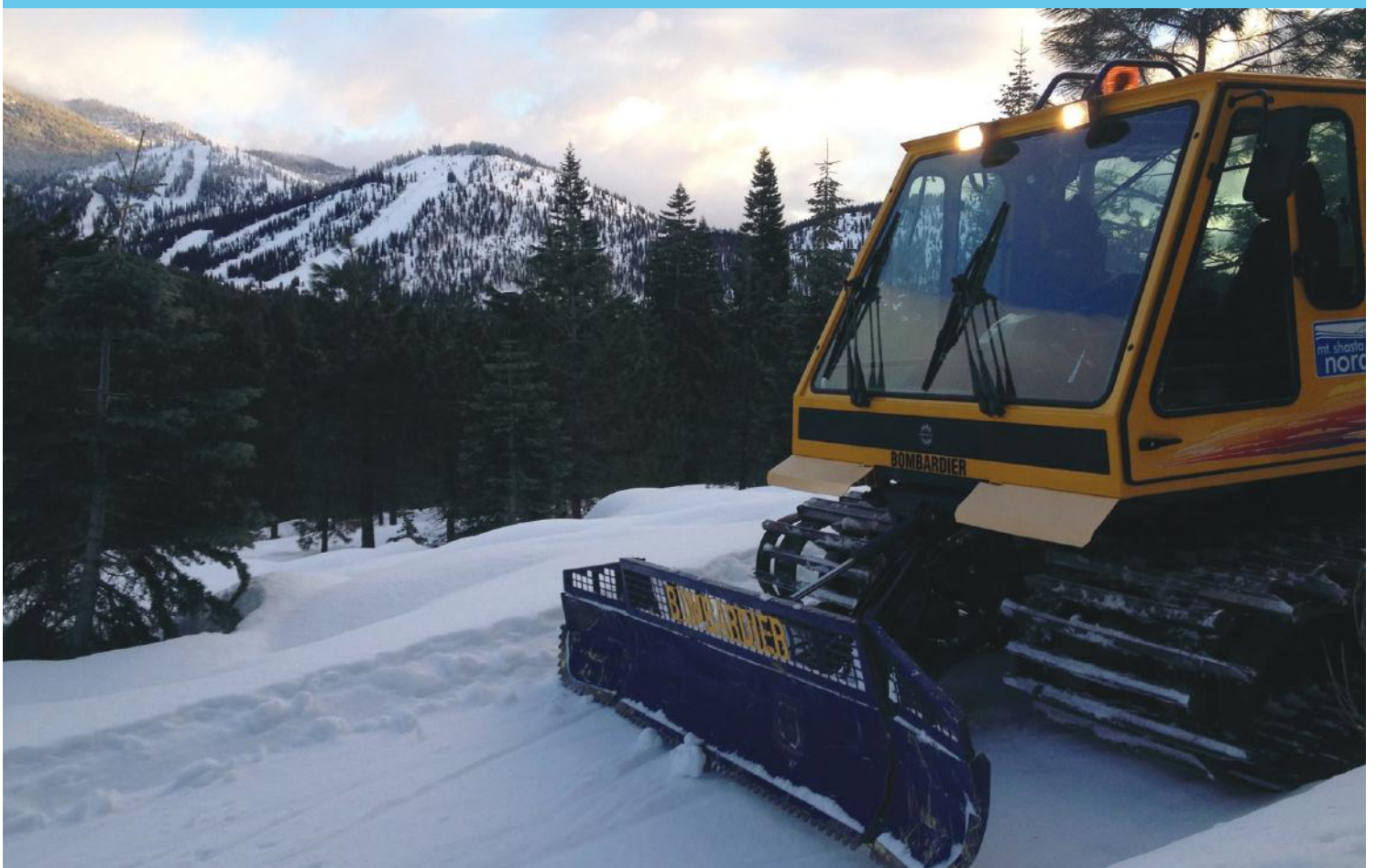


MT. SHASTA NORDIC CENTER Master Development Plan



JUNE 2021

Mt. Shasta Nordic Center Operations Plan 2021/2022

June 30, 2021

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Chapter 1
INTRODUCTION

CHAPTER 1.

INTRODUCTION

This master plan is intended to guide the management, development, and future of Mount Shasta Nordic Center. It is based on board direction, input from staff, community members, and the US Forest Service. It addresses the following mission of our program:

MISSION

Mt Shasta Nordic is a program of Siskiyou Outdoor Recreation Alliance, a 501(c)(3) non-profit organization dedicated to supporting community health and well-being by—among other objectives—providing groomed cross country ski trails and programs for a diverse population on the slopes of majestic Mount Shasta.

GUIDING PRINCIPALS

Mt. Shasta Nordic intends & strives to:

- Enable people to participate in the sport of Nordic skiing by providing well-groomed trails, marked backcountry trails, a full-service facility, quality instruction, and appropriate equipment.
- Ensure access and opportunity to all Nordic skiers by offering public access to cross country ski trails on a sliding scale basis.
- Encourage and support skiers of all ages, skill levels, disabilities, and incomes.
- Inspire and engender an active winter lifestyle in both enthusiasts and the general public.
- Promote Nordic skiing as an environmentally-friendly activity, beneficial to mental and physical health.
- Facilitate a variety of health, youth, competitive, and educational ski programs/events.
- Represent and respond to the wishes of our membership and needs of our community with consideration for environmental responsibility, fiscal prudence, and operational sustainability.

To ensure the fulfillment of our mission, Mt. Shasta Nordic is dedicated to working in partnership with the U.S. Forest Service, the Mt Shasta Ski Park, Mt. Shasta Trails Association, other various public/private agencies, and local businesses and non-profits.



BUSINESS OBJECTIVES

Build a solid foundation for the auxiliary programs to grow by:

- Ensuring the efficient operations of the Nordic Center (i.e. protect against unexpected loss of grooming services, and provide consistent grooming)
- Reducing the risk of volunteer burnout, by hiring staff for key duties and improving volunteer recruitment
- Improving our marketing message and communication
- Enhancing fundraising such that it becomes a significant and steady source of additional revenue

The auxiliary programs will evolve by:

- Constructing the appropriate facilities to shelter grooming equipment and skiers at the trailhead
- Building and growing a self sustaining youth development and junior race program, and creating opportunities to race in the CNISSF sponsored events.



A. LOCATION

The Mt. Shasta Nordic Center is located on National Forest System (NFS) lands administered under a Ski Area Permit (MTS 615) granted by the U.S.D.A Forest Service, Shasta-Trinity National Forest. The Nordic Ski Area includes NFS land in Township 40 North, Range 3 West, M.D.B.M. Sections 16, 17, and 20. The Nordic Center has been in operation since 2006 and encompasses up to 25 kilometers of Nordic ski trails, and up to 8 kilometers of snowshoe trails.

B. LAND OWNERSHIP

The Mt. Shasta Nordic Center is located on National Forest System lands administered by the Shasta-Trinity National Forest.

C. CURRENT OPERATIONS SUMMARY

1. Winter

The Nordic Center typically has a 16-week operating season, beginning in December and running through the end of March each year. Occupancy and setup of the Mt. Shasta Nordic Center typically occur the last weekend of November or before the winter storms. The Nordic Center will generally open to the public for operation with a snow depth of at least 14 inches. Additionally, consistency of coverage and quality of snow over the entire trail system involves evaluating factors that determine the Nordic Ski Area opening date each season. The Mt. Shasta Nordic Center's posted operating hours/days are Wednesday—Sunday, 9 am until 4 pm. We are closed Mondays and Tuesday.

2. SPRING, SUMMER, FALL

At present, the Nordic Center is a seasonal winter operation. However, with the development of the Gateway Phase II Learning Zone multi-use trails that will be located within the Nordic Center permit area and the proposed Nordic Center facilities upgrade included in this plan, there will be new opportunities to operate off-season programs such as youth environment education, archery, and mountain bike programs.



