and may include features like eatures. May follow the USFS Trail Class Matrix

naterial (such as decomposed granite) that Il ages and abilities. Typically 4-6 feet wide with

tland or meadow.

parking, maps, and signs to improve user

er groups (equestrians, mountain bikers, hikers).

^{1 &}lt;u>https://www.fs.usda.gov/managing-land/trails/trail-</u> management-tools/trail-fundamentals

Trail Recommendations Summary

EXTERNAL CONNECTIONS

Project E1: Carpenter Valley Connection

Description: Provide a multi-use trail connection to Carpenter Valley connecting to the existing Truckee Donner Land Trust trailhead. This will help alleviate the unsanctioned trails in this area and potential to collaborate with USFS fuels reduction projects.

Project E2: Prosser Connection

Description: Provide a multi-use trail connection to Prosser Hill. This will help alleviate the unsanctioned trails in this area and potential to collaborate with USFS fuels reduction projects.

Project E3: Emigrant Connection

Description: Provide a multi-use trail connection to Emigrant Trail. Potential to collaborate with USFS fuels reduction projects.

Project E4: Mougle to Truckee

Description: New Class I Paved Trail connecting Mougle Lane to the Town of Truckee's paved trail system. This connection is shown in the 2015 Trails and Bikeways Master Plan, approved by the Town of Truckee.

Project E5: Bermgarten to Armstrong

Description: New trail connecting Bermgarten Trailhead to the Armstrong neighborhood. This connection is identified in the 2015 Trails and Bikeways Master Plan, approved by the Town of Truckee.

Project E6: Frog Lake Connection

Description: In partnership with the Truckee Donner Land Trust, this connection will provide a multi-use trail link to Frog Lake via Mustang Sally.

Project E7: Red Mountain Connection

Description: In partnership with the Truckee Donner Land Trust, this connection will provide a multi-use trail link to Red Mountain from Crabtree Road.

NEW PAVED CLASS I TRAILS

Project C1: Mougle to Truckee

Description: Connection from Mougle to Truckee as identified in the 2015 Trails and Bikeways Master Plan. Stats: Approximately 1 mile long, 220 feet of elevation change

Project C2: Trout Creek to ACAC and DH Ski Area

Description: Connection from the end of the existing Trout Creek paved trail through the center of Tahoe Donner, connecting Northwoods Clubhouse, Trout Creek Recreation Center and ACAC with a spur connecting to the Downhill Ski Area. Stats: Approximately 4.5 miles long, 600 feet of elevation change

Project C3: Recreation Center to Swiss Lane Description: Paved trail connecting through the golf course, providing a bike and pedestrian connection to the Swiss Lane neighborhood. Stats: Approximately 2,000 feet long, 100 feet of elevation change

NEW DIRT TRAILS

Project 1: Crabtree

Description: New multi-use trail connecting the east end of Euer Valley to the north end of Tahoe Donner property with the potential to connect into future regional trail plans by TDLT. Stats: Approximately 1.3 miles long, 500 feet of elevation change

Project 2: Sidewinder Extension

Description: New multi-use trail connecting the east end of Sidewinder to East Mustang Sally. Currently trail users need to connect these two single track trails with a dirt road. Stats: Approximately 700 feet long, 15 feet of elevation change

Project 3: Lower Cinnamon Twist

Description: New multi-use trail connecting the two lower sections of Cinnamon Twist. Currently trail users need to connect these two sections of single track with a dirt road.

Stats: Approximately 1,000 feet long, 70 feet of elevation change

Project 4: Rawhide Equestrian Extension

Description: New equestrian only trail connecting the new equestrian zone to Rawhide Trail providing an improved equestrian only access to Euer Valley. Currently equestrians need to exit the equestrian center on dirt roads or busy multi-use trails, this equestrian only access will improve that experience.

Stats: Approximately 4,000 feet long, 200 feet of elevation change

Project 4a: Foot-only Euer Valley Connection

Description: New foot only trail connecting from the top of Cinnamon Twist to Euer Valley. Stats: Approximately 1,000 feet long, 150 feet of elevation change

Project 5: Equestrian Loop

Description: New equestrian only trail looping around the new equestrian zone. Stats: Approximately 3,500 feet long, 40 feet of elevation change

Project 6: Family Flow Trails

Description: New bike optimized trails of beginner to intermediate skill level in close adjacency to ACAC. These trails will serve as a way for families and new mountain bikers to hone their skills in a zone dedicated to mountain bikers. Stats: Three trails, each approximately 1,800 feet long, 160 feet of elevation change each

Project 7: Whoop It Up Extension

Description: New multi-use trail connecting ACAC to Whoop It Up single track. A new boardwalk is proposed on the west side of ACAC, located in a way not to interfere with winter operations. Some decommissioning of existing trails and roads in this area will need to occur.

