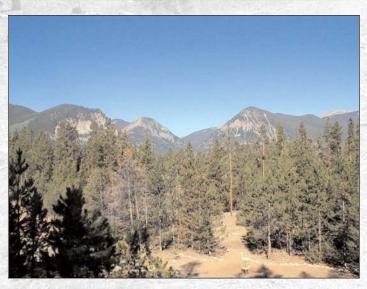


PENINSULA RECREATION AREA LAND USE PLAN

FINAL REPORT

17 SEPTEMBER 2002





WINSTON ASSOCIATES

2299 PEARL STREET SUITE 100 BOULDER, CO 80302 303-440-9200 FAX 303-449-6911 WWW.WINSTONASSOCIATES.COM

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The Peninsula Recreation Area serves a unique function for the Town of Frisco. In a land-locked community such as Frisco, its 219 acres represent the only practical site for larger recreational facilities or major public buildings. As such, it is the home for the Town's main softball and soccer fields, skatepark, disc golf course, winter sleigh ride, Nordic Center / Summer Fun Club and a host of Nordic and bike/hike trails. It is safe to say the PRA holds a special place in the hearts of the Town's residents who want to assure it is not unduly harmed.

The challenge facing the Town is how to determine the appropriate level of development for the Peninsula Recreation Area (PRA). This question was addressed in detail during the 2001 Park and Recreation Master plan through a public opinion survey, public meetings and focus groups and at an additional public meeting following the Master Plan. This provided residents with numerous opportunities to offer suggestions and opinions on the PRA and its future. To some in the community, no additional development is appropriate. These people feel the site should be preserved as is, or even re-forested. Others contend the PRA is the only site available to address a number of Frisco's unmet recreation needs. These residents contend the site can be sensitively developed without causing environmental damage or dramatically changing the recreational experience. This **Peninsula Recreation Area Land Use Plan** is an off-shoot of the 2001 Master Plan and been designed to answer the technical issues surrounding these positions, including which habitats or features are critical to be preserved and which areas are best suited for new recreational uses or Town facilities Council has identified as important priorities.

The goal of this plan is to provide the Town the information and vision to make informed choices regarding the PRA's future. Ultimately, it will be the residents of Frisco who will the final say in how the PRA is used

BACKGROUND

The Peninsula is surrounded on three sides by Dillon Reservoir and totals 854 acres. The United States Forest Service (USFS) manages the majority of the site, generally the northern 602 acres. A number of public uses are provided by the USFS on its land including camping, a campfire ring and a boat launch. The Town has developed Nordic skiing trails on the USFS's 854 acres through a USFS permit, which is in the process of being renewed. The Denver Water Board also owns a 35-acre triangle just north of the Town-owned land, which is leased by the Town for disc golf and other recreational uses. The Town of Frisco acquired the remaining 217 acres from the USFS in1990 through the Homestake Land Exchange. This is the area now known as the *Peninsula Recreation Area*.

Over the years the Town has continued to develop its portion of the site for year-round recreation. It is currently zoned "Parks and Recreation" and used by the residents of Frisco and the surrounding area on a daily basis for passive recreation, hiking, biking, Nordic skiing, disc golf, softball/baseball, field sports, and skateboarding. There have been a number of planning studies completed for the PRA. This includes at least two golf course plans and two master plans (1994 and 1996 – see Appendix A) for the 35-acre central portion of the site for that has been developed for the soccer and softball fields.

In 1992, a citizen petition was validated as a ballot initiative, but since no election was held that year, Council chose to pass an ordinance to "cease spending funds to design and construct a golf course". However, the concept of building a golf course at the PRA still has the support of

Land Use Plan 1 Winston Associates

a significant segment of the community. In order to help resolve the question, Council has directed that golf be studied as a potential land use at the PRA to see if it could be sensitively accommodated. Any additional study of golf would likely require "an affirmative vote of the electorate" to be authorized. The electorate will also likely be asked to approve funding for any other major improvements suggested in this plan

APPROACH

The methodology used to complete the PRA Land Use Plan was based on a detailed analysis of the existing conditions to determine if adding new recreation uses or Town facilities would harm unique or environmentally sensitive habitats. In addition, a range of development options were studied to determine if the new uses could be accommodated without dislodging existing facilities or unduly altering the character of the PRA.

- Existing environmental studies for wildlife and vegetation were used as a baseline, and then field verified against current conditions. Unique or sensitive habitats were identified and mapped. The analysis also included a detailed examination of physical characteristics of the site such as slope, views, existing facilities, trails and overall site capacity.
- ➤ The Land Use Plan used information from the Town's engineering staff and area utility providers to identify the capacity of the existing water, sewer, electric and telephone for the site. This broad-brush approach was intended to provide a baseline understanding of the PRA's infrastructure's capacity and its ability to accommodate additional development.
- ➤ A wide range of the development concepts were completed based on the detailed analysis. These concepts looked at potential configurations for the program elements that were suggested by the community and prioritized by Council. The positive and negative aspects of each option were also evaluated.
- ➤ A Preferred Land Use Plan was then developed based on feedback from staff and Council and an estimate of probable cost developed.