D. BACKGROUND/CHRONOLOGY OF DEVELOPMENT

Mt Shasta Nordic was formed in early 2006 by members of the Mt Shasta area Nordic community who recognized that the Nordic skiing infrastructure in Northern California could be preserved and enhanced by a community group passionate about cross-country skiing. With the intention of benefiting generations to come, we set our scope of influence to encompass those who have yet to discover the joys and benefits of Nordic skiing. Our intention is to create, enhance, and preserve Nordic skiing opportunities for all ages and abilities. By facilitating participation in education programs, competitive events, and Nordic skiing as a fun, health beneficial, aerobic activity, we aim to enhance the legacy of Nordic Skiing in our community.

In 2018, Mt. Shasta Nordic became one of the founding projects in creating Siskiyou Outdoor Recreation Alliance, formed with the aim of gathering together the larger community of outdoor recreation nonprofit organizations and initiatives throughout far Northern California. SORA hopes to serve to amplify the voice of outdoor recreation interests within the region, and support partnerships, policy, and planning related to outdoor recreation and community vitality. Through combining forces with other area groups and consolidating financial and administrative resources, our goal is to reduce the burden on smaller nonprofits, resulting in more sustainable programs, events, and organization.

1997 Mt. Shasta Ski Park obtains USFS Ski Area Term Special Use Permit

2006 Mt. Shasta Ski Park decides to transfer operations of the Mt. Shasta Nordic Center

2007 Mt. Shasta Nordic Ski Organization is founded and assumes Nordic Center operations as a community supported non-profit 501(c)(3) organization.

2018 Mt. Shasta Nordic Ski Organization merges with Mountain Runners, a well-established local non-profit 501(c)(3) organization to form Siskiyou Outdoor Recreation Alliance.

E. VISION AND DESIGN PHILOSOPHY

Clarifying a vision and design philosophy is an essential component of the planning process, as it helps establish an overall theme and direction for all projects. Since assuming management of operations, Mt. Shasta Nordic has committed to providing locals and visitors with a quality recreation resource. Through changes in management, re-allocation of resources, and on-going partnership with the Forest Service, the Mt. Shasta Nordic believes it is in a position to take the Mt. Shasta Nordic Center to its full potential.

The overarching vision of this MDP is to refine and enhance the experiences available at the Mt. Shasta Nordic Center in a way that allows the surrounding communities to best serve their residents, remaining true to their character while capitalizing on opportunities for increased visitation from tourism already present in the region.

This MDP seeks to proactively address the needs of the Nordic Center recreation area to accommodate future trends in regional visitation over the next ten to fifteen years. Providing adequate facilities and amenities for increasing visitation while improving existing guest experiences in winter and spring, summer, and fall seasons is the focal point of this plan. Understanding that guests' preferences are constantly changing, this MDP will provide the local communities and the Shasta-Trinity US Forest Service with preparedness and creativity to meet future guest demands.

H. STATEMENT OF GOALS AND OBJECTIVES

MASTER DEVELOPMENT VISION:

We intend to offer a full-service, top-quality Nordic ski experience for all our users and pass holders. To that end, we have identified three significant areas of potential development, which expand on services and programs already in place.



1. Master Development Goals

- Base/Hospitality Area: this physical area includes parking, restroom facilities, and the physical structures required for operations and maintenance. To include:
 - Permanent vault toilets
 - Guest lounge
 - Reception Structure which will provide sufficient enclosed space for:
 - o A full-service rental center
 - o Retail sales area
 - o Food and beverage sales
 - o Classroom space for school and interpretive programs
 - Paved and expanded parking area with marked RV slots to allow for overnight parking
 - A power source such as generator, solar panels, etc.
 - Secure, enclosed equipment storage
 - Shuttle service between the Nordic Center and the Mount Shasta Ski Park

2. PROGRAMS

- A full-service lesson/instruction program
- Youth outreach that includes school programs
- Community outreach programs for seniors, veterans, disabled, and other interest groups
- Race program
- Youth Nordic Ski Team
- Professional development classes
- Interpretive programs

3. TRAILS

- Quality groomed Nordic ski trails
- Expanded trail system
- Snowshoe trails
- Dog-accessible trails
- Marked backcountry routes (ungroomed)
- Remote warming huts
- Snowmobile transit trail through the Nordic Center
- Trails available and appropriately groomed for fat bikes
- Working partnerships for year-round use of trails



Chapter 2
DESIGN CRITERIA

CHAPTER 2.

DESIGN CRITERIA

The Mt. Shasta Nordic Center is a community resource that attracts locals and contributes to the winter recreation tourist economy. In this unique recreation landscape, the Mt. Shasta Nordic Center must serve the local community while taking advantage of the regional and national tourism in Siskiyou County.

A. RECREATION LANDSCAPE

The Mt. Shasta Nordic Center is a community resource that attracts locals and contributes to the winter recreation tourist economy. In this unique recreation landscape, the Mt. Shasta Nordic Center must serve the local community while taking advantage of the regional and national tourism in Siskiyou County.

1. Community Resource

First and foremost, the Mt. Shasta Nordic Center is a resource for the residents of Mt. Shasta, McCloud, and surrounding communities in Siskiyou County. We serve local residents with a variety of well-groomed/maintained trails that support a learning progression for new users while meeting the needs of diverse skier abilities in the community. As a community-oriented resource, we strive to provide a service that is affordable and easily accessible—accommodating work schedules and offering programming that meets the needs of local user groups. To compete with other Nordic ski areas in the Bend and Tahoe areas, the Mt. Shasta Nordic Center strives to offer various activities, programs, and facilities that serve locals and visitors alike.



2. Regional Tourism

Mt. Shasta Nordic Center is the only Nordic ski area between Lake Tahoe and Bend, Oregon. It serves regional visitors from Southern Oregon and Northern California, including Chico, Redding, Arcata, Sacramento, and Lake Tahoe. These skiers stay in local lodging and patronize local restaurants, shops, and grocery stores.

3. Alpine Ski Destination

Most winter destination visitors to the Mt. Shasta area visit the adjacent Mt. Shasta Ski Park. Because destination visitors often stay for multiple days while visiting the alpine ski area, some engage in non-alpine skiing opportunities like those available at the Mt. Shasta Nordic Center. The Nordic Center also provides a recreation option for friends and family members of Ski Park users who do not alpine ski.





B. GUEST SERVICES FACILITIES

Planning the Mt. Shasta Nordic Center's guest services facilities and trail network is critically important. The fundamental objectives for the planning process to integrate the trail network with the facilities to create a cohesive, functional, and easily navigable user experience. This will be achieved by addressing base area components that include guest service locations (passes and rentals), skier/snowshoe circulation, parking/access requirements, and transit drop-offs. The lodge area facilities have three main functions:

1. Receiving arriving guests
2. Providing the necessary guest services, including ticket and rentals sales
3. Efficiently circulating the guests onto the trail systems and activities

1. Trail Routes

There are up to 25 kilometers of groomed Nordic ski trails inside the Nordic Center boundary. The average width of the Nordic ski trail is 15 feet wide. Trails are generally cleared of vegetation, but not necessarily to bare ground (Figure 1: Nordic Center Trail Photo). Inside the Nordic Center boundary, both natural openings through Forest Service plantations and Forest Service System roads serve as Nordic ski trails during the Nordic Center operating season.

The snowshoe trails include up to eight kilometers of packed trails that are intertwined within the Nordic ski trails. These snowshoe trails range in width from 3 feet to 4 feet, depending on the density of forest vegetation and trees. The trails are flagged with ribbon. Staff and volunteers pack the trails by foot.