Stats: Approximately 2,200 feet long, 100 feet of elevation change

Project 8: Springbrook Connector Description: New multi-use trail connecting a new

trailhead at Springbrook/Skislope to Whoop It Up Extension.

Stats: Approximately 1,000 feet long, 20 feet of elevation change

Project 9: Foot-only Northwoods

Description: New foot-only trail built to ADA standards providing easy access for all users in the area on the edges of the meadow behind Northwoods Clubhouse. Stats: Approximately 1 mile long, 40 feet of elevation change

Project 10: Foot-only Bermgarten

Description: New foot-only trail built to ADA standards providing easy access for all to an overlook from Bermgarten Trailhead. Stats: Approximately 2,500 feet long, 200 feet of elevation change

Project 11: Foot-only Glacier

Description: New foot-only trail built to ADA standards providing easy loop for all from the Glacier Trailhead.

Stats: Approximately 1 mile long, 100 feet of elevation change

Project 12: Glacier Connector

Description: New multi-use trail connecting Glacier Trailhead to the Donner Lake Rim Trail. Stats: Approximately 1 mile long, 100 feet of elevation change

Project 13: DH Ski Area to Teewinot

Description: New multi-use trail connecting Teewinot Trail across Skislope Way to the new Ski Area Loop Trail.

Stats: Approximately 1,700 feet long, 60 feet of elevation change

Project 14: DH Ski Area to Glacier

Description: New multi-use trail connecting Glacier Trailhead across Skislope Way to the new Ski Area Loop Trail. Stats: Approximately 3,400 feet long, 120 feet of

elevation change

Project 15: DH Ski Area Loop

Description: New multi-use trail looping around the Downhill Ski Area, providing larger connections within Tahoe Donner. Stats: Approximately 3 miles long, 700 feet of elevation change

Project 16: Downhill Ski Area Trails

Description: New bike optimized trails of intermediate skill level that could be accessed by pedaling uphill on the new Ski Area Loop Trail, or by lift service on the existing chairlifts. These trails will help concentrate mountain bikers in a new bike only zone as well as serve many families. Stats: Approximately 3 miles long, 700 feet of elevation change

Project 17: Sunrise Trail

Description: New multi-use trail traversing the Sunrise Bowl, providing larger connections from Glacier Trailhead to Hawk's Peak Trail. This trail was identified in the 2016 YIP but not built.

Stats: Approximately 1 mile long, 300 feet of elevation change

Project 18: Dogs in Space Extension

Description: New multi-use trail connecting from the new Ski Area Loop Trail, across Skislope to Dogs in Space and Hawk's Peak Trail, continuing towards ACAC. Stats: Approximately 1 mile long, 500 feet of

elevation change

Project 19: Willie's Wiggle Extension

Description: New multi-use trail connecting Willie's Wiggle Trail to Hawk's Peak. Stats: Approximately 4,000 feet long, 150 feet of elevation change

Project 20: Fool's Gold Extension

Description: New multi-use trail connecting the bottom of Fool's Gold to Coyote Hut. Stats: Approximately 1,300 feet long, 50 feet of elevation change

Project 21: South Euer Valley Cross Slope

Description: New multi-use trail connecting Sundance Hut to Euer Valley at the bottom of Hidden Gem.

Stats: Approximately 1.5 miles long, 250 feet of elevation change

Project 22: Hawk's Peak

Description: New multi-use trail for hikers and equestrian to access Hawk's Peak Stats: Approximately 1.1 miles long, 590 feet of elevation change

IMPROVE EXISTING DIRT TRAILS

Project A1: Alder Creek Trail

Description: Upgrades including realignment out of wet areas, bridges, and trail tread improvements. Stats: Approximately 1 mile long

Project A2: Hillside Trail

Description: Upgrades to fix this eroding trail. Potential to decommission if it's not possible to fix the erosion problems.

Stats: Approximately 2,500 feet long

Project A3: East Perimeter Trail North Description: Upgrades including realignment out of wet areas and off Forest Service Land, and trail tread improvements.

