SATSS

The Sherwin Area Trails Special Study

Existing Conditions Memo
Opportunities and Constraints Memo
Alternatives Memo

Commissioned by the Town of Mammoth Lakes
Alta Planning and Design, Project Consultant

February 6, 2009

Mammoth Lakes Trail System Master Plan (Attachment B) – Sherwin Area Trails Special Study

Existing Conditions Memo

Feburary 6, 2009

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Purpose

This technical memo discusses the existing conditions data that Alta Planning & Design has obtained as part of the Sherwin Area Trails Special Study (SATSS) effort, and is being provided to augment the information presented in the SATSS Summer and Winter Existing Conditions maps. This memo provides a general overview of the data and it will be used to develop subsequent work products. It is being provided in accordance with Task 2 of the project contract.

General Conditions

The SATSS effort makes a clear distinction between summer and winter conditions, but some issues are present regardless of the season. This section discusses the most prominent year-round issues.

Access and connectivity between the National Forest and the developed area within the Town of Mammoth Lakes urban area is severely restricted by private property along the Town's southern and eastern boundary. Seventy percent of the study area's border with Town abuts private property.[1] This private property acts as a barrier between the most populous part of Town and the SATSS area's most desirable terrain (Sherwins, Mammoth Meadow, Hidden Lake, Mammoth Rock).[2] In contrast, the thirty percent of the UGB/SATSS border with public lands on either side is located along the less populated southeastern edge of Town. Sherwin Creek Road and Mammoth Creek Park provide the legal access closest to Town. The Main Path provides additional access farther to the east. Old Mammoth Road and some smaller local streets provide access at the far south and west of the Urban Growth Boundary. Limited access is a serious issue that manifests itself differently in winter than summer, but the primary concern is present during both: that many users of the SATSS must trespass through private property in order to move with reasonable directness between the open spaces of the National Forest and Town.

Topography plays a key role in defining the SATSS: to the south, the steep flanks of the Sherwins drop to terrain that is variously flat (e.g., Mammoth and Kerry Meadows) or rolling (e.g., moraines in the eastern portion). The steep bowl ringing Mammoth Meadows to the south, west, and parts of the north creates a unique feature, as does Panorama Dome near the far western border of the study area.

A *variety of vegetation types* compliment the topography and are determined by soil, elevation, aspect, and precipitation. The stands of evergreen trees of various sizes dominating the north-facing hills contrast with the scrub and sage at lower elevation, on south-facing aspects, and in unprotected areas. The scrub and sage do not protect against wind and the drying effects of sun. This low vegetation also causes pockets of air between the snow surface and the ground, creating a "false bottom" during the winter snow cover that can create difficulties for winter recreationists, especially absent any marked trails to lead users

[1] By "Town" we are referring to the lands within the Urban Growth Boundary (UGB).
[2] The areas listed here are considered more desirable due to their physical and aesthetic qualities (both steep and flat terrain, vistas, wooded areas, etc), the variety of activities they support, and their proximity to residential populations.

along trajectories over more consistently packed snow. In contrast, evergreen trees provide better wind protection year round. The shade they provide allows soils to retain moisture in the summer and snow in the winter. The height of the evergreen trees makes them visible—and thus more avoidable—in winter. The trees can also be used to support signage.

Historic areas are present in the western portion of the SATSS area, but are not fully developed. The sites do not otherwise receive much use by recreationists. Patent *Mining claims*, located in the vicinity of the historic areas but unrelated to them, restrict access across some portions of the public lands, but this information is not denoted in the field, nor is it generally known to the public.

Soils in the area are primarily pumice-based. Igneous and metamorphic rock outcroppings are present in various locations, with one of the most popular being Mammoth Rock. Talus fields also exist, particularly on the slopes west and north of Mammoth Meadows.

A *concentration of facilities and activities* around Mammoth Creek Park and the adjacent Sierra Meadows assures that the site sees considerable use in winter and summer. As the primary public access portal into the eastern region of the SATSS area, a number of walkers, hikers, equestrians, Nordic skiers, mountain bikers, Over-Snow Vehicles (OSVs), and motorized users pass from the east edge of town into the National Forest through this area.

The connection to *Mammoth Mountain Ski Area* (MMSA) has particular seasonal issues, but occurs regardless of the time of year. Users flow between the official boundaries while partaking of a variety of non-motorized activities, particularly mountain bicycling, skiing, and snowboarding. The Nordic trail system on National Forestland that accesses Panorama and Vista Point is fee-based during the winter and run under permit issued by the US Forest Service.

The *Lakes Basin area* is located at the southwest corner of the SATSS area and is linked by a variety of uses and facilities, such as Old Mammoth Road, the Mammoth Rock trail, Lake Mary Road, and the soon-to-be-completed Lake Mary Road bike path. The link between the two areas is key to many summer and winter recreationists' enjoyment of the Mammoth Lakes area and the SATSS area provides an important method for people to access the Lakes Basin area from town.

Summer Conditions

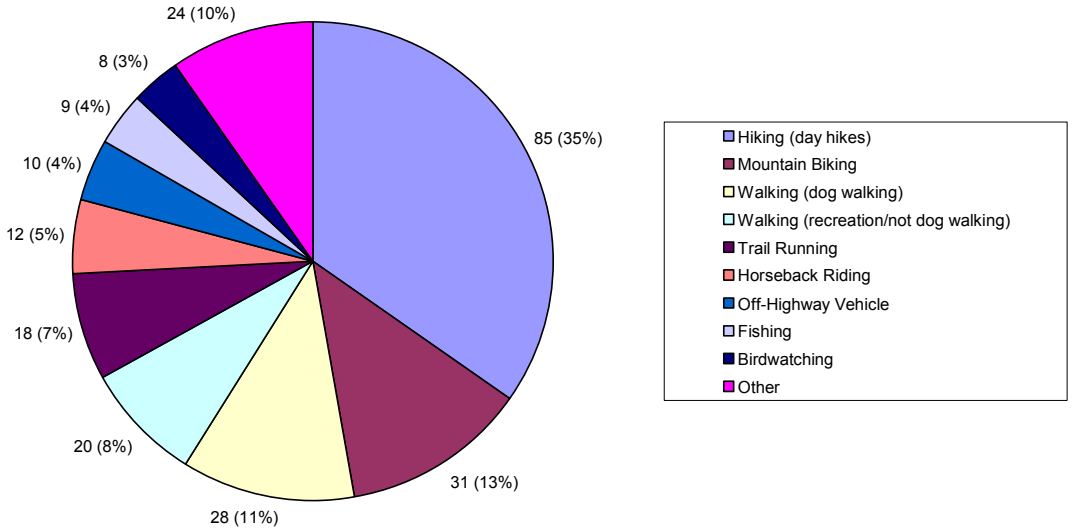
The *summer trail system* in the Sherwin study area is used extensively by both residents and visitors for a variety of reasons, from everything from after-work walks to the start of multi-day treks. The primary system trail in the SATSS area is the Mammoth Rock Trail. The Mammoth Rock Trail runs in both directions and allows pedestrians, equestrians, and mountain bicyclists to travel from the eastern portion, through the lower flanks of the Sherwin onto Old Mammoth Road, on the way to the Lakes Basin.

A large number of unofficial, user-created, "demand trails" or "use trails" trails also exists. The total mileage of "use" trails is three times that of "official" (USFS-sanctioned) trails in

the SATSS area.[3] These typically access unique and/or scenic natural features, such as the trail connector to Mammoth Rock itself (hike only), Panorama Dome (hike and equestrian), and a system in the far northwest corner of the study area (hike and mountain bicycle). Based upon a review of the trail locations and contour data, it can be reasonably assumed that most of these trails are environmentally unsustainable in that they do not follow accepted practices for trail design and construction. As importantly, these trails lack a logical system of origins, destinations, and connections. The highest concentration and most used unofficial or "use" trails are in the Mammoth Meadow area, with connections and loops running out of Tamarack Street.

The TOML Summer Trail Usage survey provides some insight into which activities are most common during summertime. Of the summer activities reported in the Old Mammoth/ Sherwins area, the most common were day hikes (35%), mountain biking (13%), dog walking (11%), recreational walking (8%), trail running (7%), horseback riding (5%), off-highway vehicle use (4%), fishing (4%), and birdwatching (3%). Other reported activities included bicycle commuting, road bicycling, backpacking, jogging on paved surfaces, rock climbing and walking for work or errands.

Figure 2-2: Summer Activities in the SATSS Area



Source: TOML Summer Trail Usage Study (2008)
Note: Based on a cross tabulation of users who selected "Old Mammoth/Sherwins" as a location under each activity. Respondents who wrote in more specific locations in the SATSS area (i.e. Hidden Lake, Sierra Meadows) were also counted.

Day hikers and walkers are statistically the most prominent users of the trails within the study area, with many pedestrians venturing onto the National Forest from Tamarack Street, Snowcreek, and the Old Mammoth neighborhood. Since no official trails connect to these neighborhoods, this foot traffic has contributed greatly to the aforementioned unsustainable user-created trail system, and indicates a demand for hiking and walking facilities serving these residential areas.

[3] Mileage of "official" trails is 4.64 miles, calculated using the INF trails layer. The original source of the "official" trail data is USFS. Mileage of "use" trails is 15.02, calculated using field data provided by MLTPA.

Mountain bicycling is the second most-popular non-motorized summer activity in the area—behind day hiking—and the Mammoth Rock Trail is a primary connector route for cyclists to ride from town up to the many trails in the Lakes Basin area and then back down again. The growth of the sport in the past decades has anecdotally contributed to the displacement of equestrian use on some trails.

Equestrian use exists on roads and non-system trails in the eastern portion of the study area. This use emanates from the Sierra Meadows facilities and the US Forest Service stables along Sherwin Creek Road. Equestrians also use the Mammoth Rock Trail to access the Lakes Basin area.