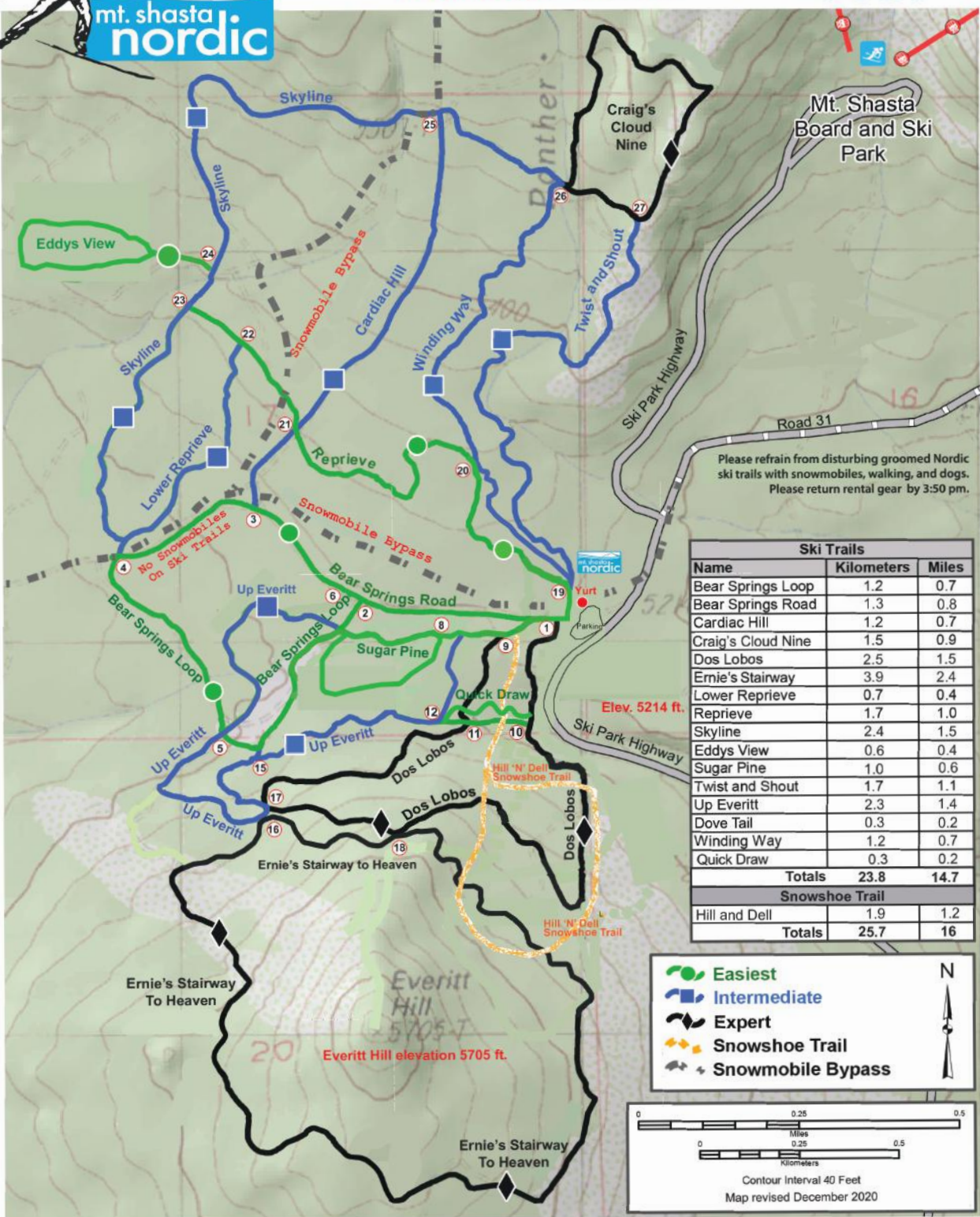
Mt Shasta Nordic staff will reevaluate and realign trails periodically to improve efficiency of grooming and improve flow pattern for guest skiers and skaters. Some trail arteries may be decommissioned. Decommissioning a trail consists of reprinting trail maps, removing signs, discontinuing grooming, and allowing existing vegetation and woody material to re-establish within the abandoned trail.



Figure 1: Nordic Center Trail Photo



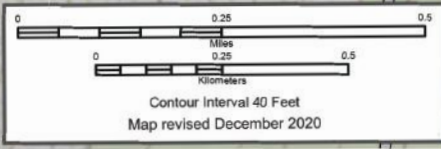
TRAIL MAP



Please refrain from disturbing groomed Nordic ski trails with snowmobiles, walking, and dogs. Please return rental gear by 3:50 pm.

Ski Trails		
Name	Kilometers	Miles
Bear Springs Loop	1.2	0.7
Bear Springs Road	1.3	0.8
Cardiac Hill	1.2	0.7
Craig's Cloud Nine	1.5	0.9
Dos Lobos	2.5	1.5
Ernie's Stairway	3.9	2.4
Lower Reprise	0.7	0.4
Reprise	1.7	1.0
Skyline	2.4	1.5
Eddys View	0.6	0.4
Sugar Pine	1.0	0.6
Twist and Shout	1.7	1.1
Up Everitt	2.3	1.4
Dove Tail	0.3	0.2
Winding Way	1.2	0.7
Quick Draw	0.3	0.2
Totals	23.8	14.7
Snowshoe Trail		
Hill and Dell	1.9	1.2
Totals	25.7	16

● Easiest
■ Intermediate
◆ Expert
◆ Snowshoe Trail
◆ Snowmobile Bypass





2. Snowmobile By-Pass Trail

The designated Snowmobile By-Pass Trails is groomed; they are packed out regularly with the Mt Shasta Nordic snowmobile and other snowmobile users. The bypass has three access points – Ski Park Highway, at the western boundary of the Bear Springs Road 31, and the northern boundary of Wagon Camp Road. The bypass has historically been signed at the three boundary entrances with the standard U.S. Forest Service Snowmobile logo signs (Figures 2-6: Snowmobile Bypass Signs). Snowmobile signs are posted on trees at intersections facing both directions of travel. Additionally, up to six “Snowmobile Bypass” signs are posted on trees at intersections facing both directions of travel. (See sign images below).

The Snowmobile By-Pass Trail crosses the Ski Park Highway just north of the Nordic Center parking area. Larger snowmobile signs are posted facing both directions of approaching vehicle traffic along the Ski Park Highway. Periodically, the Ski Park uses a snow cat to cut a sloping ramp on both sides of Ski Park Highway to allow snowmobile traffic to safely cross the highway.



Figures 2-6: Nordic Center Snowmobile Bypass signs

3. Boundary Management

With the exception of the snowmobile bypass signs at the three road entry points, the Nordic Center boundary is unmarked.

The road closures (snow berms) are constructed and maintained by Nordic Center staff in three locations: Bear Springs Road/US Forest Service Road 31, west of the base area, the foot pathway leading from the parking area, and the Snowmobile By-Pass Trail. The Nordic Center will post a “Road Closed” sign on USFS Road 31 stating that the Forest Service initiated a “Forest Order” to close the road during the Nordic Center ski season.

4. Nordic Center Publications

Mt Shasta Nordic will publish a new trail map at the start of each ski season, which considers any revisions to the trail system. Mt Shasta Nordic also distributes map/brochures and maintains a website (www.mtshastanordic.org), both of which provide information on the Nordic Center. In addition to the required posters (e.g. Justice for All), the standard U.S. Forest Service logo shield is displayed on all publications with the following wording attached: “Portions of this facility are operated on land under the jurisdiction of the U.S. Department of Agriculture, Forest Service. The area is located on the Shasta-Trinity National Forest and the trail system is operated on a non-discriminatory basis.” Mt Shasta Nordic Ski Organization complies with the requirements of Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; Title IX of the Education Amendments of 1973; and the Age Discrimination Act of 1975, as amended and completes the Equal Opportunity Program Delivery Compliance Reviews according



MT. SHASTA NORDIC SKI CENTER INFORMATION

Mt. Shasta Nordic grooms 23.5 kilometers of cross-country ski trails at its Nordic Ski Center. Seasonal and day-use trail passes are for purchase. Ski equipment for diagonal stride and skate skiing are available to rent. Beginning skiers may receive ski instruction in group or private lessons each weekend during ski season. A warming hut at the trailhead is stocked with snacks and beverages. Baby pull-sleds are provided for free on a first-come basis. Snowshoe rentals are available. Welcome to a winter paradise!

DIRECTIONS

The Mount Shasta Nordic Ski Center is located about ten miles east of Interstate 5, near Mount Shasta City, CA. From I-5, exit onto Highway 89 towards McCloud. After 6.5 miles on Highway 89, turn left (north) onto Ski Park Highway. After 3.5 miles, look for the Nordic Center sign. Parking is on the same highway. Be prepared to travel with tire chains or in all-wheel drive vehicle with snow tires. Please check the Mt. Shasta Ski Park's website for driving conditions on Ski Park Highway.