Stats: Locations to be determined in the field

Project A4: East Perimeter Trail South Description: Upgrades including realignment out of wet areas and off USFS land, and trail tread improvements.

Stats: Locations to be determined in the field

Project A5: East Perimeter Trail South Description: Upgrades including new boardwalks and trail tread improvement. This project was identified in the 2016 YIP but not built. Stats: Locations to be determined in the field

Project A6: Willie's Wiggles

Description: Upgrades including trail tread improvement and agreement with the USFS to

allow this trail on their land. Stats: Locations to be determined in the field

Project A7: Mother Lode Description: Upgrades including trail tread improvements, sight line improvements and realignment of sections to improve user experience.

Stats: Locations to be determined in the field

Project A8: West Mustang Sally Description: Upgrades including trail tread improvement, sight line improvements and realignment of sections to improve user experience.

Stats: Locations to be determined in the field

NEW AND IMPROVED TRAILHEADS

Project T1: New Moondance Hut TH Description: New trailhead with parking at the end of Alder Creek Road. Summer only.

Project T2: Alder Creek Adventure Center (ACAC) Improvements

Description: Reconfigure parking, trail intersections and overall wayfinding to optimize ACAC as a summer and winter trail hub.

Project T3: New Springbrook TH

Description: New trailhead to provide summer and winter users access to the trails without bringing further congestion to ACAC.

Project T4: New Downhill Ski Area TH Description: New formal trailhead that uses the existing downhill ski area parking lot for summer use connecting to the new multi-use trails at the ski area and surrounding land.

Project T5: New Hansel Mailboxes TH Description: New trailhead near the mailboxes with improved access to East Perimeter Trail. Summer only.

Project T6: Improved Hawk's Peak TH Description: Improvements including parking and signage at Skislope and Dogs in Space.

Project T7: New Swiss Lane TH Description: New access point trailhead on Swiss Lane connecting to the new Class I paved path, no parking.

Project T8: New Top Shop TH Description: New access point trailhead on Skislope connecting to the new Ski Area Loop Trail and Teewinot Trail.

Project T9: Improved Glacier TH Description: Improvements to the existing Glacier Trailhead.

Project T10: Improved Teton TH Description: Improvements to the existing Teton Trailhead.

Trail Master Plan - Compiled Map of Improvements



Figure 7: Compiled Map of Improvements

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Alder Hill

This map shows a compilation of the proposed improvements to the Tahoe Donner trail system. Subsequent maps show the focused improvements.

Adaptive Management: These recommendations represent the current needs and desires for trail improvements at Tahoe Donner, through adaptive management practices, changing use patterns, and developments will be addressed with ongoing management by Tahoe Donner staff and the TOS Committee.

Legend

EXISTING

- External Connections Singletrack Trail ____ Doubletrack Trail === Class I Path Improved Existing Trail шш Primary Road Secondary Road Improved Trailhead Existing Trailhead Existing Neighborhood Access ÷ PROPOSED **External Trail Connections** Class I Paved Path Multi-use Trail 🚥 Equestrian Trail Bike Optimized Trail
 - Inclusive Trail Boardwalk

New Trailhead

Zonal Land Use

Miles

1

Tahoe Donner Trails Master Plan Update | 53

USFS Land Encroachment



Figure 8: USFS Land Encroachment



USFS LAND ENCROACHMENT

This map shows areas where the Tahoe Donner trail system has encroached on USFS land and needs to be corrected.

Corrective measures can include agreements with the USFS and/or trail realignments. Some of these areas have been identified for future off-site regional trail connections and can be addressed in those projects.

External Connections



Figure 9: External Connections

ABCD

EXTERNAL CONNECTIONS

This map shows future connections to the regional trail network to and from Tahoe Donner. These regional connections can be provided by working closely with the USFS and TDLT. In some cases preliminary trail planning with the adjacent land managers has already started and a collaborative effort will help expedite the process.

Carpenter Valley Connection*

² Prosser Connection
R & P & B
Emigrant Connection
2 & 4 & 2
Mougle to Truckee
R & P & Z
Bermgarten to Armstrong
R & P & Z
Frog Lake Connection*
B B B B B
Red Mountain Connection*
A & A A

*Tahoe Donner will work with neighboring land owners to identify mutually beneficial trail alignments and allowable uses.