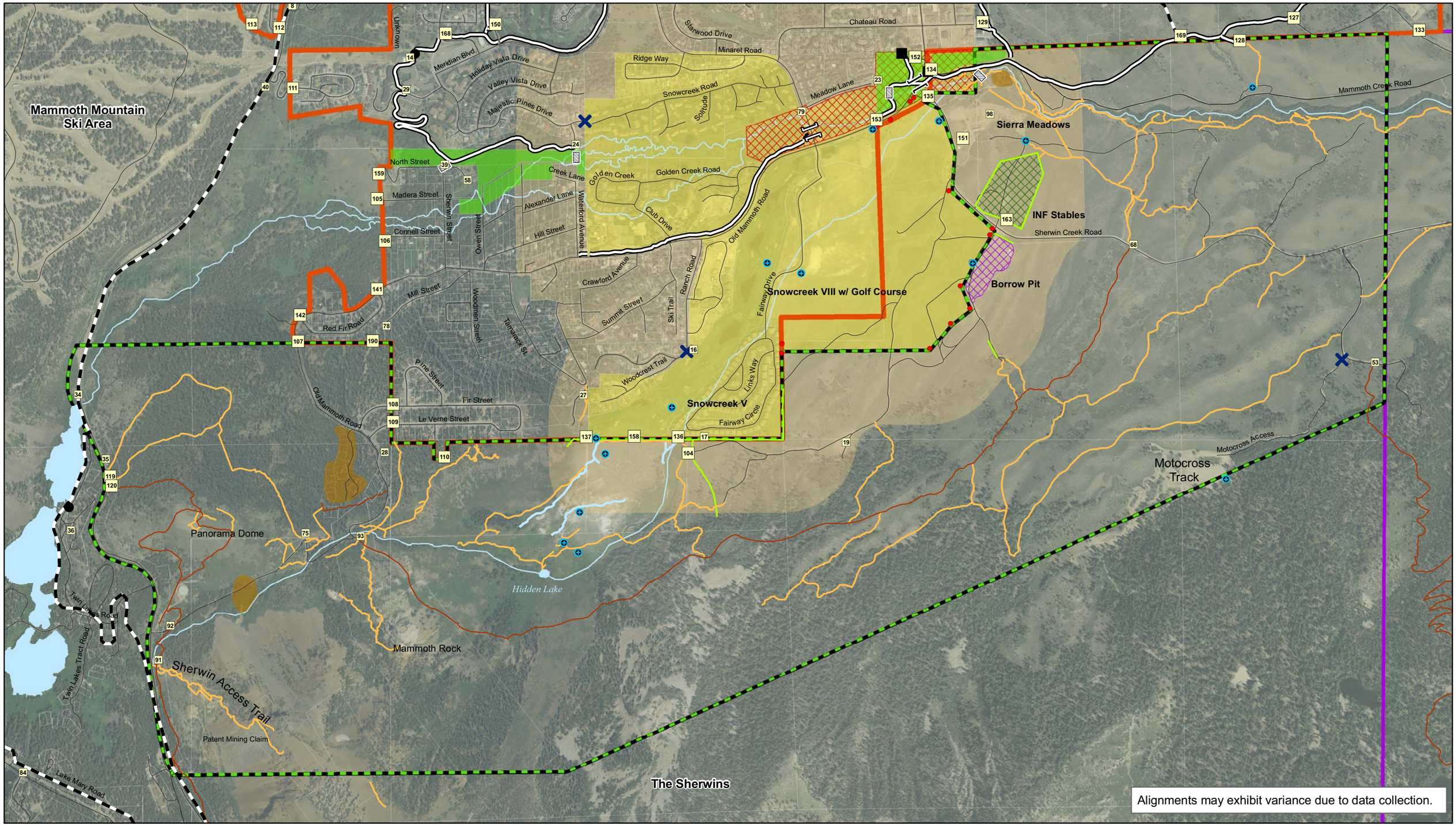
The use of *off-highway vehicles (OHV)* in the SATSS area is restricted to unpaved roads; the list of roads currently open will likely be changing in the near future as the US Forest Service finalizes its Travel Management Plan (TMP). The growth of dual-sport motorcycle use indicates that there will probably be an increase of motorized use on those roads, both paved and unpaved, that do remain open to motorized users after the TMP is adopted. The *motocross use area*, located in the southeast corner of the study area, is open only once a year by permit from the US Forest Service.

In general, the summer trails lack a system of coherent loops preferred by all trail users. There is also an absence of diversity of trail options for various skills and desired outing lengths, with the Mammoth Rock trail serving as the main route offering little chance for variety or ability to access other parts of the SATSS area.

While hidden during most of the winter, *Mammoth Creek* flows through the site during the summer. The flow of the creek is modified by various ditches and other water-control structures, but that does not keep it from providing scenic, habitat, and recreation value. *Hidden Lake*, a historic impoundment pond that sees use by local residents.

Environmentally sensitive areas, primarily Mammoth Meadows and Kerry Meadows, are not an issue during the winter when they are covered in snow and not susceptible to typical user impacts. Summer recreation use, however, has had negative impacts, with user-created trails bringing humans into a unique habitat area and also physically modifying drainage patterns.

Mammoth Meadow hosts *access roads and wells* for the Mammoth Community Water District (MCWD). These facilities are routinely used by the water district for maintenance purposes. The roads are typically in poor condition, however, and are responsible for changing historic hydrologic patterns.



Alignments may exhibit variance due to data collection.

SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)

Summer Existing Conditions

0 450 900 1,800 2,700 3,600 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Summer Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

Paved Multi-Use Paths
- Existing MUP
- Near-Term MUP

Soft-Surface Trails
- INF Trails
- Use Trails (MLTPA)

- Paved and Dirt Roads
- Fences
- MCWD Sherwin Area Wells
- Land Monument Survey
- Snowcreek District Area
- Snowcreek Area Influence

- Drainage Features
- Water Bodies
- East OSCC NDP
- Borrow Pit
- INF Stable

- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

MAMMOTH LAKES CALIFORNIA

MLTPA MAMMOTH LAKES TRAILS · PUBLIC ACCESS

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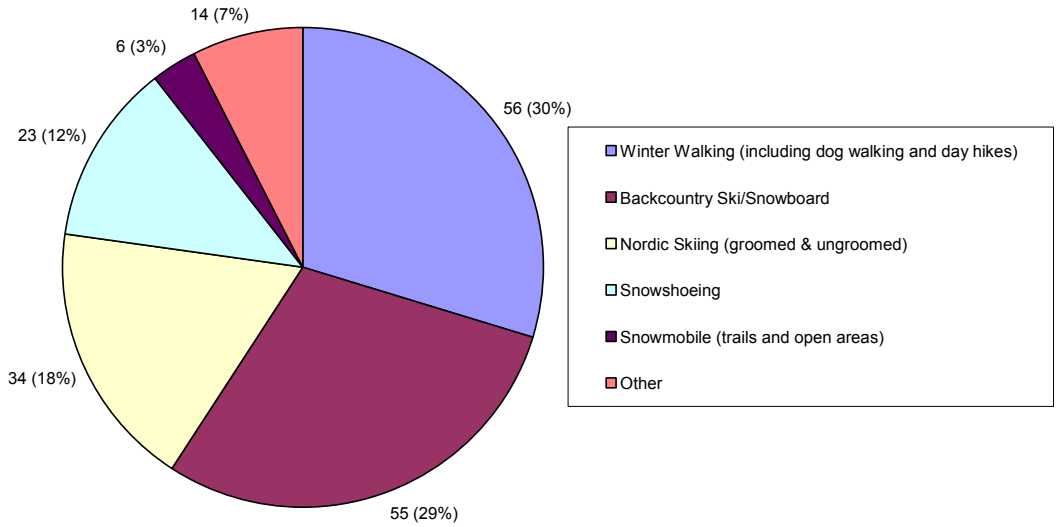
Winter Conditions

Despite a lack of formal facilities for winter recreation, a variety of winter activities currently take place in the SATSS area. MLTPA's GIC database provides a comprehensive inventory of the winter activities taking place at the locations in the SATSS area. The TOML Winter Trail Usage survey provides some insight into which activities are most common. Of the activities reported in the Old Mammoth/Sherwins area, the most common were all types of winter walking (30%), backcountry skiing/snowboarding (29%), Nordic skiing (18%), snowshoeing (12%) and snowmobiling (3%). Other activities reported in the area included running, ice skating, snow play, winter camping, dog sledding and bicycling.

Figure 2-1: Winter Activities in the SATSS Area



Source: TOML Winter Trail Usage Study (2008)
Note: Based on a cross tabulation of users who selected "Old Mammoth/Sherwins" as a location under each activity. Respondents who wrote in more specific locations in the SATSS area (i.e. Hidden Lake, Sierra Meadows) were also counted.

Winter walking of all types is the most commonly reported activity in the area. Due to the lack of groomed or cleared facilities in the study area, it can be assumed that much of this activity takes place on roads, residential streets and Main Path segments to the north of the study area boundary. However, the level of activity indicates a general demand for winter walking opportunities in the area.

Backcountry ski and snowboard descents from the Sherwins into the flats are one of the unique, high-value activities that define living in Mammoth Lakes. Backcountry skiing and snowboarding is the second most common activity in the project area. Access to the Sherwins for this purpose typically occurs through the Lakes Basin area, with skiers and snowboarders ending their descents near the border of the Snowcreek golf course or the Snowcreek V development. This puts users in the situation where the most expedient egress is through private property.

Nordic skiing and snowshoeing generally take place on similar terrain and combined accounted for just under a third of reported activity in the area. Blue diamonds have been used to mark some *Nordic/snowshoe routes* in the SATSS area, primarily in the southeast section. A more

limited number of blue diamonds were located in Mammoth Meadow. These routes were originally installed by volunteers, and they do not currently form a coherent, well-marked system. The only groomed route in the area a segment of Main Path which is groomed through a cooperative effort involving TOML, MCWD, and Mammoth Nordic.

The vast majority of the SATSS area is open to *OSV use* (91.8%). The only OSV-restricted area is at the far western end of the study area adjacent to the Lakes Basin. Use of the area by OSVs varies greatly, however, with snowpack depth and snow conditions. During much of the season the conditions are not favorable for snowmobiling, but when conditions are good there are pressures placed on support facilities, such as parking for vehicles and trailers, since most users must tow their OSVs to the staging areas. OSV users also ride along Old Mammoth Road from the vicinity of Mill City; it is assumed that most of these users come from adjacent private land.

Variable snow conditions across the SATSS area affect recreation use. While annual variances certainly play a role, typically the eastern and lower elevations will receive less snowfall and will more quickly lose what snow does reach the ground. *Avalanche terrain* is present in the Sherwins and winter conditions can become hazardous. This mostly burdens individual recreationists to be responsible with their activities, but winter activities are modified by these conditions.

While difficult to map, *winds* are present and can have an effect on the recreational use of the area. Higher winds can scour an area of snow, load slopes and make them more inclined to slide, and degrade the quality of the outdoor experience.

Mammoth Mountain Ski Area
Unknown
Meridian Blvd.
Holiday Vista Drive
Valley Vista Drive
Majestic Pines Drive
Starwood Drive
Minaret Road
Ridge Way
Chateau Road
Snowcreek Road
Solitude
Meadow Lane
Mammoth Creek Road
Sierra Meadows
North Street
Madera Street
Connell Street
Creek Lane
Golden Creek
Golden Creek Road
Alexander Lane
Hill Street
Waterford Avenue
Sherwin Street
Owen Street
Club Drive
Old Mammoth Road
INF Stables
Sherwin Creek Road
Borrow Pit
Crawford Avenue
Ranch Road
Ski Trail
Fairway Drive
Snowcreek VIII w/ Golf Course
Mill Street
Woodmen Street
Tamarack St.
Summit Street
Red Fir Road
Pine Street
Fir Street
Le Verne Street
Woodcrest Trail
Links Way
Fairway Circle
Snowcreek V
Old Mammoth Road
Motocross Access
Twin Lakes
Panorama Dome
Hidden Lake
Twin Lakes Road
Twin Lakes Tract Road
Mammoth Rock
Sherwin Access Trail
Patent Mining Claim
The Sherwins
Lake Mary Road

Alignments may exhibit variance due to data collection.

SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Winter Existing Conditions

0 455 910 1,820 2,730 3,640 Feet

MAP SCALE 1:6,400
Aerial Background: NAIP 2005

Winter Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points
- Backcountry Egress/Access Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

- Blue Diamond Markers
- MCWD Sherwin Area Wells
- Land Monument Survey
- Paved and Dirt Roads
- Fences
- 10ft. Contours

Paved Multi-Use Paths
- Snow Removed MUP
- Groomed MUP
- Snow Covered
- Near-Term MUP

Winter Use
- Groomed Non-Motorized
- Snowshoe Trail
- Use Trails
- Backcountry Area
- OSV Restricted Area

- Drainage Features
- Water Bodies
- Snowcreek District Area
- Snowcreek Area Influence
- East OSCC NDP
- Ranch Rd Easement

- Borrow Pit
- INF Stable
- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

Conclusions

The SATSS area provides significant habitat, scenic, and recreation opportunities to Mammoth Lakes residents and visitors. With a variety of motorized and non-motorized activities and connections to the Mammoth Mountain Ski Area and Lakes Basin area, it is a critical component for both summer and winter activities. It is highly constrained by a lack of public access points and a system of well-designed and maintained winter and summer trails.

Mammoth Lakes Trail System Master Plan (Attachment B) – Sherwin Area Trails Special Study

Opportunities & Constraints Analysis Memo

Feburary 6, 2009

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Purpose

This technical memo discusses the opportunities and constraints present in the Sherwin Area Trails Special Study (SATSS) area, and is being provided to augment the information presented in the SATSS Summer and Winter Opportunities & Constraints maps. This memo provides opportunities and constraints data correlated numerically to points on the aforementioned maps, and should therefore be used in conjunction with them.

This information will be used to develop subsequent work products. It is being provided in accordance with Task 3 of the project contract.

Summer Opportunities

Opportunities for summer activities are the considerable and varied, although they focus primarily on non-motorized recreation. Opportunities are represented graphically on the maps with black symbols.

1	Connect Lake Mary Bike Path to West corner of SATSS
2	Panorama Done in NW corner provides unique experience for equestrians and hikers
3	Open expanse of forested land provides good trail opportunities in NW corner of SATSS for hikers and mountain bikers
4	Motocross track could host other events and users
5	Connection to Lakes Basin Area
6	Develop multiuse trail system around Mammoth Meadows
7	Connect upper bluffs of Mammoth Meadows to lower trail
8	Connect Mammoth Meadows lower trail to Mammoth Rock trail
9	Create backcountry hiking connection from lower area of SATSS
10	New summer trailhead at borrow pit
11	Knob south of Snowcreek V provides unique terrain and views
12	Good beginner/intermediate mountain bicyclist terrain in NE portion of SATSS
13	Good beginner/intermediate equestrian terrain in NE portion of SATSS
14	Equestrian facilities in Sierra Meadows provide good staging areas
15	Multiuse path (MUP) to borrow pit from main path
16	Pursuit of SATSS special use permit
17	Connect Kerry Meadows lower trail to Mammoth Rock trail
18	Potential creek crossing at east end of SATSS to connect main path to south side of creek
19	Connect Mammoth Meadows to borrow pit trailhead
20	Conversion of roads to trails for OHV motorized, coordinate with travel management planning
21	Opportunity to connect people from trailheads along Sherwin Road to east end of Mammoth Rock Trail
22	Improve existing pedestrian use trail to Mammoth Rock
23	Hiking connection from SW corner along Sherwin Ridge
24	Connection through eastern boundary to Laurel Lakes
25	Fishing access to Mammoth Creek

26	Opportunity to convert Mammoth Creek Road to MUP
27	Opportunity to allow people to access trailheads through non-motorized means (MUPs, sidewalks) for their non-motorized recreation
28	Dedicated public access easement through Tamarack Street
29	Potential public access MUP through Snowcreek VIII
30	Coordinate with fire management to find opportunities to develop trails
31	Connection Mammoth Mountain Ski Area bike park to Twin Lakes parking lot
32	Exploitation of interpretive opportunities (cultural & historic)

Summer Constraints

As in winter, limited access is the greatest constraint, although environmental concerns are also present in this season. Constraints are graphically represented on the maps with red symbols.

1	Impact towards cultural and historic areas should be avoided
2	Mammoth Meadows is sensitive and should be avoided
3	Road access for wells in Mammoth Meadows must remain open
4	Kerry Meadows is sensitive and should be avoided
5	No legal access points from Mill City east through Snowcreek development (to Sherwin Creek Road)
6	Golf balls from Snowcreek golf course could be a potential safety issue along the border to the National Forest
7	Tamarack Street will serve primarily as neighborhood access/egress, because it is located in a residential area with narrow streets and limited potential for parking or bus service. In winter, the utility of this location is diminished due to adjacency to avalanche risk area and its lack of proximity to the typical downhill trajectories of backcountry skiers and snowboarders.
8	Safety issue of crossing road by Twin Lakes parking area
9	Circulation constraints at intersection of Sherwin Creek Road and Old Mammoth Road
10	Sherwin Creek Road is a Mono County road
11	Lack of ability to change existing recreation use patterns
12	Mining claims limit access/passage

Mammoth Mountain Ski Area
Unknown
Meridian Blvd
Holiday Vista Drive
Valley Vista Drive
Majestic Pines Drive
Starwood Drive
Minaret Road
Chateau Road
Ridge Way
Snowcreek Road
Solitude
Meadow Lane
Mammoth Creek Road
Sierra Meadows
North Street
Madera Street
Connell Street
Creek Lane
Golden Creek
Golden Creek Road
Alexander Lane
Hill Street
Sherwin Street
Owen Street
Waterford Avenue
Club Drive
Old Mammoth Road
INF Stables
Borrow Pit
Sherwin Creek Road
Crawford Avenue
Summit Street
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Ranch Road
Fairway Drive
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Woodman Street
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Pine Street
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Twin Lakes Road
Twin Lakes Tract Road
Sherwin Access Trail
Patent Mining Claim
Lake Mary Road
Motocross Access
The Sherwins

Alignments may exhibit variance due to data collection.

GENERAL

16
27
30
11

SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)

Summer Opportunities and Constraints

0 450 900 1,800 2,700 3,600 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Summer Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

Paved Multi-Use Paths
- Existing MUP
- Near-Term MUP

Soft-Surface Trails
- INF Trails
- Use Trails (MLTPA)

- Paved and Dirt Roads
- Fences
- MCWD Sherwin Area Wells
- Land Monument Survey
- Snowcreek District Area
- Snowcreek Area Influence

- Drainage Features
- Water Bodies
- East OSCC NDP
- Borrow Pit
- INF Stable
- 10ft. Contours

- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

MAMMOTH LAKES CALIFORNIA
MLTPA MAMMOTH LAKES TRAILS - PUBLIC ACCESS
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Winter Opportunities

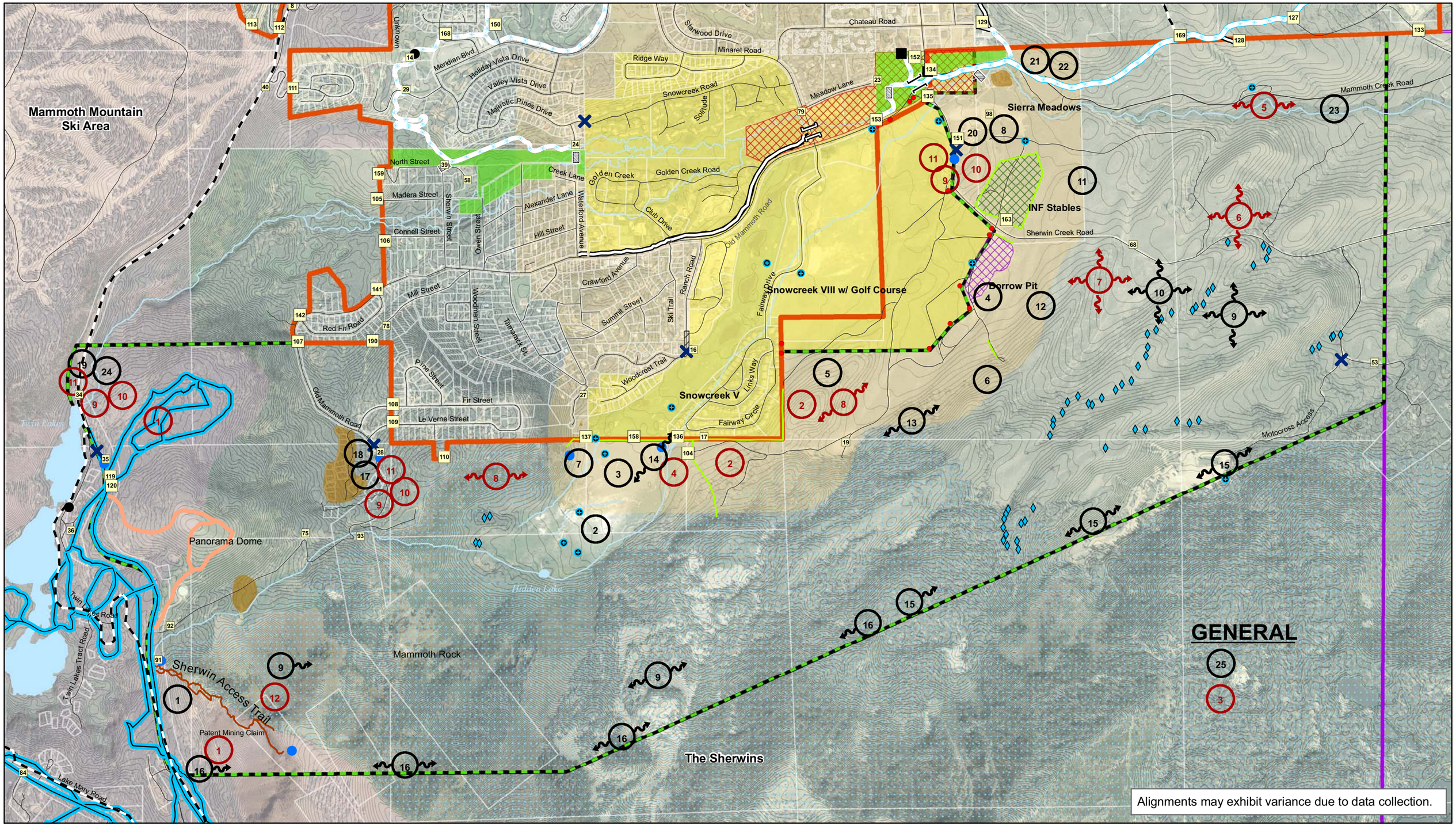
The primary winter opportunities focus on the development of new facilities (e.g., snowplay area, groomed Nordic tracks) and access/connectivity. Opportunities are represented graphically on the maps with black symbols.

1	Connection to Lakes Basin area
2	Development of groomed Nordic trail system in Mammoth Meadows
3	Connect Mammoth Meadows Nordic trail system to Snowcreek golf course
4	New winter snowpark and OSV staging at borrow pit
5	Connect SATSS trail system to Snowcreek hotel ("outfitters cabin")
6	Snowplay area on rolling terrain just south of new snowpark at borrow pit
7	Connect Mammoth Meadows through Tamarack Street for skier/snowboarder/snowshoer access/egress
8	Winter walking and snowshoeing at Sierra Meadows
9	Over-Snow Vehicles (OSV) access throughout most of SATSS
10	Terrain in lower areas of SATSS is good for un-groomed Nordic
11	Potential for groomed Nordic area adjacent to Sierra Meadows
12	Potential for groomed Nordic area adjacent to new winter snowpark at borrow pit
13	Potential for groomed connector between Nordic areas described in #2 & #12 (above)
14	Connection from meadows through Snowcreek to Ranch Road easement
15	Collection for upper chutes backcountry snow use to #4
16	Collection for upper chutes backcountry snow use to #7 & #14
17	Snowmobile access from Mill City up to end of Old Mammoth Rd
18	Winter non-motorized access from Mill City up Old Mammoth Road (walkers, snowshoers, BC skiers)
19	Lake Mary Road non-motorized access and use south from end of snow removal
20	Connection between main path south from Hayden cabin through Sierra Meadows and out to borrow pit Nordic area
21	Potential for full Nordic grooming of main path
22	Potential for winter walking on main path (groomed, not cleared)
23	Potential creek crossing at east end of SATSS to connect main path to south side of creek
24	Expansion and development of parking, restroom, and trailhead (not fee based)
25	Pursuit of SATSS special use permit

Winter Constraints

The primary winter constraints are lack of access and limited developed facilities. Constraints are graphically represented on the maps with red symbols.