Mt. Shasta Nordic Ski Center operates under the Non-profit umbrella of SORA, Siskiyou Outdoor Recreation Alliance. To learn more, visit: siskiyououtdooralliance.org



CONTACT

GROOMING REPORT RECORDING:
530-925-3494

DIRECT CONTACT LINE:
530-925-3495

info@mtshastanordic.org



@mtshastanordic



TRAIL MAP

Mt. Shasta Nordic Ski Center memberships, business sponsors, and trail use fees combine to support Nordic Center operations and community outreach ski programs for local seniors and children. Please help this local recreation center remain viable.

For details about supporting this vision, please visit: mtshastanordic.org/take-action

Email questions to: info@mtshastanordic.org



Mt. Shasta Nordic Ski Center operates under a special use permit with the Shasta-Trinity National Forest. This institution is an equal opportunity provider.



GROOMED NORDIC SKI TRAILS
IN A WINTER PARADISE



Chapter 3
SITE INVENTORY

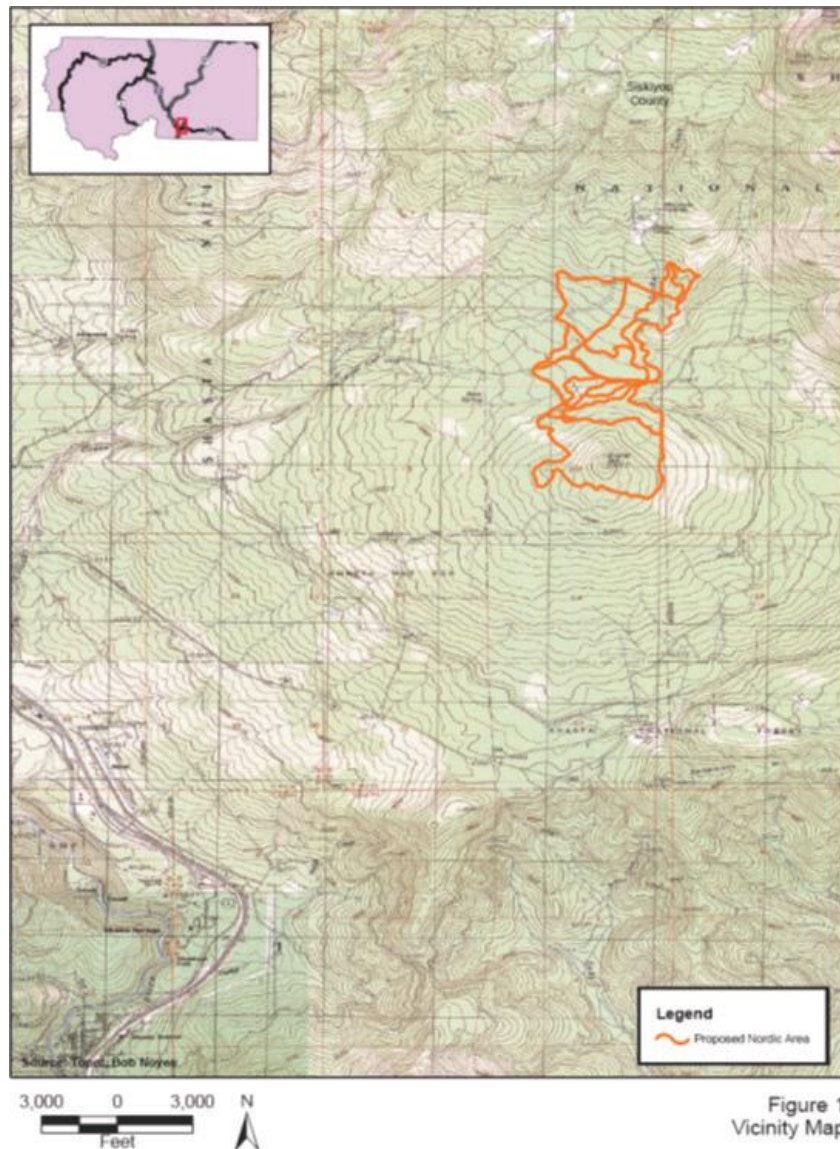
CHAPTER 3.

SITE INVENTORY

A. TYPOGRAPHY AT NORDIC CENTER

Mt. Shasta Nordic Center's topography consists of a mix of flat areas with steeper terrain surrounding flat areas on the north and south ends of the site. The landscape is flat on the midsection of the terrain (along Bear Springs Road) and gets progressively steeper on the northeast and southwest areas of the terrain.

The highest elevation within the Mt. Shasta Nordic Center trail network is approximately 5600 feet at Earnie's Stairway to Heaven and Craig's Cloud Nine Trails. The lowest elevation of the trail network, at the Bear Springs Trail, is approximately 5180 feet. Thus, the total vertical drop of the Nordic Center trail network is approximately 400 feet. The Nordic Center base area is located at around 5200 ft.





B. SLOPE GRADIENTS

Mt. Shasta Nordic Center's ability level designations are based on slope gradients and terrain features within a trail network. Regardless of the slope gradient for a particular trail, if it feeds into a track that is rated higher in difficulty, its ability level will be rated accordingly. Accordingly, if a trail is fed only by trails of a higher ability level, it too will be rated accordingly. Unlike downhill ski runs, Nordic trails do not need to follow the fall line and can cut across the slope.

- 0 to 10% (0 to 6 degrees): This gradient is suitable for beginner and intermediate skiing, buildings, and other support facility development.
- Trails for expert skiers can include these grades for short sections. 10 to 20% (6 to 11 degrees): This gradient is suitable for expert skiers.
- Trails for intermediate skiers and bikers can exceed 10% grade for short sections or will need to cut across the hillside. These slopes can typically support some types of development.
- 20 to 30% (12 to 17 degrees): At this gradient, trails for expert skiers should cut across the hillside as well.

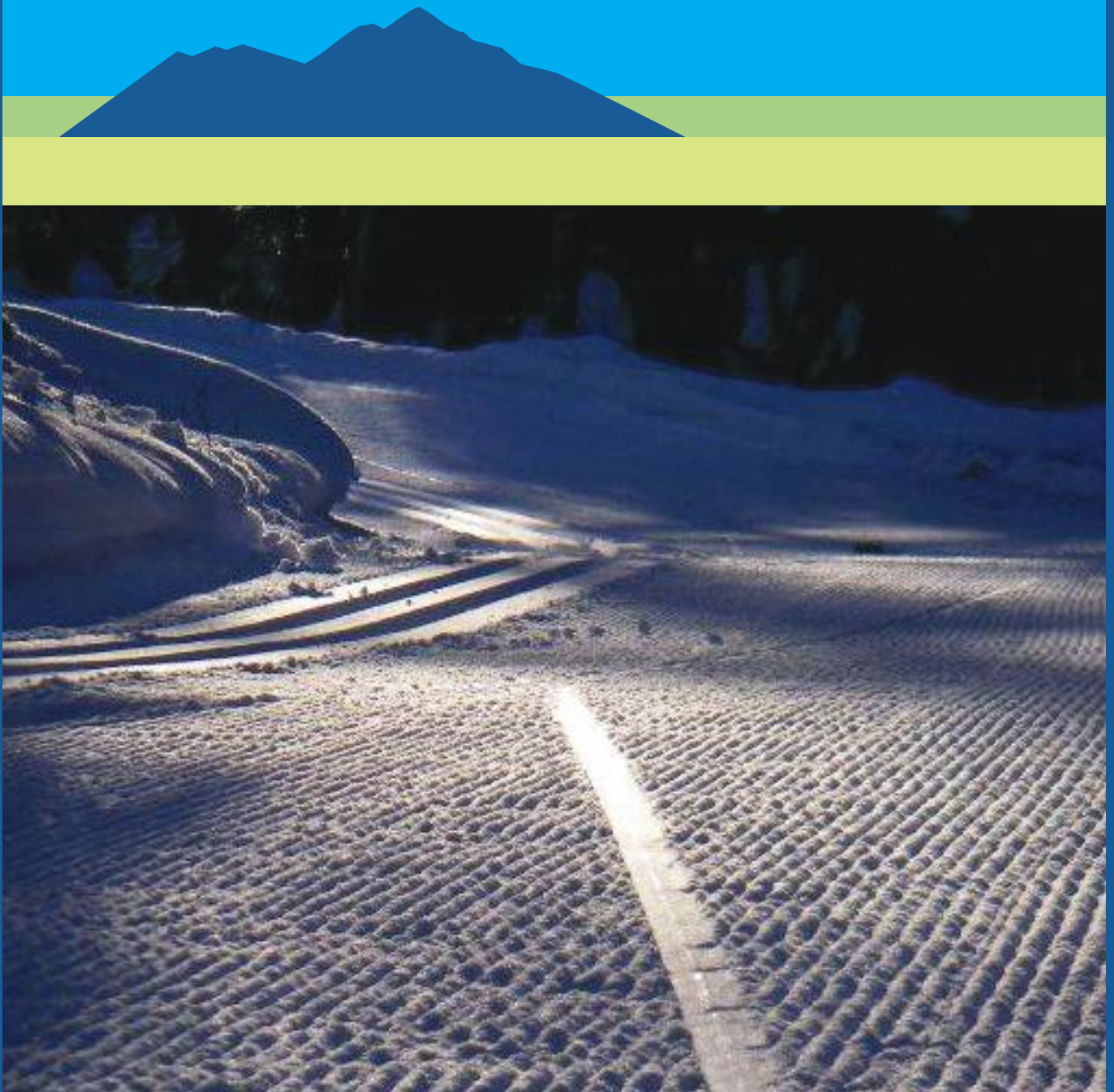
(Adapted from the Frisco Nordic Center 2019 Master Development Plan)