Improvements to Existing Dirt Trails



Figure 10: Improvements to Existing Dirt Trails

IMPROVE EXISTING DIRT TRAILS

Several trails in the Tahoe Donner trail system are in poor condition either from over use and infrequent maintenance or inappropriate alignments for the terrain. Alder Creek Trail and Hillside Trail are both in poor condition with many wetland and creek crossings. West Mustang Sally has switchbacks that are very tight on the steep terrain, realignment of this trail would improve user experience.

Repair and maintenance to these trails and others as shown, will improve the trail system.

\Lambda Alder Creek Trail*
R & P & X
A2 Hillside Trail
R & P & X
A3 East Perimeter Trail North
R & P & X
A4 East Perimeter Trail South
R & P & X
A5 Nature Trail
🔒 Willie's Wiggles
R & P & L
A7 Mother Lode
A & P & Z
48 West Mustang Sally
R & F & X

*Bridges on the Alder Creek Trail would need significant improvement to accommodate equestrian use.

New and Improved Trailheads



Figure 11: New and Improved Trailheads

throughout Tahoe Donner will improve user navigation and help to create more varied starting points for trail users. Expanded trailheads outside of Alder Creek Adventure Center will improve congestion and provide more

New Dirt Trails



Figure 12: New Dirt Trails

New multi-use trails throughout Tahoe Donner will create a better connected trail system with continuous singletrack trails to improve user navigation and experience. New trails will provide important connections to popular trails

NEW DIRT TRAILS

and destinations.

back to Alder Creek area.

2 Sidewinder Extension

3 Lower Cinnamon Twist

60

1 Crabtree

(A)

PX

(A)

βλ

5 Equestrian Loop

6 Family Flow Trails

Whoop It Up Extension

8 Springbrook Connector

R & & & X

民命

Hawk's Peak Connector links the trail system on the western edge of Tahoe Donner to the Hawk's Peak trails. While new trails at the downhill ski area connect trails in the Alder Creek area to Teewinot and the Donner Lake Rim Trail. The Euer Valley trail creates a full singletrack loop around the valley and

4 Rawhide Equestrian Extension

4a Foot only Euer Valley Connection



New Paved Class I Trails



Figure 13: New Paved Class I Trails

ABCD

NEW PAVED Class I TRAILS

A new Class I paved trail is proposed from Alder Creek Adventure Center to the existing Trout Creek Trail. The trail will follow Northwoods Boulevard and the Nature Loop trail to connect to the Trout Creek trail. These Class I trails could be plowed for safe four-season access.



ATC.

PX

^{C2} Trout Creek to ACAC and Ski Area

G3 Recreation Center to Swiss Lane



New Mountain Bike Trails





Mountain Biking and E-Bike Opportunities

Across the region and Tahoe Donner trail system, mountain bikers are a rapidly growing user group. The sport's popularity is evident across the entire Tahoe Donner trail system. Differing speeds between bikers, walkers and equestrians creates the highest potential for negative encounters. There is an opportunity to minimize conflicts by reorganizing use patterns and creating more predictable outcomes for all trail users. Riders can be attracted and redirected to purpose-built bike trails that offer technical and physical challenge by choice. Designation and creation of mountain bike specific trails, raises the quality of rider experiences and potentially decreases the volume of bicycle use on the broader trail system.

Recommendation: Bike specific trail designations and directional use should be established in areas of congestion and where terrain is likely to encourage higher speeds.

Class I E-Bike Management

Due to their similarity, pedal assist Class I e-bikes, limited to 20 MPH are most effectively managed as mountain bikes. If negative encounters occur between Class I e-bikers and other users, the cause is most likely poor rider etiquette not related specifically to performance differences between a standard bike and Class I e-bike.

Adjoining land management agencies are taking similar approaches to managing the demand for e-bike riding opportunities. The Tahoe National Forest which surrounds much of Tahoe

0.5



Figure 14: New Mountain Bike Trails 60 | Trails Plan es

Donner's lands has studied e-bike usage on its trail system since 2018. Through a formal NEPA Environmental Analysis process¹ found that "Class I e-bikes are similar to traditional mountain bikes with respect to a number of key characteristics. These include components, comparative speeds, relative health benefits, impacts to trail, and comparative appearance is not expected to increase conflicts among uses".

Recommendation: Focus management efforts on improving biking etiquette through educational signage and communication efforts that can improve positive shared experiences for all users, without diminishing riding opportunities for Class I e-bike riders.