1	Over-Snow Vehicles (OSV) use prohibited in far western portion of SATSS
2	Snowcreek V access is unlikely
3	Variable avalanche danger throughout area
4	Snowcreek golf course Nordic area access could be fee based
5	No creek crossing from path on north side
6	Northeastern portion of SATSS does not hold snow well
7	High wind across entire area (primarily west-to-east)
8	No legal access points from Mill City east through Snowcreek development (to Sherwin Creek Road). Legal access is located across the Urban Growth Boundary.
9	Parking is constrained (limited spaces)
10	No bathrooms
11	Lack of capacity to develop and manage
12	Mining claims limit access/passage



SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Winter Opportunities and Constraints

0 455 910 1,820 2,730 3,640 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Winter Recreation Nodes
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Winter Use
- Groomed Non-Motorized
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Mammoth Lakes Trail System Master Plan (Attachment B) – Sherwin Area Trails Special Study

Alternatives Memo

Feburary 6, 2009

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PLANNING + DESIGN

Purpose

This technical memo discusses potential alternative facility options for the Sherwin Area Trails Special Study (SATSS) planning effort, and is intended to augment the graphical information provided on the various Summer and Winter Alternatives maps. This technical memo is being provided in accordance with Task 4 of the project scope of work and consultant contract.

The memo and the maps do not provide definitive, discrete options for the future of the Sherwin area; rather, three particular scenarios for both winter and summer are depicted, from which any number of variations could be selected. Each scenario was created based upon a coherent level of recreational use, but it is not necessary that the final development scenario be limited to one of the specific options.

Use Descriptions

The most common summer outdoor recreation uses proposed for the SATSS area (hiking, walking, mountain bicycling, horseback riding, etc) do not need detailed descriptions. MLTPA's GIS Inventory Contract (GIC) datbase provides a complete listing of all current activities in the SATSS area.

Particular winter uses relative to the proposed Alternatives that benefit from additional details include:

Backcountry (BC) Alpine Touring (AT)/Telemark/Snowboard – Non-motorized muscle-powered snow recreation on ungroomed terrain, typically gravity-fed. Signed/blazed routes may or may not be present.

Groomed Nordic – Nordic skiing that takes place in designated areas that provide parallel tracks and/or skate skiing tracks along signed, managed routes. Groomed Nordic areas typically have additional management regulations, such as direction of travel, prohibition of dogs, restrictions on OSV travel, etc.

Nordic (signed) - Nordic skiing on ungroomed terrain following a signed/blazed route.

Nordic (unsigned) - Nordic skiing on ungroomed terrain without the use of a signed/blazed route.

On-Snow Vehicles (OSV) – Snow machines or snow-specific motor-powered vehicles.

Snow Park (trailhead) – A facility with all of the year-round characteristics of a trailhead (automobile and/or bicycle parking, restroom, trash/recycling receptacles, trail access, signage) as defined in the Trail System Master Plan, but with a strong seasonal focus during winter including a dedicated snow play area, winter interpretive signage, and opportunities for service or non-profit groups to provide educational programs and other services

including information on snow conditions in the surrounding area.[1] Non-profit programs could be supported by allowing limited vending on site to help raise funds for programs.

Snowplay – Ungroomed area designated for unstructured non-motorized snow activities such as sledding and tubing. Typically family-oriented.

Snowshoe – Snowshoeing on ungroomed terrain. Signed/blazed routes may or may not be present.

"No Build" Option

As with every alternatives analysis, there is the option to continue with the current management and development pattern that exists in the Sherwin Area. This option is represented by the Existing Conditions Winter and Summer maps.

The major drawback of this option is that it does not adequately address several issues, including changing user preferences, population growth, trespassing/trail user access onto adjacent parcels, significant development directly adjacent to the area's boundary, and environmental degradation caused by historic use and existing facilities. Use trails have been created without appropriate planning, design or sustainable construction techniques which have led to potentially negative impacts on the environment.

Alternatives

Three Alternatives (A through C) have been developed to address recreational improvements for each season, each building on the previous one. The summer alternatives provide a wide range of opportunities, from rugged pedestrian-only trails to multi-use roads that include motorized vehicles. The differences between the summer options come primarily in the volume of trails and number of access points. All of the alternatives propose closing most of the existing unimproved dirt roads in the study area, as the majority are dead-end routes that serve little recreation or transportation purpose.

The winter alternatives provide a wide range of opportunities, from a family-friendly snowplay area to expert-level backcountry options. What the alternatives have in common is that they are focused on access and activities, as the Sherwin Area is proximate to a large number of the residents of the Town of Mammoth Lakes, and provides significant "close-in" recreation opportunities.

Names for all of the proposed trail and trailhead facilities should be determined through a public process using the naming conventions outlined in the Town of Mammoth Lakes Trail System Master Plan. Baseline year-round improvements for all alternatives include the following:

[1] An avalanche beacon similar to the one provided at the Welcome Center is one example of a service that could be provided at a Snow Park. This service could be linked to snow safety classes and informational materials which could also be conducted/distributed on site.

Sherwin Creek Road Access Improvements

Alternative A requires that the portion of Sherwin Creek Road from Old Mammoth Road to the trailhead entrance at the USFS borrow pit be paved and cleared of snow in winter. This extends the paved/cleared area to GIC 163, beyond its current winter terminus at GIC 151.

Trailhead at USFS Borrow Pit

The trailhead at the USFS borrow pit requires a paved parking area with OSV/OHV parking[2] on the north side serving summer and winter motorized uses along Sherwin Creek Road, and standard auto parking spaces on the south side providing close access to the non-motorized trail in summer and the snowplay area in winter.

Two "Portal Identification Marker" signs as described in the Trail System Master Plan (Ch 4 & 5) are required to alert traffic on Old Mammoth Road (both directions) to the presence of the new trailhead. Trail information kiosks would be located at the point where each trail begins.

Other amenities at the trailhead would include a restroom, trash/recycling receptacles, interpretive signage and bicycle parking. All trailhead amenities would be ADA compliant. Summer and winter bus service should also be considered.

Paved Multi-Use Path Connector (Main Path to Borrow Pit)

A paved MUP connector would provide year-round non-motorized access to the trailhead at the borrow pit. To be effective, this path would need to balance the sometimes competing priorities of: (1) minimizing cost by taking advantage of existing grade-separation infrastructure (tunnels and bridges); (2) avoiding the acquisition of easements over private property; (3) providing the most direct access possible for users approaching from all directions; and (4) minimizing the number of at-grade crossings to improve safety by reducing potential conflicts with motor vehicles. Each of the following alternatives provides a unique alignment option for this MUP, with Alternative A focusing on 1 & 2, Alternative B focusing on 2 & 3, and Alternative C focusing on 3 & 4.

Alternative A

This alternative focuses on making improvements and connections for some of the most common current summer and winter recreational activities. To ease future implementation it does not rely on obtaining access through private property. The MUP alignment described below would provide summer and winter non-motorized access to the proposed trailhead at the borrow pit.

Paved Multi-Use Path Connector – Alignment A

The alignment recommended in Alternative A would cross Mammoth Creek using the existing bridge located about 800 feet east of Old Mammoth Road and follow along the east side of Sherwin Creek Road to the trailhead entrance. This alignment would require at-grade driveway crossings at Sherwin Meadows and the INF Stables, and an at-grade roadway crossing of Sherwin Creek Road. In order to avoid conflicts with vehicles entering and exiting the trailhead, the MUP would cross Sherwin Creek Road just beyond the trailhead

[2] OSV/OHV parking area should be designed to accommodate vehicles with trailers.

entrance and follow the southeastern edge of the trailhead parking area to the southern tip of the trailhead. This trail would provide ADA-compliant access between the Main Path and the new trailhead facilities in summer, but would need to be groomed in the winter to provide consistency with the recommended winter maintenance on the section of Main Path to which it connects.

Summer Alternative A

This option focuses on improving close-in recreation opportunities on a limited number of new trail miles, thereby maximizing facility efficiency, but at the expense of variety. The Mammoth Rock Trail would remain the "backbone" of the trail system, and it would be enhanced by an expanded, sustainable multi-user trail system at the northeast corner of the study area and improved trail access facilities at the intersection of Old Mammoth Road and the Mammoth Rock Trail. To ease future implementation none of the trails rely on access through private property.

This alternative also eliminates large sections of unsustainable use trails. Most of these trails, having never been properly design or constructed, are eroding and causing sedimentation in adjacent waterways. The trails also invite human incursions into sensitive landscapes, such as Mammoth Meadows. Recognizing that many of the use trails are a result of unmet recreation demand, this alternative at a minimum attempts to address the most pressing user needs for close-in trail opportunities by providing official, sustainable trails and legal public access designed to accommodate most of the common summer activities in the area.

The following are more detailed descriptions of each of the summertime improvements provided in Alternative A.

Sherwin Meadows Type 3 Trails (Shared Non-Motorized)

A loop trail system between Mammoth Creek and Sherwin Creek Road would provide summertime recreational opportunities for equestrians and other non-motorized users. Primary access to this subsystem of trails would be provided at the Sierra Meadows Equestrian Center. Secondary access would be provided via the intersection of the Mammoth Rock Trail and Sherwin Creek Road. This system would be fee-based or part of the pack station system.

Borrow Pit Type 2 Hike/Bike Trail

This trail would begin at the southern tip of the new trailhead and continue to the southeast, providing a connection to the Mammoth Rock Trail. It would then continue on from the Mammoth Rock Trail following the contours of the land before turning and initiating a steeper climb to the southwest. The trail traverses an area with sparse, low-lying vegetation for most of its length until entering a short forested segment at the far southwestern end of the trail.

Mammoth Rock Trailhead Improvements

The only improvement that is not proximate to Sherwin Creek Road would be improving the trailhead at GIC 93 serving the Mammoth Rock Trail. The current access at GIC 93 includes signage and a minimal dirt parking area. Alternative A recommends that this location be upgraded to a trailhead per the definitions provided in the Trail System Master

Plan. Improvements would include a small restroom, trash/recycling receptacles and updated signage. Summer bus service should also be considered.

Mill City to Lake Mary Road Type 2 Hike/Bike Trail

This use trail would be designated as an official trail along its current alignment. The trail provides a connection between the trail at Mill City and GIC 120 near the Panorama Dome trailhead through scenic forested terrain.