C. SOLAR ASPECT

Slope aspect plays an essential role in snow quality and retention. There are various exposures at the Nordic Center that considerably affect the quality of skiing on Nordic Center trails, including changes in sun angle, temperature, wind direction, and shadows. Typical constraints concerning the various grades of exposure are discussed below:

- North-facing: ideal for snow retention, minimal wind scour, minimal sun exposure.
- East-facing: good for snow retention, some wind scours, morning sun exposure.
- Southeast-facing: fair for snow retention, moderate wind scour, morning and early afternoon sun exposure.
- South-facing: at lower elevations, poor for snow retention, moderate wind scour, full sun exposure.
- Southwest-facing: poor for snow retention, high wind scour, full sun exposure.
- West-facing: good for snow retention, high wind scour, late morning and afternoon sun exposure.
- Northwest-facing: good for snow retention, moderate wind scour, some afternoon sun.

(Adapted from the Frisco Nordic Center 2019 Master Development Plan)



Chapter 4
EXISTING CONDITIONS

CHAPTER 4.

EXISTING CONDITIONS

This chapter contains an assessment of the existing facilities and operations at the Mt. Shasta Nordic Center. This assessment includes an inventory of existing trails, facilities, available recreational activities, guest services, parking capacity, general operations, and other utilities/infrastructure

A. SUMMARY OF EXISTING GUEST EXPERIENCE

The Mt. Shasta Nordic Center offers rustic amenities with groomed, uncrowded ski and snowshoe trails. We offer groomed trails for skate & classic cross country skiing and snowshoe trails for all ages and abilities. Services include classic and skate ski lessons, equipment rentals, and a cozy warming hut at the trailhead with hot drinks and snacks.

- Groomed trails for skate and classic skiing
- Marked snowshoe trails
- Group and private ski lessons
- Ski and snowshoe equipment rentals
- Free Pulk Sleds for small children
- Warming yurt with woodstove



1. Base Area Facilities

Mt Shasta Nordic uses a 16 ft diameter yurt with a wood stove at the base area. The structure has been approved by the Siskiyou County building department. The location has been approved by the Forest Service. It is assembled in November of each year and dissembled at the end of each season between late March to early April.



The structure is a warming hut for skiers. It is also used as the lesson meeting area with space behind the wood stove to dry rental ski boots. While the yurt provides a nice space for visitors to take a break from the cold, it is not big enough to accommodate the needs of all guests on the weekends and during the holidays.

The Nordic Center also uses an open tool trailer as the equipment rental and ticket sales center. The trailer keeps the equipment safe and protected from the elements, but it is not big enough to accommodate customers, which leaves them waiting in line outside to rent gear and purchase trail passes. This setup also leaves staff working in an uninsulated, open-air workspace in winter weather conditions with a portable propane heater.

2. Sanitation and Toilets

Waste receptacles are provided at the Base Area and in the adjoining parking lots. These cans are emptied weekly during the operating season. A clean-up and sanitation patrol is conducted over the entire Nordic Center area at the end of the season. Portable toilets currently serve as sanitation facilities (restrooms) for Nordic Center users. The portable toilets are located adjacent to the parking lot. The toilets are cleaned by Mt Shasta Nordic staff on a regular basis and pumped by a service provider every week. At the end of the season, the toilets are removed from the site.



3. Parking and Snow Removal

The plowed and graded parking area is approximately 1.5 acres at the intersection of Bear Springs Road (41N31) and Ski Park Highway (40N88) as the main ingress and egress. The open area is a mixture of chip-sealed and graveled surface. This area can accommodate up to 100 vehicles during the winter season.

Wintun Development Corporation (Mt. Shasta Ski Park) provides parking lot snow removal and maintenance throughout the entire season under a Memorandum of Understanding. The snow is plowed or blown to the edge of the tree line surrounding the area. Cinder is spread over the lot when snow-covered. A foot pathway from the parking area to the lodge area and trailhead is plowed and maintained. The entrance into the parking area is maintained at a width of at least 20 feet, with a visible stop sign. Berms of snow are pulled back to create a sight distance for cars pulling out.

4. Signs and Picnic Tables

A 4'x4' U.S. Forest Service sign with a directional arrow and the wording "Mt. Shasta XC Ski Center, Shasta-Trinity National Forest" is located at the intersection of Ski Park Highway and Bear Springs Road (Figure 3: Nordic Center Directional Sign). During the off-season, the sign is covered to avoid confusion to summer travelers. There are two "No Parking at Anytime" signs on either side of the portion of Ski Park Highway approaching the Nordic Ski Area turn-off.

The main trailhead sign is located immediately adjacent to the parking area. It contains information including but not limited to:

- Trail System Map
- Use Fees
- Grooming Schedule
- Calendar of Events
- Mt Shasta Nordic Ski Organization contact information
- Emergency contact information

Trail intersections are marked with ski area standard trail signs and safety signs made of fiberglass and UV resistant material. Signs are placed at junctions along the Nordic Center trails (Figure 7: Nordic Center Kiosk). All of these *temporary* signs are placed in the snow along the trails at the beginning of each season and removed at the end of each season.

We installed a kiosk that includes an enclosed bulletin board with Plexiglas doors to keep maps and other materials protected from rain and snow. This kiosk can be shared with the USFS to post maps and other pertinent information. Finally, a sign is posted to state that the ski area boundary is not marked or patrolled. Picnic tables for guest use are located at the base area and at major intersections along the trails. The picnic tables are removed at the end of each season.



Figure 7: Nordic Center Kiosk



B. EROSION CONTROL AND VEGETATION MANAGEMENT

1. Erosion Control

Most, if not all, of the waterway drainages inside the Special Use Authorization Area boundary, are seasonal or intermittent streams. The Nordic Center season runs from December through mid-April when snow reaches a minimum depth of 14 inches. During the operational period, any Nordic trail system with running or standing water or crosses a saturated area will be closed to machine grooming until the water is frozen or the saturated zone is sufficiently drained or covered with snow to prevent damage or erosion.

From April through July, there is seasonal snow runoff in the form of intermittent streams. During this period, Nordic Center staff inspect this area to evaluate the extent of runoff. Aside from snowmobile grooming, if adequate snowpack exists, no mechanical trail maintenance work is performed during seasonal runoff periods (April 1 through July 15). Handwork may be performed on trails to control runoff that could cause erosion. General erosion control work is performed from August 1 through October 15 of each year.


2. Vegetation Management

Vegetation management projects or trail maintenance on the Nordic Center trail system is conducted between August 1 and October 15. The scope of work may include trimming intruding brush, trimming tree limbs along the trails, repairing water bars, and removing hazardous trees (e.g., broken and/or heavily leaning) along trails. The native grasses and flowers are not disturbed on the trail routes. All tree slash, brush, or limbs that are removed will be lopped and scattered to a depth of 18 inches or less.