1 <u>https://www.fs.usda.gov/project/?project=57704&e</u> xp=overview

Legend

EXISTING

- External Connections
- -- Singletrack Trail
- === Doubletrack Trail
- Class I Path
- Improved Existing Trail
- Primary Road
- Secondary Road
- 🛟 🛛 Improved Trailhead
- Existing Trailhead
- Existing Neighborhood Access

PROPOSED

- External Trail Connections
- Class I Paved Path
- Multi-use Trail
- Bike Optimized Trail
- Boardwalk
- 🛟 🛛 New Trailhead
 - Zonal Land Use

New Walking and Hiking Trails





Figure 15: New Walking and Hiking Trails





opportunities to a wide range of ages and abilities, from strollers to 20k runs. The trails identified through the planning process offer new trails for hiking and walking, These trails were designated with viewpoints, external connections, and quality of experience in mind.

Legend

EXISTING

External Connections Singletrack Trail ___ Doubletrack Trail ___ Class I Path Improved Existing Trail Primary Road Secondary Road Improved Trailhead Existing Trailhead Existing Neighborhood Access ÷ PROPOSED **External Trail Connections** Class I Paved Path Multi-use Trail 🚥 Equestrian Trail Inclusive Trail Boardwalk New Trailhead Zonal Land Use

New Inclusive Trails



Figure 16: New Inclusive Trails 62 | Trails Plan

offering staff led outings into Euer Valley and the Glacier Way area to provide more opportunities for limited mobility users to access more of Tahoe Donner Open Space lands.



Legend

EXISTING

Singletrack Trail			
Doubletrack Trail			
Class I Path			
Improved Existing Trail			
Primary Road			
Secondary Road			
Improved Trailhead			
Existing Trailhead			
Existing Neighborhood Access			
PROPOSED			
Class I Paved Path			
Multi-use Trail			
Inclusive Trail			
Boardwalk			
New Trailhead			
Zonal Land Use			

New Winter Recreation Opportunities



Figure 17: New Winter Recreation Opportunities

ABCD



Winters at Tahoe Donner are traditionally long and full of deep snow. Tall banks of snow throughout neighborhoods can create a sense of confinement and limit access to Open Spaces. Snowshoeing, XC skiing, and fat biking access opportunities were requested during member surveys. There are opportunities for the Tahoe Donner Trails Department to develop winter access routes over appropriate portions of the summer trail system. With consideration of topography and weather factors, there may be an opportunity to snow blow existing short portions of the paved golf course cart paths to offer off street winter walking.

Recommendation: Provide information to Tahoe Donner users about the opportunities for winter recreation outside of the Cross Country Center. Utilize signage that will be visible above snowpack for better trail legibility.

Legend

EXISTING

- -- Singletrack Trail
- === Doubletrack Trail
- Class | Path

Improved Existing Trail

- Primary Road
- Secondary Road
- Improved Trailhead
- Existing Trailhead
- Existing Neighborhood Access

PROPOSED

New Winter Trailhead

New Equestrian Trails





Figure 18: New Equestrian Trails 64 | Trails Plan



and hiking areas and trails absent of mountain bikers.

Recommendation: Utilize the northeast corner of Euer Valley as an area with limited bike trail development. New and existing trails identified through the planning process offer equestrian opportunities that create clear trail designations connecting the equestrian center to Euer Valley.

Legend

EXISTING

	Singletrack Trail
===	Doubletrack Trail
	Class Path
	Improve Existing Trail
	Primary Road
	Secondary Road
	Improved Trailhead
	Existing Trailhead
	Existing Neighborhood Access
PROP	OSED
	Class I Paved Path
	Multi-use Trail
	Equestrian-Only Trail
	Boardwalk
	New Trailhead
	Zonal Land Use

Alder Creek Aerial



ABCD

Improvements to Alder Creek Adventure Center will enhance the experience of all trail users and activate the facility in non-winter months. Proposed is an expanded equestrian zone, new boardwalks through the meadows, improved signage, and better trail connections to the broader TD trail system.

Additional improvements to the ACAC area include:

- Addition of family friendly amenities such as a play lawn, pump track, ropes course.
- Improved parking.
- Trailhead signage and map kiosks.
- Improve equestrian center.