Winter Alternative A

This option builds upon the year-round improvements listed above (Sherwin Creek Road access, Borrow Pit Trailhead, and Paved MUP Connector). The winter specific improvements include the Sierra Meadows groomed Nordic area (fee-based) and a new family snow play site (non-fee). The trailhead would take on the characteristics of a snow park per the description provided in the "Use Definitions" section of this memo. OSV staging would take place at the north end of the trailhead parking lot providing access to ungroomed terrain, and OSV users would continue to enjoy access to all but a small portion of the study area.[3]

Backcountry activities would continue much as they do today, with signage and wayfinding provisions to encourage users to better respect private or restricted properties, including the access/egress points at Tamarack Street, Snowcreek V and the patent mining claim to the south and east of GIC 91. The "blue diamond" routes for backcountry Nordic skiers would be removed rather than improved, as the gaps in the system make it confusing.

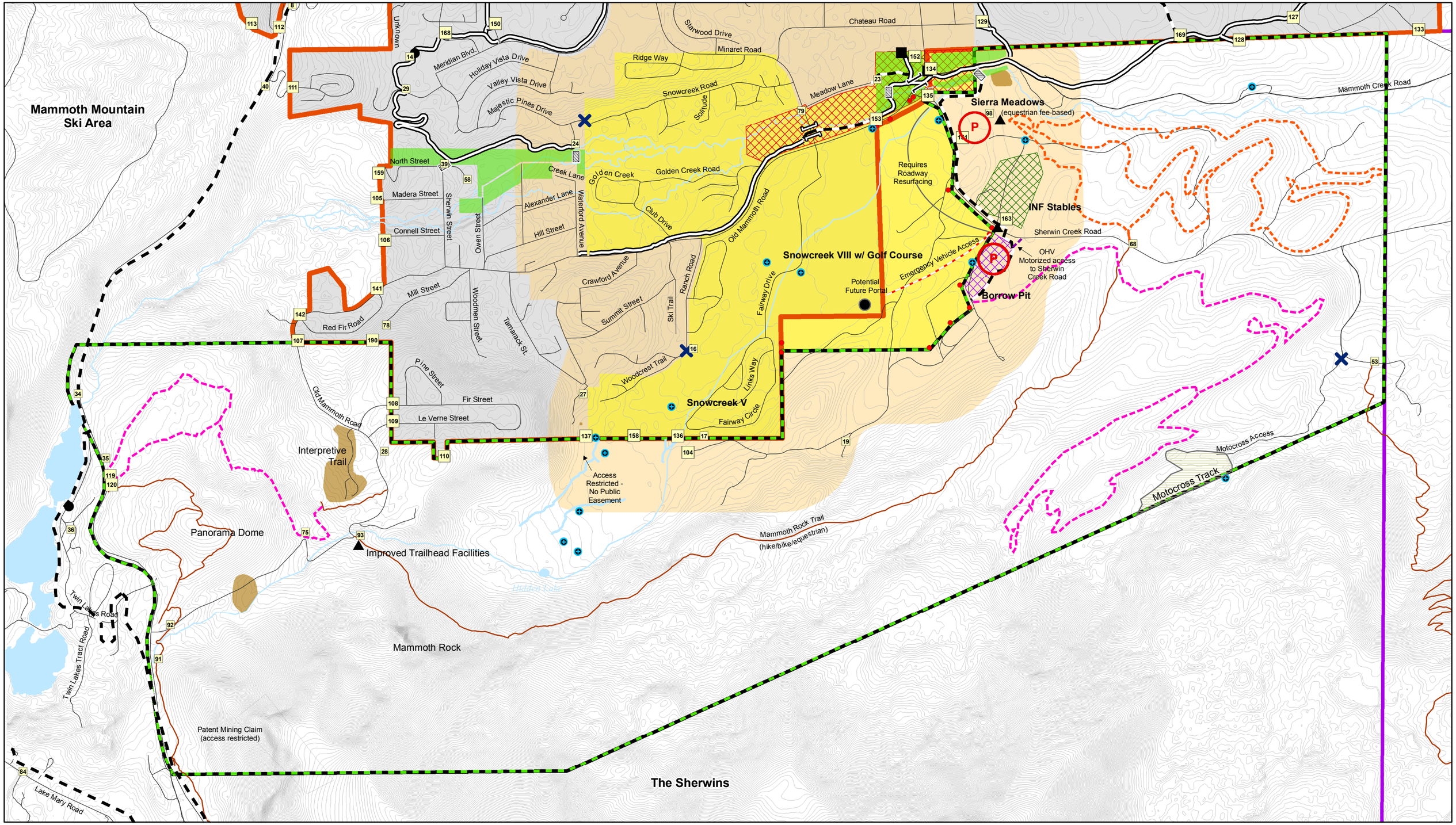
Sierra Meadows Groomed Nordic (fee-based)

The Sierra Meadows groomed Nordic area would operate under an existing USFS use permit. Legal cross-country ski access would be provided via the Sierra Meadows Equestrian and Ski Touring Center. The groomed trails may or may not follow the underlying summer trail system. Alternative A recommends that the fee based system remain within the area bound by Sherwin Creek Road, Mammoth Creek, and the eastern SATSS boundary.

Snow Play Area

Although no specific boundary is recommended, snow play would take place primarily at the south of the trailhead. Snow removal from the trailhead parking area should be coordinated in such a way that is does not hinder or reduce the quality of the snow play experience. The only infrastructure and operational requirements would be signage and the maintenance of clear access between the parking area and the snow play hillside.

[3] The OSV restrictions would remain unchanged, leaving over 90% of the study area open to OSV use. OSV users would continue to be bound by the regulatory language of Forest Order 04-93-1.



SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Alternative A (Summer)

0 480 960 1,920 2,880 3,840 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Summer Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

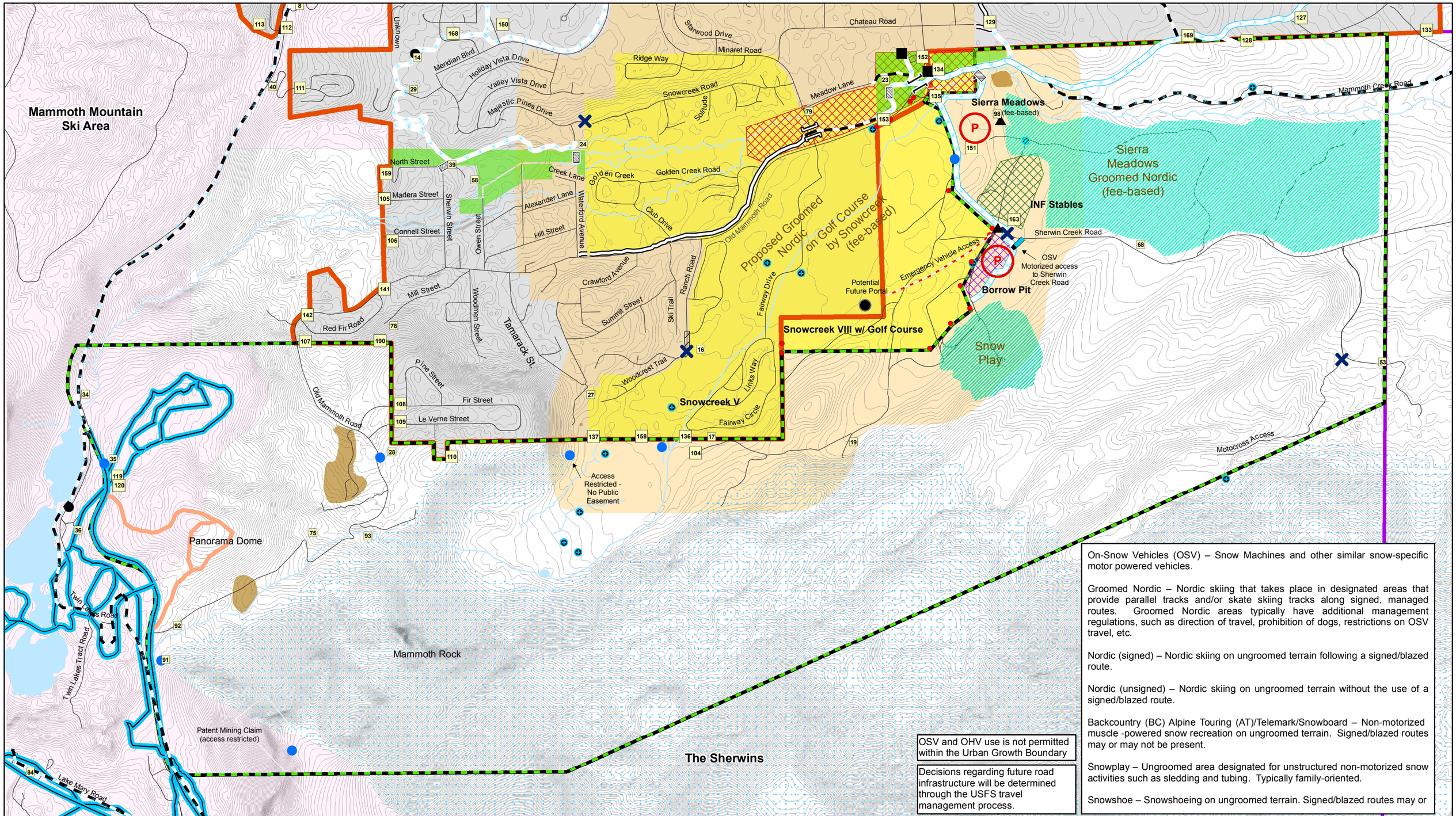
Paved Multi-Use Paths
- Existing MUP
- Proposed MUP

Soft-Surface Trails
- INF Trails
- Type 2 Hike/Bike
- Type 3 Shared Non-Motorized
- Type 4 Shared Motorized

- Parking
- Land Monument Survey
- MCWD Sherwin Area Wells
- Paved and Dirt Roads
- 10ft. Contours

- Drainage Features
- Snowcreek Area Influence
- Snowcreek District Area
- East OSCC NDP
- Borrow Pit
- INF Stable

- Water Bodies
- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area



OSV and OHV use is not permitted within the Urban Growth Boundary

Decisions regarding future road infrastructure will be determined through the USFS travel management process.

On-Snow Vehicles (OSV) – Snow Machines and other similar snow-specific motor powered vehicles.

Groomed Nordic – Nordic skiing that takes place in designated areas that provide parallel tracks and/or skate skiing tracks along signed, managed routes. Groomed Nordic areas typically have additional management regulations, such as direction of travel, prohibition of dogs, restrictions on OSV travel, etc.

Nordic (signed) – Nordic skiing on ungroomed terrain following a signed/blazed route.

Nordic (unsigned) – Nordic skiing on ungroomed terrain without the use of a signed/blazed route.

Backcountry (BC) Alpine Touring (AT)/Telemark/Snowboard – Non-motorized muscle -powered snow recreation on ungroomed terrain. Signed/blazed routes may or may not be present.

Snowplay – Ungroomed area designated for unstructured non-motorized snow activities such as sledding and tubing. Typically family-oriented.