C. EXISTING OPERATIONS

1. Grooming

Consistent, detailed trail grooming is Mt Shasta Nordic's foremost priority for the Nordic Center. The goal for the season is to groom the entire trail network each day that the Nordic Center is open. Mt. Shasta Nordic owns a BR180 Snow Cat groomer for trail grooming and has budgeted 300 hours of grooming per season. The snowcat groomer is stored off-site at the Mt. Shasta Ski Park maintenance yard.



Mt Shasta Nordic also owns and operates a snowmobile and pull-behind groomer/track setter. This equipment is used as an adjunct to snowcat grooming. Grooming with the snowcat is only conducted when the snowpack has reached a depth of at least 14 inches. Additionally, consistency of coverage and quality of snow over the entire trail system determines the first and last day of grooming each season.

2. Trail Fees

Mt. Shasta Nordic has implemented a trail use fee as of July 2013. Previously, Mt. Shasta Nordic used a donation model, and trail access was free for members and non-members alike. The new model includes a daily trail use fee and season pass for unlimited access each season. We offer different tiers of ski passes and ticket prices, and season pass scholarships so that no one will be denied access to the Nordic Center due to financial circumstances. Trail users will still be encouraged to donate to Mt. Shasta Nordic by using a steel collection tube mounted to the trailhead sign, which reads, "Your donations fund the maintenance and grooming of these public access trails." Daily ski tickets and season passes are available at mtshastanordic.org and the Nordic Center rental trailer. Cash, checks, or credit cards are accepted; checks are made out to the Mt Shasta Nordic.

Frequent users of the Nordic trails will be encouraged to purchase a season pass. Season passes can be purchased on the website, at the trailhead, or upon request. Season pass forms include a required liability release waiver.

3. Safety

Risk Management

Nordic Center Staff and volunteers evaluate risks and hazards and formulate mitigation measures to reduce or eliminate issues associated with the Nordic Center operations. This includes, but is not limited to:

- Posting of Public Health and Safety Messages
- Educating/Training Employees on Safe Work Habits
- Fire Prevention
- Risk and Hazard Identification
- Minimize "Slip and Fall" Hazards
- Maximizing Health and Sanitation



Ski Patrol

Mt Shasta Nordic Ski Organization does not provide on-site ski patrol services at the Nordic Center. Instead, Mt. Shasta Ski Park provides emergency service as per the written Memorandum of Understanding.

Accident-related incidents are promptly communicated by Nordic Center staff, by either radio or cell phone, to the Ski Park's Mountain Operations Dispatcher. It is the responsibility of Nordic Center staff to notify the Ski Patrol or local emergency management service. Mt. Shasta Nordic will investigate all Nordic-related incidents involving an employee or user of the Nordic Center. Snowmobile and skiing are the primary modes of search transportation. It is the responsibility of the Nordic Center staff to document and report an incident on an accident report form and submit to executive officers of Siskiyou Outdoor Recreation Alliance and the authorized USFS officer.

Search and Rescue and Avalanche Control

In the event of a Search and Rescue event, Nordic Center staff and/or volunteers will conduct a "hasty search" for overdue or missing Nordic skiers within and adjacent to the Nordic Center and Mt. Shasta Ski Park property boundaries. The staff and/or volunteers can also request Ski Patrol support. Beyond a "hasty search," it is the responsibility of the Siskiyou County Sheriff to conduct search and rescue operations. Nordic Center staff and/or volunteers will notify and keep the Sheriff informed with regards to the progress of the "hasty search." There is no avalanche control terrain inside the Special Use Authorization Area boundary of the Nordic Center.

Safety Communication

The trailhead sign will direct skiers to call 911 in case of an emergency. The sign will also list the phone number for the Ski Park's Mountain Operations Dispatcher, as the Ski Park has offered its Ski Patrol to provide additional assistance in the event of an emergency.

Staff and volunteers will have access to a cell phone, which can be used for emergency communication with the Mt. Shasta Ski Park and local emergency services (e.g., Sheriff, US Forest Service).

D. PROGRAMS AND EVENTS

1. Race and Social Events

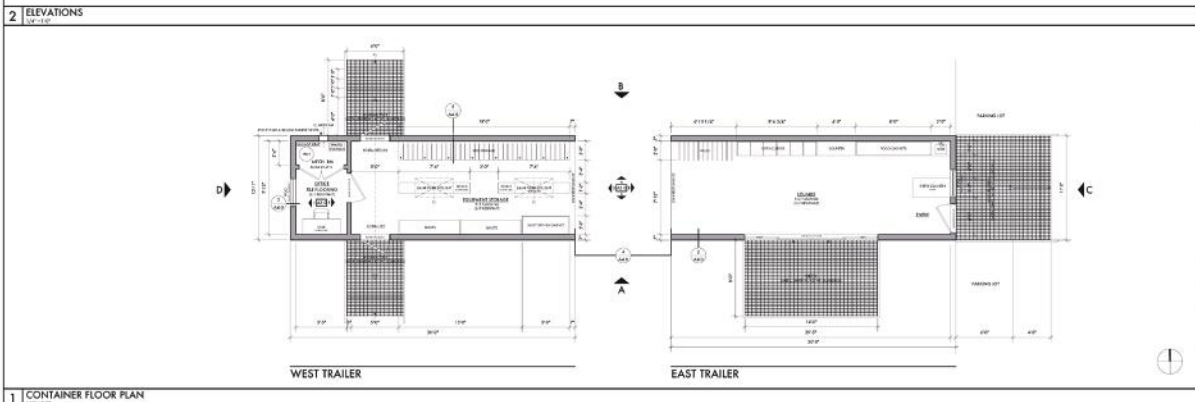
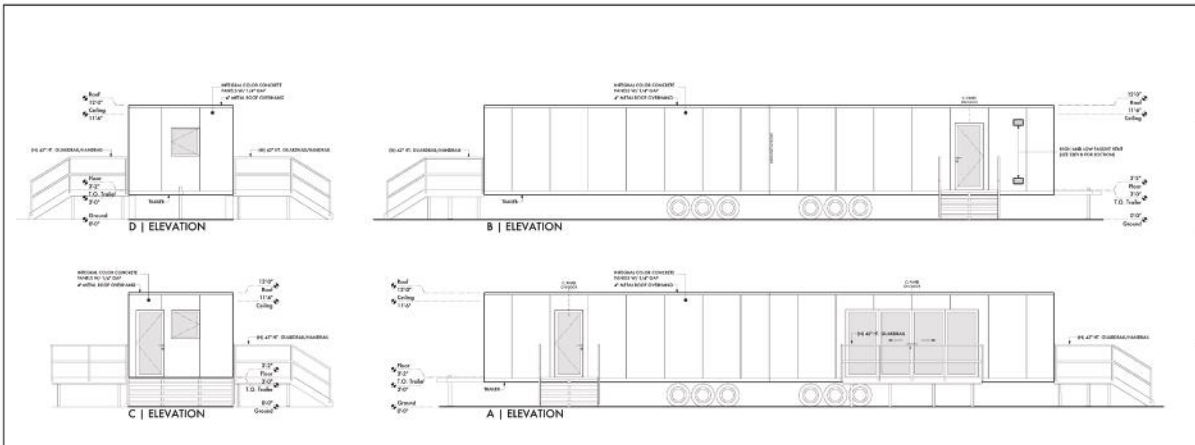
Mt Shasta Nordic hosts various race and social events at the Nordic Center this season. Events include:

- Annual Winter Wildlands Back Country Film Festival
- PSIA Skate & Classic Ski Clinics
- Oregon Interscholastic Ski Racing Association Nordic Junior State Championships
- Shasta Disabled Sports Day
- Free Senior Ski & Snowshoe days
- Free Veteran Ski & Snowshoe days

2. School Program

The Nordic School Program serves youth from diverse socio-economic circumstances and physical abilities from North and South Siskiyou County. This program aims to provide equitable access to Nordic skiing and expose kids to fun, healthy winter outdoor activities





SHASTA NORDIC

TODD DAVIS ARCHITECTURE

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REVISIONS

PERMIT SET

FLOOR PLANS/ELEVATIONS

SCALE: 1/4" = 1'-0"

DATE: 09.08.20

A2.0

Chapter 5 UPGRADE PLAN

CHAPTER 5.