Alder Creek Adventure Center & Trails







Legend

EXISTING

Trail

PROPOSED

- Multi Use Trail
- Boardwalk
- Class 1 Paved Path
- Family Bike Trail
- Equestrian Center
- Equestrian Loop & Trails
- Restore to Native Plants

Alder Creek Adventure Center & Trails







Legend

EXISTING

Trail

PROPOSED

Multi	Use	Trail

- Boardwalk
- Class 1 Paved Path
- Family Bike Trail
- Equestrian Center
- Equestrian Loop & Trails
- Restore to Native Plants

Alder Creek and East Euer Valley



Figure 19: Alder Creek and Euer Valley North

Legend

- EXISTING **External Connections** Singletrack Trail Doubletrack Trail ===Class | Path Improved Existing Trail Primary Road Secondary Road Improved Trailhead Existing Trailhead Existing Neighborhood Access ÷ PROPOSED **External Trail Connections Class I Paved Path** Multi-use Trail Equestrian Trail **Bike Optimized Trail** Inclusive Trail
- Boardwalk
- New Trailhead

Zonal Land Use





Popularity & Density



Connected Network



Zonal Land Use

By defining the Equestrian Zone at Alder Creek Adventure Center all trail users will be more aware of the trail use designations in that area and equestrians will have a safe trailhead within that zone. The alignment of Rawhide has been adjusted to have fewer intersections with other trails and provides a direct access route from the Equestrian Zone to Euer Valley. Once in Euer Valley a new zone for hiking and equestrian use will be created in the area between Quickdraw, Broken Spoke, and Alder Creek Road. This area will have a future trail connection to Carpenter Valley.

The Family Flow Trail Zone is located directly behind Alder Creek Adventure Center to provide families access to easy bike optimized trails. With a mix of downhill flow trails and dirt road uphill trails, families and beginner riders can easily navigate and improve their skills in a fun and safe environment. Connections from uphill surrounding trails will still be maintained outside of this zone to maintain ease of trail access from Alder Creek Adventure Center.

Euer Valley East Aerial



ABCD

The east end of Euer Valley has many opportunities for trail users. Enhanced equestrian only connection will be provided through Rawhide Trail into a new opportunity zone for hike and equestrian use located between Quickdraw and Broken Spoke. Multiuse trail connections will be provided between Cinnamon Twist, Sidewinder, and East Mustang Sally. A new trailhead with vault toilets and picnic area can be located on the north side of the Prosser Creek Crossing near the end of Sidewinder Trail.

Downhill Ski Area Summer Use Trails



Figure 20: Downhill Ski Area Summer Use Trails





Popularity & Density



Connected Network



Zonal Land Use

Expanding existing multi-use trails at the downhill ski area will provide connections from the broader Tahoe Donner trail network and to trails along the southern edge of Tahoe Donner. In addition, bike optimized trails are proposed on the front side treed area in the ski area.

Improved Existing Trail

Legend

External Connections

Singletrack Trail

Doubletrack Trail

Class I Path

Primary Road Secondary Road

Improved Trailhead

Existing Trailhead

Class I Paved Path

Bike Optimized Trail

Multi-use Trail

Equestrian Trail

Inclusive Trail

New Trailhead

Zonal Land Use

Boardwalk

EXISTING

÷

PROPOSED

Existing Neighborhood Access

External Trail Connections

Downhill Ski Area Aerial



The downhill ski area is currently an under-utilized area in the nonwinter months. Proposed trails will not interfere with winter operations and existing infrastructure. The new trails will allow the possibility to run the Eagle Rock Chairlift for hikers and bikers in the summer.

Moondance Hut Aerial



ABCD

The area around the Moondance Hut sees the highest concentration of trail users in the summer months. The existing trails and dirt roads in this area should be realigned to provide better connections to Euer Valley and broader TD trail system. A dedicated equestrian connect from the new Equestrian Zone to Rawhide should be provided, along with separate connections for hikers and mountain bikers. Signage and wayfinding should also be improved in this highly used area.

Trout Creek Recreation Center Aerial



ABCD

The Trout Creek Recreation Center will be directly connected to the new Class I paved path running through the center of Tahoe Donner. This will provide new opportunities and better connectivity to the recreation center and the south side of Tahoe Donner with a new connection to Swiss Lane.

Northwoods Clubhouse Aerial



Northwoods Clubhouse will be directly connected to the new Class I paved path running through Tahoe Donner, enhancements to family focused trails connecting to East Perimeter Trail is also proposed.