Snowshoe – Snowshoeing on ungroomed terrain. Signed/blazed routes may or

SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Alternative A (Winter)

0 470 940 1,880 2,820 3,760 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Winter Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points
- Backcountry Egress/Access Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

Paved Multi-Use Paths
- Existing MUP (Snow Removed)
- Proposed MUP (Snow Removed)
- Groomed MUP
- Snow Covered

Winter Use
- Groomed Non-Motorized
- Snowshoe Trail
- Groomed Mortorized
- Backcountry Area

- Parking
- Land Monument Survey
- MCWD Sherwin Area Wells
- Paved and Dirt Roads
- OSV Restricted Area

- Drainage Features
- Water Bodies
- Snowcreek District Area
- Snowcreek Area Influence
- East OSCC NDP
- Ranch Rd Easement
- 10ft. Contours

- Borrow Pit
- INF Stable
- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

Alternative B

This alternative builds upon the improvements recommended in Alternative A, adding additional trails and improving public access during both summer and winter months. Two baseline improvements under this alternative would be a modification of the paved MUP connector and the addition of public access easements at Tamarack Street and the proposed Snowcreek VIII Outfitters Cabin.

Paved MUP Connector (Alignment B)

The paved MUP connector between the Main Path and the new trailhead would be realigned within Mammoth Creek Park East to provide more direct access, especially from the west where most of the residential and visitor populations can be found. The only modification to the alignment is that MUP would begin closer to the Old Mammoth Road tunnel, requiring a new bridge across Mammoth Creek. The existing bridge to the west would still be used for year-round access between the Main Path and Sierra Meadows/Hayden Cabin.

Snowcreek VIII Outfitters Cabin Access/Egress

A public access easement between the SATSS area and Town via the Snowcreek VIII proposed Outfitters Cabin would be provided to accommodate summer and winter uses. This connection is important because it would also provide access to all the amenities of a full-fledged recreation portal including lodging, restaurants, restrooms, and bus service per the preferred alternative of the Snowcreek Neighborhood District Plan. In summer the connection would include signage and a Type 2 Hike/Bike trail to serve walkers, hikers and mountain bikers. In winter, the connection would be indicated by signage only and would provide access and egress for snowshoeing and ungroomed Nordic skiing. It would also provide winter egress for backcountry skiers and snowboarders. The easement would be a minimum of 20 feet wide.

Tamarack Street Access/Egress

The options provided in Alternative B are also predicated on the acquisition of an easement at Tamarack Street, providing public access to Mammoth Meadow. The easement would also be used by the Mammoth Community Water District for access to wells. Access at this location would be designed to protect the residential quality of the surrounding neighborhood, using only signage to indicate the public access to trails at this location. The easement would be a minimum of 20 feet wide.

Modified Emergency Vehicle Access

The emergency vehicle access route proposed in the draft Snowcreek Neighborhood District Plan would be realigned to connect with the southern end of the Borrow Pit Trailhead parking lot. The access route would also be available year-round for use as non-motorized public access.

Summer Alternative B

New summer recreational facilities provided in Alternative B include increased opportunities for the more popular summer recreation activities (e.g., walking/hiking, equestrian and mountain bicycling), which could help to alleviate user congestion on the Mammoth Rock Trail. Existing use trails are replaced with sustainable routes that still allow people to access desirable locations or continue existing activity patterns.

Hayden Cabin/Mammoth Creek Hiking Route

Alternative B includes the addition of a Type 1 hiking route starting at the Main Path, crossing the existing bridge to Hayden Cabin, following Mammoth Creek to the eastern end of the SATSS boundary, and connecting to the network of Type 3 non-motorized trails in Sierra Meadows.

Borrow Pit to Sherwin Lakes Trailhead Hike/Bike Trail

A Type 2 hike/bike trail connecting the borrow pit trailhead to the Sherwin Lakes Trailhead at GIC 53 would be added under this alternative. This trail builds upon the Borrow Pit Type 2 Hike/Bike Trail described in Alternative A and connects to a Type 2 Hike trail leading to Laurel Lakes.

Borrow Pit to Mammoth Meadow Shared Multi-Use Trail

This trail would use native soils and stabilizers to create a smooth firm surface to support walking, biking, and wheelchair use during summer months. The trail would be accessed via the new trailhead at the borrow pit, continuing southwest and tracing a loop around Mammoth Meadow. The loop around Mammoth Meadow would follow a higher, more sustainable route than the current use trails and discourage unsustainable activities in the meadow itself. Secondary access to this trail would be provided at Tamarack Street, and could be ADA compliant with grades and have space to provide 6 parking stalls, but no other support facilities.

Mammoth Meadow to Mammoth Rock Trail Connector

This trail would provide a connection between the above shared multi-use trail and the Mammoth Rock Trail for hikers and mountain bikers.

Mammoth Rock Hike Route

This hiking route would originate at the improved Mammoth Rock Trailhead and follow rock stairs and switchbacks past the back side of Mammoth Rock and continue climbing to the south and west into the Sherwins. The route would be marked to the SATSS southern boundary. From there, hikers could choose their own route further into the backcountry, or the route could be extended further south to connect with John Muir Wilderness and Trail.

West End Hike/Bike Trails

A network of hike/bike trails would be constructed in the northeast corner of the study area. The trails would connect the Lakes Basin to the SATSS area. This network of trails would include a realignment of the unofficial hike/bike trail connecting the Mill City trail to Lake Mary Road (shown in Alternative A). Access to these trails would be provided via (1) the Mammoth Rock Trailhead, (2) the Lake Mary Bike Path near Twin Lakes, (3) the Panorama

Dome Trail at Lake Mary Road, (4) Mill City, (5) Old Mammoth Road at the UGB, and (6) Tamarack Street via the shared multi-use trail in Mammoth Meadow.

Panorama Dome to Mammoth Rock Shared Non-Motorized Connector

This trail would provide a connection between the southern terminus of the Panorama Dome Trail at Old Mammoth Road and the Mammoth Rock Trailhead for equestrians and other non-motorized users.

Winter Alternative B

The provision of a number of enhanced public access, additional groomed and ungroomed non-motorized trails, and the grooming of Sherwin Creek Road for enhanced motorized access are the highlights of this alternative. The specific elements are described below.

Sherwin Creek Road Grooming

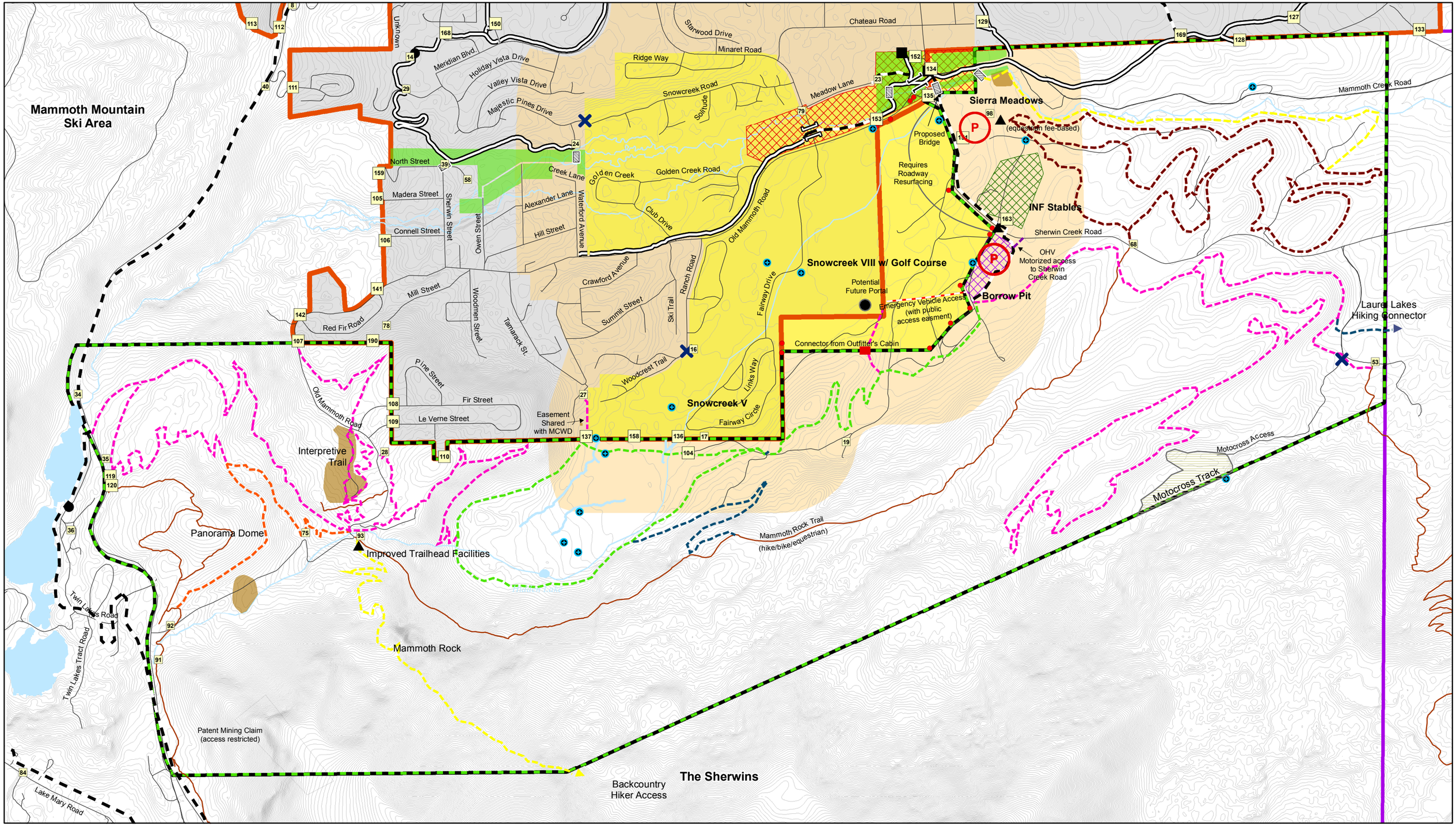
Sherwin Creek Road would be groomed from the road closure to the SATSS boundary, providing groomed OSV access in and out of the snow park. From Sherwin Creek Road, OSV users access other parts of the SATSS area and beyond, which are currently open to OSV use. Grooming could potentially be extended to the east and along Laurel Lakes Road to Laurel Lakes.

Mammoth Meadow Blue Diamond Loop

An ungroomed Nordic skiing and snowshoe route around Mammoth Meadow would be marked using blue diamonds. The intent is for this to act as an "introduction" to backcountry adventure, as the route is fairly well delineated by private property and steep hillsides thus increasing the confidence of a novice backcountry skier. Public access would be provided via a non-fee groomed connector between Ranch Road and GIC 158. Public access would also be available at Tamarack Street. Snowcreek residents could access the route via private property. The route could also be linked to the fee-based system on the golf course which was proposed in the Snowcreek Neighborhood District Plan.

Sherwin Ridge Winter Access (via Patent Mining Claim)

In order to support backcountry access to the Sherwins via Lake Mary Road (GIC 91), a seasonal access easement would be negotiated allowing backcountry skiers and snowboarders to legally cross the patent mining claim during winter months.



SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Alternative B (Summer)

0 500 1,000 2,000 3,000 4,000 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Summer Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

Paved Multi-Use Paths
- Existing MUP
- Proposed MUP

Soft-Surface Trails
- INF Trails
- Type 1 Hike Route
- Type 2 Hike
- Type 2 Hike/Bike
- Type 2 Equestrian Preferred
- Type 3 Shared Non-Motorized
- Type 4 Non-motorized ADA Accessible
- Type 4 Shared Motorized

- Parking
- Land Monument Survey
- MCWD Sherwin Area Wells
- Paved and Dirt Roads
- 10ft. Contours

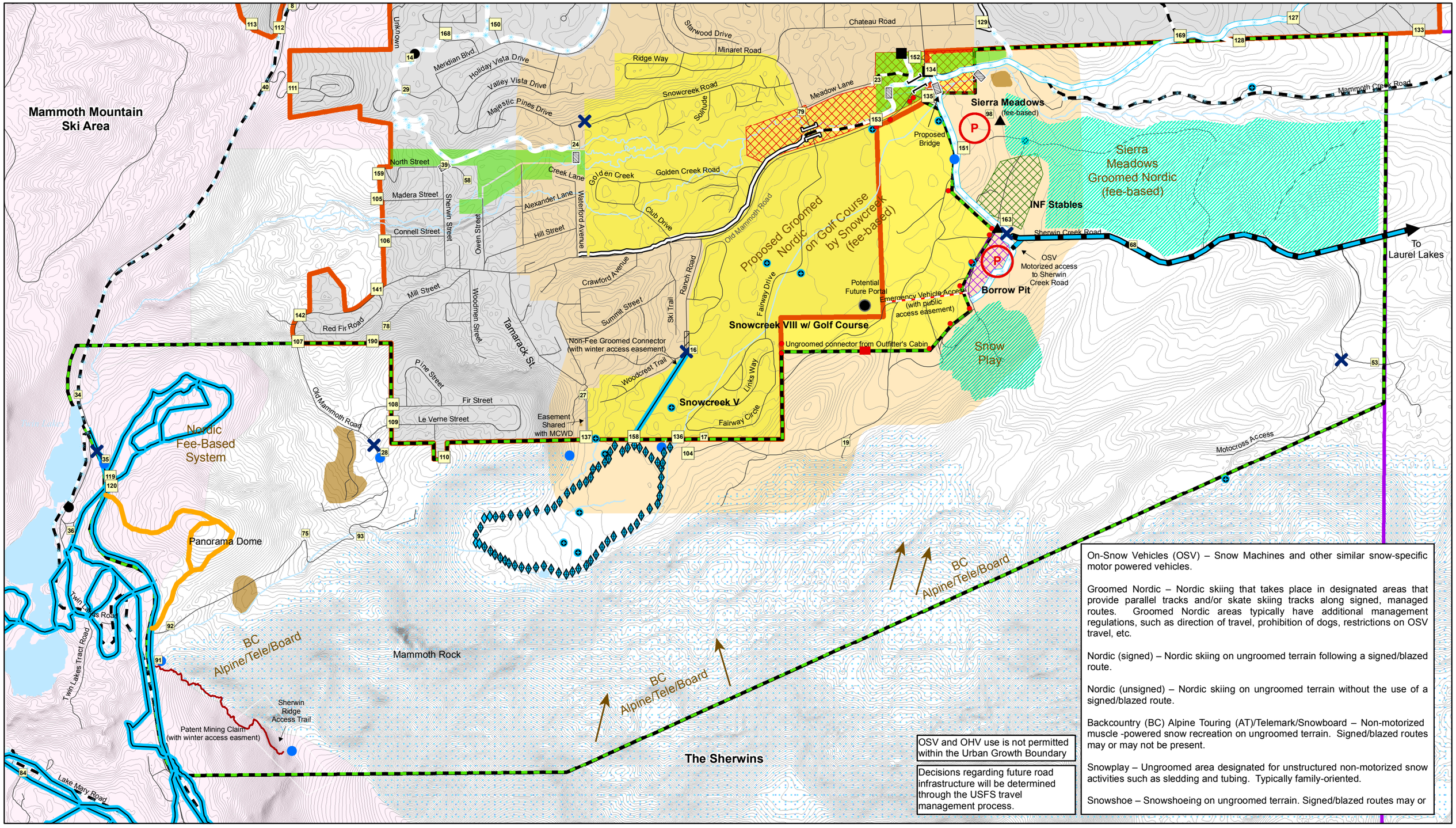
- Drainage Features
- Snowcreek Area Influence
- Snowcreek District Area
- East OSCC NDP
- Borrow Pit
- INF Stable

- Water Bodies
- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

MAMMOTH LAKES CALIFORNIA

MLTPA MAMMOTH LAKES TRAILS - PUBLIC ACCESS

alta PLANNING + DESIGN



On-Snow Vehicles (OSV) – Snow Machines and other similar snow-specific motor powered vehicles.

Groomed Nordic – Nordic skiing that takes place in designated areas that provide parallel tracks and/or skate skiing tracks along signed, managed routes. Groomed Nordic areas typically have additional management regulations, such as direction of travel, prohibition of dogs, restrictions on OSV travel, etc.

Nordic (signed) – Nordic skiing on ungroomed terrain following a signed/blazed route.

Nordic (unsigned) – Nordic skiing on ungroomed terrain without the use of a signed/blazed route.

Backcountry (BC) Alpine Touring (AT)/Telemark/Snowboard – Non-motorized muscle -powered snow recreation on ungroomed terrain. Signed/blazed routes may or may not be present.

Snowplay – Ungroomed area designated for unstructured non-motorized snow activities such as sledding and tubing. Typically family-oriented.

Snowshoe – Snowshoeing on ungroomed terrain. Signed/blazed routes may or

OSV and OHV use is not permitted within the Urban Growth Boundary

Decisions regarding future road infrastructure will be determined through the USFS travel management process.

SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Alternative B (Winter)

0 470 940 1,880 2,820 3,760 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Winter Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points
- Backcountry Egress/Access Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

Paved Multi-Use Paths
- Existing MUP (Snow Removed)
- Proposed MUP (Snow Removed)
- Groomed MUP
- Snow Covered

Winter Use
- Groomed Non-Motorized
- Snowshoe Trail
- Use Trails
- Groomed Mortorized
- Backcountry Area
- Existing/New Diamond Signs

- Parking
- Land Monument Survey
- MCWD Sherwin Area Wells
- Paved and Dirt Roads
- OSV Restricted Area

- Drainage Features
- Water Bodies
- Snowcreek District Area
- Snowcreek Area Influence
- East OSCC NDP
- Ranch Rd Easement
- 10ft. Contours

- Borrow Pit
- INF Stable
- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

Alternative C

Alternative C would require the highest level of infrastructure and ongoing maintenance.

Paved MUP Connector (Alignment C)

A major change under Alternative C would be the realignment of the paved MUP connector to the west side of Sherwin Creek Road. This would provide the safest and most direct route for most users. All at-grade driveway and roadway crossings would be eliminated. This alignment would require a new tunnel under Old Mammoth Road and an easement along the eastern edge of the Snowcreek VIII development. A fence or vegetative screen would be required to provide a barrier between users and the golf course in summertime and to prevent users from straying onto private property in the winter. Main Path winter grooming would continue west to the new tunnel and the connector would be groomed in winter to provide over-snow non-motorized access to the trailhead during winter months.

Summer Alternative C

This alternative does not focus on removing existing unsustainable trails, but instead takes advantage of them to create more options for movement and dispersal of users. Use trails that follow desirable and sustainable alignments are incorporated into the proposed summer trail system. Users will be able to create a variety of loop opportunities and experience varied terrain through the duration of their outing; these advantages, however, may be negated by the confusion brought on by too many choices and by continued environmental degradation caused by unsustainable alignments. Summertime motorized use is also accommodated in this scenario.

Main Path to Mammoth Creek Road Hike/Bike Connector

A short connector trail between the Main Path Viewpoint at GIC 128 and the proposed MUP along Mammoth Creek Road would be constructed to provide a short loop close to the Old Mammoth Road District over a combination of paved and dirt surfaces. The trail would be designed as a Type 2 Hike/Bike trail and could be used by walkers and mountain bikers. The connector could be used before and after construction of the proposed MUP along Mammoth Creek Road.

Expanded Sherwin Meadows Type 3 Trails (Shared Non-Motorized)

The trail system emanating from the Sierra Meadows Equestrian Center are expanded in this option to including an additional loop extending to the south and west, taking advantage of existing "use trails" and the Mammoth Rock Trail. The Hayden Cabin/Mammoth Creek Hiking Route from Alternative B is converted to a Type 3 shared non-motorized trail. A connection would also be provided between the Mammoth Rock Trail and the motorized loop trail described below.

Kerry Meadow Motorized Loop

Staging out of the proposed trailhead at the borrow pit, an existing dead-end road will be extended to provide a short loop route, ideally suited for families on ATVs or off-road motorcycles. Long-distance motorized loops are not provided in any alternative because of limited land, difficult terrain, and the lack of ability to do so while still serving a large

population of non-motorized users in the SATSS area. A segment of the Borrow Pit to Mammoth Meadow Shared Multi-Use Trail would be converted to motorized use, and additional staging for the remaining segment would be provided at an auxiliary parking area to the south and west of the borrow pit trailhead.

Panorama Dome Trail Realignment

The existing Panorama Dome Trail would be redesigned to follow a more sustainable alignment and given a "Type 3 Shared Non-Motorized" designation.

Sherwin Ridge Summer Access (via Patent Mining Claim)

An access trail starting at GIC 91 would provide access to vistas along the Sherwins Ridge. This would require the negotiation of a summertime easement through the Patent Mining Claim to supplement the winter easement described in Winter Alternative B.

Winter Alternative C

This option requires the highest level of (public and private) winter maintenance, and accommodates the highest level of free and fee-based winter activities in the area.

Groomed OSV Access via Mammoth Creek Road

Over snow vehicle access to the proposed trailhead/snow park at the borrow pit could be provided by grooming Mammoth Creek Road from east of the SATSS area to its western terminus, adding a new creek crossing, and following the eastern edge of Sherwin Creek Road to the proposed trailhead and the groomed portion of Sherwin Creek Road. This groomed trail does not require the proposed MUP along Mammoth Creek Road to be in place. The existence of wells along Mammoth Creek Road and the potential to connect this trail to the MCWD facility on Meridian Boulevard, makes MCWD a potential partner in the development and maintenance of this trail. An additional bridge crossing at the northeast corner of the study area would allow for a closed loop, requiring an adjustment of the Sierra Meadows groomed Nordic area.