UPGRADE PLAN

This MDP has been prepared in compliance with the terms and conditions of the Forest Service issued 30-year Ski Area Term Special Use Permit for the Mt. Shasta Nordic Center. Planned projects in this MDP are conceptual in nature and may be refined in the future, as long as the original intent of a planned project is maintained. This upgrade plan focuses on enhancing the guest experience through a series of improvements to the guest services facilities.

A. GUEST SERVICES UPGRADE

Mt Shasta Nordic intends to upgrade its current guest services facility with a new and more permanent one. By design, the current and proposed Nordic Center facilities are mobile to reduce risks and liabilities associated with leaving unattended facilities on site during the offseason. Additionally, in light of the current warming weather trends, the Nordic Center may need to be relocated to a higher elevation in the future. A ski area needs a lodge, and whereas the current yurt has served the public well for 15 years, a more permanent solution will allow the Nordic Center to provide more comprehensive services for Nordic Center guests. (See our full architectural plans in appendices.)

1. The current operation depends on the following infrastructure:

- Heated 16' diameter canvas yurt, and three unheated trailers housing ski rental gear, firewood, and our snowmobile and other heavy equipment respectively.

2. The proposed new facilities will include:

- New 10' x 60' heated lodge comprised of two 10' x 30' trailers joined together. These trailers will house our rental gear, a lounge, an entry station and small retail area, and a private office for the staff.
- Double vault toilets.

3. Construction

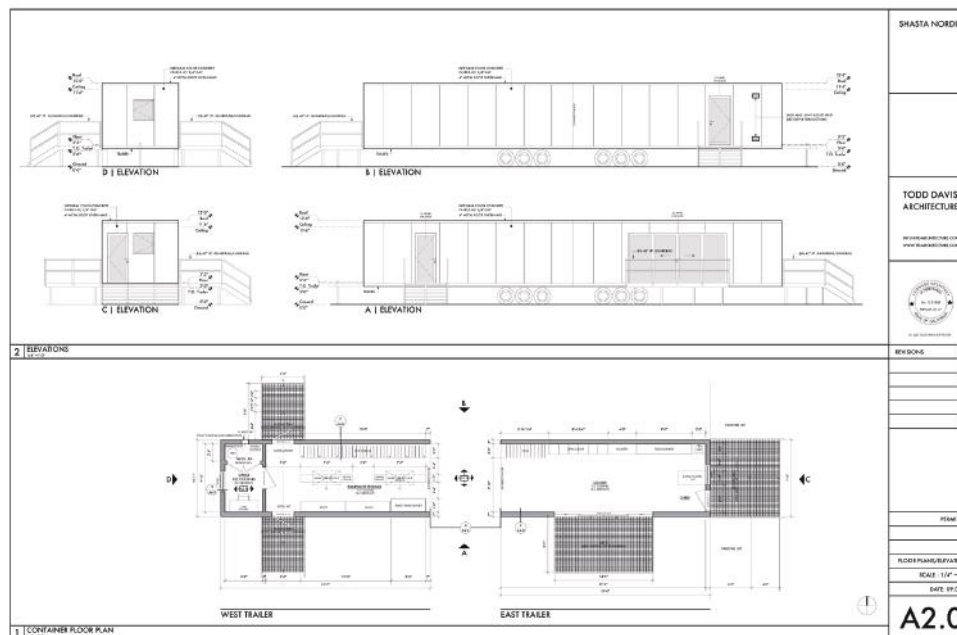
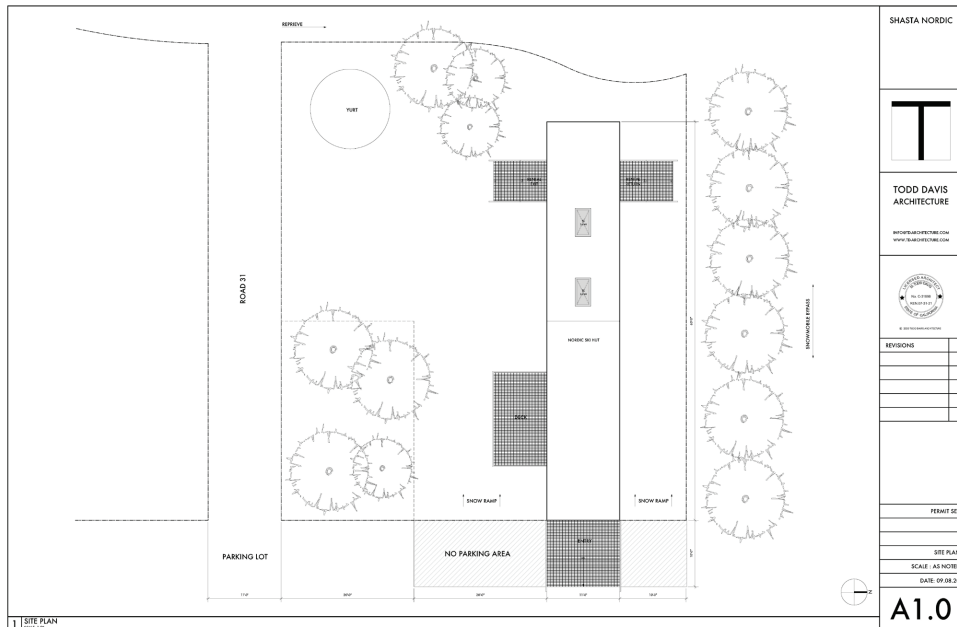
Construction will be both durable and architecturally significant with a modern aesthetic. The lodge will be inviting, dry and warm for both employees and patrons, and will be built to last. The lodge will be supplemented by a new facilities trailer that will house trail signs, maintenance equipment, and a small workshop for on site repairs (engineered plans in figures below). Our current storage trailers for firewood, snowmobile, heavy equipment, and the yurt will continue as part of our operation. The rental trailer will be retired.

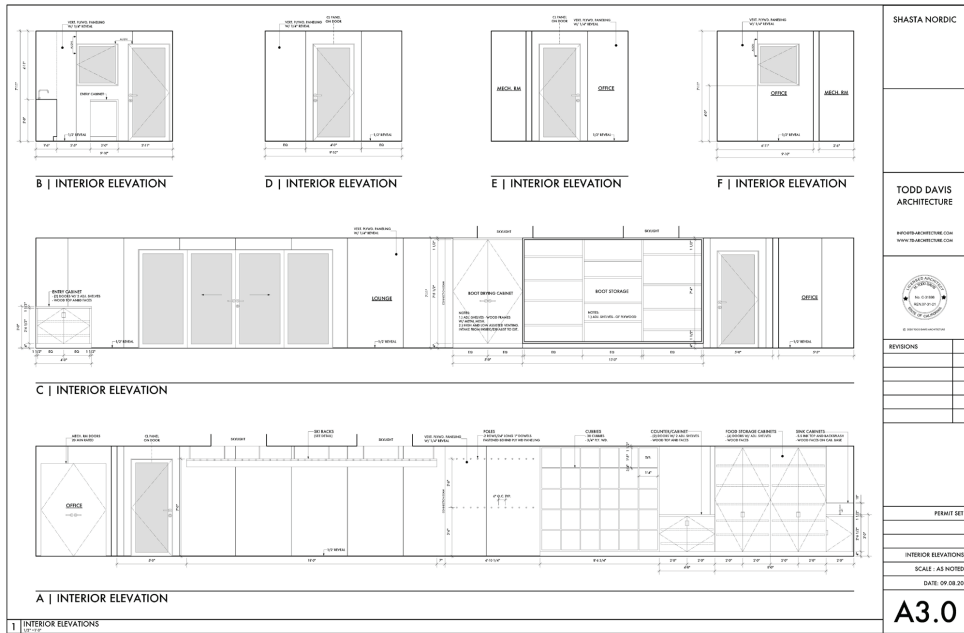
The final component of the facilities upgrade is restrooms. The Nordic Center provides temporary portable toilets. They get a great deal of use from Nordic Center guests and non-Nordic Center users each season. Both the USFS and Mt Shasta Nordic have interest in a permanent double vault toilet being installed. A double vault toilet has been approved in the Gateway Phase II NEPA and awaiting funding to install. Servicing of the vault toilet will likely be shared with the USFS maintaining summer operations of this toilet and the Mt. Shasta Nordic Center assisting in winter operations and maintenance of the vault toilet.