Ungroomed Nordic Loop

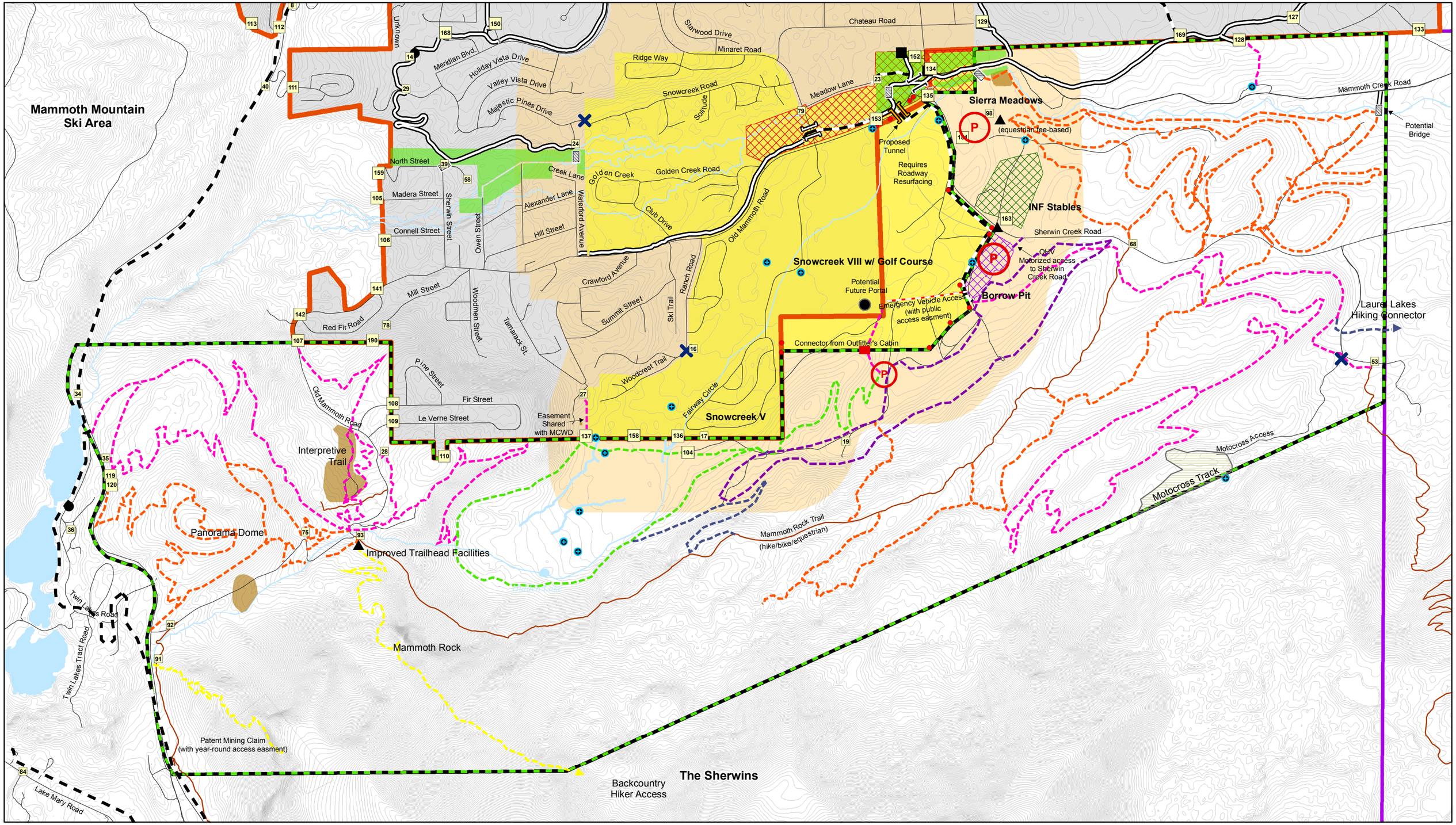
An ungroomed blue diamond route would be developed with access via the Borrow Pit Trailhead and the groomed (motorized/non-motorized) segment of Sherwin Creek Road. The loop builds on the blue diamonds already existing in the area and provides an additional winter activity that can be accessed via the proposed Borrow Pit Trailhead/Snow Park.

Mammoth Meadows Nordic System

This fee-based system would be an extension of the proposed groomed Nordic area on the Snowcreek golf course, roughly following and bounded by the alignment of the blue diamond system proposed in Winter Alternative B. Public access to the area could be maintained by following the ungroomed route of the summer trail which from a larger loop around meadow. Groomed public access between GIC 158 and Ranch Road (GIC 16) would also be maintained.

Public Groomed Connector

A public groomed trail (no Nordic tracks) would provide access between the proposed Borrow Pit Trailhead, the Ranch Road access trail and Tamarack Street—creating an option for free public access along the area's southern boundary. A spur of the groomed public connector would connect to the Snowcreek VIII Outfitters Cabin. The connector will also provide groomed egress for backcountry skiers and snowboarders.



SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Alternative C (Summer)

0 475 950 1,900 2,850 3,800 Feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Summer Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

Paved Multi-Use Paths
- Existing MUP
- Proposed MUP

Soft-Surface Trails
- INF Trails
- Type 1 Hike Route
- Type 2 Hike
- Type 2 Hike/Bike
- Type 3 Shared Non-Motorized
- Type 4 Non-motorized ADA Accessible
- Type 4 Shared Motorized

- Parking
- Land Monument Survey
- MCWD Sherwin Area Wells
- Paved and Dirt Roads
- 10ft. Contours

- Drainage Features
- Snowcreek Area Influence
- Snowcreek District Area
- East OSCC NDP
- Borrow Pit
- INF Stable

- Water Bodies
- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

Mammoth Lakes California

MLTPA Mammoth Lakes Trails · Public Access

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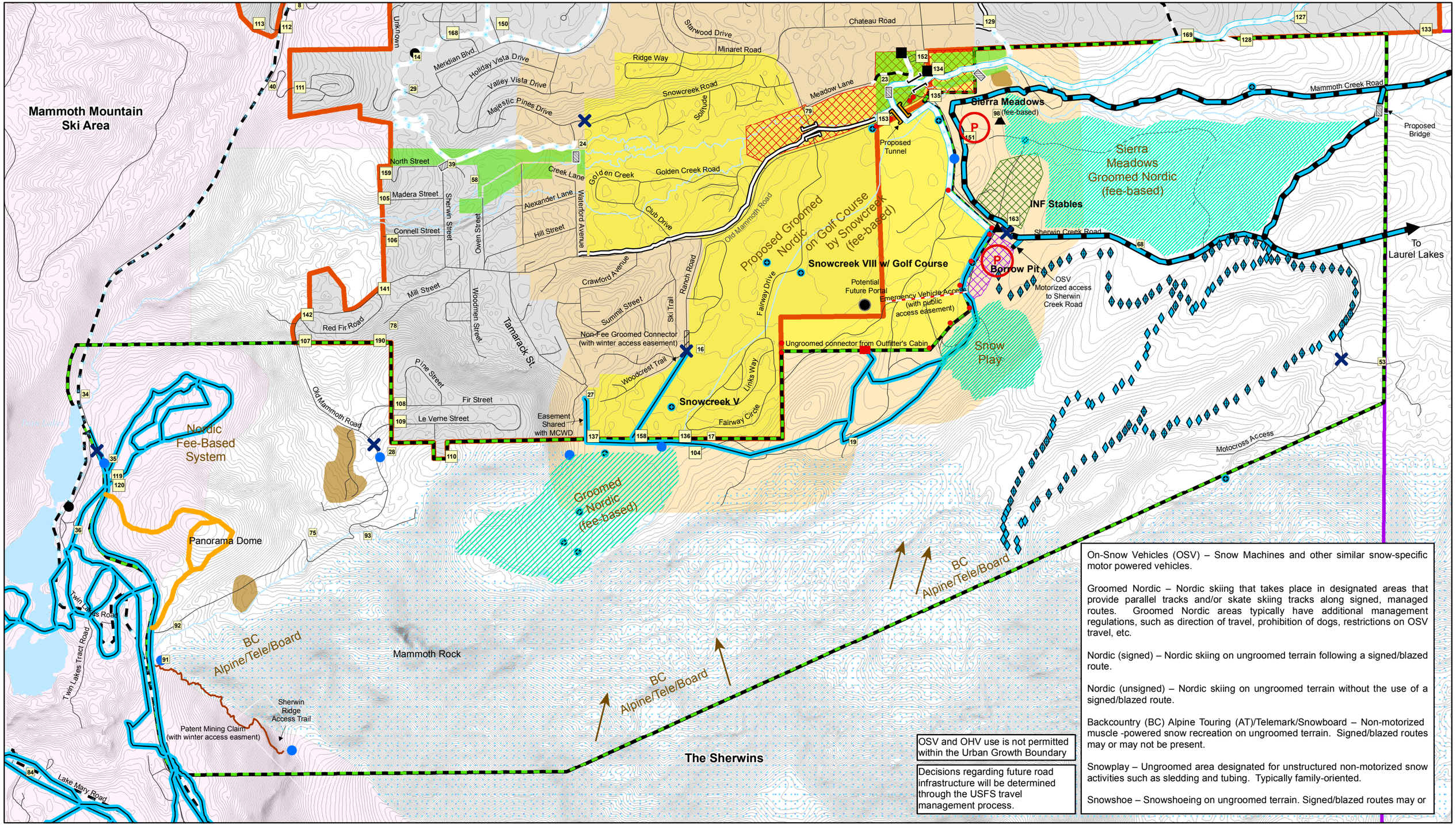

OSV and OHV use is not permitted within the Urban Growth Boundary

Decisions regarding future road infrastructure will be determined through the USFS travel management process.

On-Snow Vehicles (OSV) – Snow Machines and other similar snow-specific motor powered vehicles.

Groomed Nordic – Nordic skiing that takes place in designated areas that provide parallel tracks and/or skate skiing tracks along signed, managed routes. Groomed Nordic areas typically have additional management regulations, such as direction of travel, prohibition of dogs, restrictions on OSV travel, etc.

Nordic (signed) – Nordic skiing on ungroomed terrain following a signed/blazed route.

Nordic (unsigned) – Nordic skiing on ungroomed terrain without the use of a signed/blazed route.

Backcountry (BC) Alpine Touring (AT)/Telemark/Snowboard – Non-motorized muscle -powered snow recreation on ungroomed terrain. Signed/blazed routes may or may not be present.

Snowplay – Ungroomed area designated for unstructured non-motorized snow activities such as sledding and tubing. Typically family-oriented.

Snowshoe – Snowshoeing on ungroomed terrain. Signed/blazed routes may or

SHERWIN AREA TRAILS SPECIAL STUDY (SATSS)
Alternative C (Winter)

0 490 980 1,960 2,940 3,9 feet

MAP SCALE 1:6,400

Aerial Background: NAIP 2005

Winter Recreation Nodes
- Portals
- Trailheads
- Parks
- GIC Points
- Backcountry Egress/Access Points

- Gates/Barriers/Closures
- Existing Tunnels
- Proposed Tunnels
- Bridges

Paved Multi-Use Paths
- Existing MUP (Snow Removed)
- Proposed MUP (Snow Removed)
- Groomed MUP
- Snow Covered

Winter Use
- Groomed Non-Motorized
- Snowshoe Trail
- Use Trails
- Groomed Mortorized
- Backcountry Area
- Existing/New Diamond Signs

- Parking
- Land Monument Survey
- MCWD Sherwin Area Wells
- Paved and Dirt Roads
- OSV Restricted Area

- Drainage Features
- Water Bodies
- Snowcreek District Area
- Snowcreek Area Influence
- East OSCC NDP
- Ranch Rd Easement
- 10ft. Contours

- Borrow Pit
- INF Stable
- Parks/Open Spaces
- Cultural Historic Areas
- Town Urban Growth Boundary
- Town Municipal Boundary
- SATSS Study Area

MAMMOTH LAKES CALIFORNIA

MLTPA MAMMOTH LAKES TRAILS - PUBLIC ACCESS

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Conclusions

Given the terrain and variations in available experiences, there are a nearly infinite number of recreation iterations that could be conceived for the study area. The proposed alternatives are not meant to be exhaustive, but rather to display three coherent trail system and activity options that balance, to varying degrees, the recreation needs of Mammoth area residents and visitors with development and land management objectives in and adjacent to the study area.

The above memoranda and the accompanying maps constitute the complete Sherwin Area Trails Special Study per the contract between Alta Planning + Design and the Town of Mammoth Lakes. The Alta Team truly appreciates having had the opportunity to work on this important and exciting study.