4. Climate Adaptation

With warming weather patterns in California, mobility will allow us to move up to higher elevations during low snow years and warm, rainy weather cycles at lower elevations. This option will also enable us to extend our operation season and ensure more days of operation each ski season.





SHASTA NORDIC

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KEYPLANS

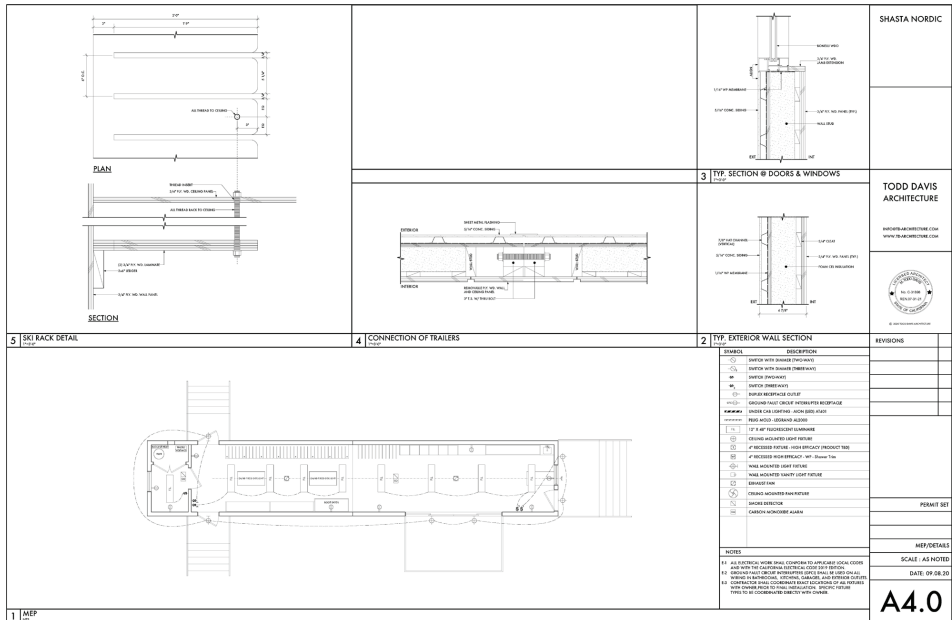
PERMIT SET

INTERIOR ELEVATIONS

SCALE: AS NOTED

DATE: 09.08.20

A3.0



SHASTA NORDIC

TODD DAVIS ARCHITECTURE

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KEYPLANS

PERMIT SET

MEP/DETAILS

SCALE: AS NOTED

DATE: 09.08.20

A4.0

B. TRAIL DEVELOPMENT

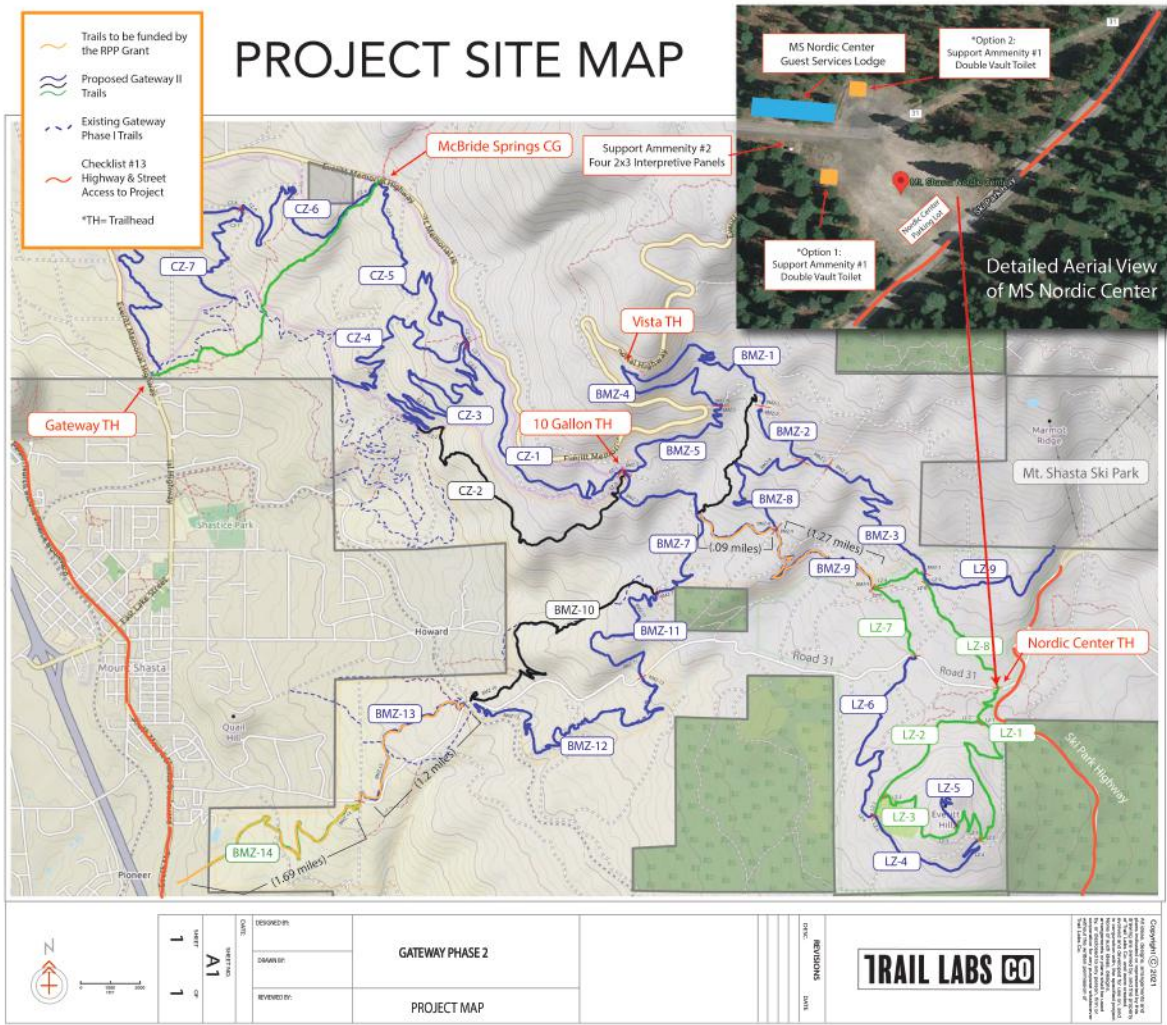
1. Off-Season Trail Development

With the development of the Gateway Phase II Learning Zone (Figure 8: Gateway Phase II Map) multi-use trails that will be located within the Nordic Center permit area, there will be new opportunities to operate off-season recreation opportunities. The conceptual trail network was designed to provide summer users with a trail network through the improvement of existing trails and the development of new trails using current trail design techniques. Siskiyou Outdoor Recreation Alliance is seeking grant funding to help fund the development of these trails.

2. Fat Bike Trail Development

Fat biking is a growing winter sport. They provide a great way for avid cyclists to stay in shape during the winter season and they provide different recreational fun for people who are active and love the outdoors. In recent years, Nordic ski areas have become popular fat biking destinations due to the suitable riding surface of groomed trails. Many Nordic skiers have resistance to the presence of fat bikes due to the potential for degradation to the groomed surface. To accommodate the Nordic skiing and fat biking public, Mt. Shasta Nordic intends to develop fat bike/E fat bike trails that can be groomed by snowmobiles. Fat bike trails are designed to intersect perpendicular to Nordic ski trails to the greatest extent possible, rather than following the Nordic ski trail surface to decrease the potential for trail conflicts.







Mt. Shasta Nordic operates under a special use permit with the Shasta-Trinity National Forest.
This institution is an equal opportunity provider.