As stated previously, an extensive public process was conducted for the *Park and Recreation Master* Plan. This included a community opinion survey, three focus groups with a cross-section of Town residents and three general public forums. This provided the community with ample opportunity to speak to the future of the PRA. In addition, a public meeting was held in February following the master plan specifically to discuss the Peninsula (see Appendix A). This broad cross-section of public input gave Council and Town staff a clear picture of the residents' feelings toward the PRA. Council felt this Land Use Plan was an opportunity take this input and complete a careful, independent study of the PRA and make decisions based on factual information.

2 ECOLOGICAL AND SITE ANALYSIS

In preparation for developing the Peninsula Recreation Area Land Use Plan, a detailed ecological and site analysis was completed. The purpose of this analysis was to gain an indepth understanding of the site, its environmental systems and physical characteristics. This information was then used as a framework to guide the production of the Land Use Plan.

ECOLOGICAL ANALYSIS

Walsh Environmental visited the Peninsula Recreation Area in late May of this year traversing the site on foot, and completing a visual assessment. The 1990 David Cooper (et. al.) inventory and assessment of the site was reviewed prior to the visit, providing background information on site conditions and serving as a basis for assessing ecological changes during the past 12 years. (See Appendix B for the complete report.)

2.1.1 Vegetation

The site is composed of a series of parallel north-south ridges that are forested with a dense cloak of lodgepole pine. As is typical of lodgepole pine forest, there is a sparse understory with much of the ground beneath the tree canopy either bare soil or dense needle litter. In general, lodgepole pine forests are known for their low species diversity and low productivity for both plants and wildlife. This condition is quite evident in the PRA. Most of the vegetation appears to have been impacted by logging or tree thinning, road and trail construction and other human use. No pristine, unique, or unusually high-quality areas were found within the Peninsula site. However, the forest on the west-facing slopes in the northeastern corner of the site appears to be the most diverse in terms of plant species and tree age. This area should be preserved where possible because of the higher quality of the forest and associated wildlife value.

Open areas between trees can support more diverse meadow communities and are most common in the western part of the site. The only wetland is a small area at the extreme southeastern corner. The wetland appears to be becoming drier, based on shifts in species dominance. No other plant communities of special interest are present within the Peninsula site.

In general, plant communities on the site are in relatively good health. Some mistletoe infection was observed in lodgepole pine, but not to a level of concern. In addition, Town parks staff have conducted an on-going management program to control the small areas of pine beetle infested trees at the PRA. Although the site is relatively free of weeds, some noxious weeds were noted in areas of disturbance along trails, in parts of the disc golf course and adjacent to the parking lot. An updated list of common plants found onsite is presented in Appendix B.

Visible changes to vegetation have occurred since the first survey due to new construction and increased use, especially in the southern half of the site. The athletic fields and parking lot occupy an area that formerly supported a meadow and the number of social trails has increased. The most dramatic impacts to vegetation and soils are in the vicinity of the disc golf course. Heavy off-trail use has resulted in widespread trampling of vegetation and soil erosion. In addition, any trees have sustained multiple limb breaks and trunk injuries.

2.1.2 Wildlife

All of the few songbirds noted were observed in the more open forest along the site's western and eastern edges. The arboreal species identified spend most of their time in the canopies of coniferous forests. Birds associated with aspen or more diverse spruce/fir forests are generally

lacking, as are ground-nesting birds and species associated with a shrub understory. No birds were seen or heard in the denser interior forest.

Signs of American elk were noted in the open forests of the northeastern part of the site. The 1990 study found evidence of use by elk and mule deer only in the northwestern part of the site, where the largest grass areas occur. The earlier study also noted greater use north of the site boundaries, particularly near Crown Point where timbering operations have created large areas of grasses. Minor migration routes for elk and deer that reportedly once skirted the southwestern portion of the site probably no longer exist due to the increased human use, adjacent development and highway traffic.

Carnivores likely to use the site include the coyote and red fox. Although neither species was observed, both are common in areas of similar habitat throughout the region. One den on the side of a ridge adjacent to the disc golf course appeared to be that of a red fox. Black bears could occur as irregular transients but mountain lions are much less likely due to surrounding development and low use by deer or other prey species.

The only small mammal observed during the May 2002 survey was the pine squirrel (red squirrel or chickaree). Small burrows noted along the forest edges are probably those of the golden-mantled ground squirrel and/or least chipmunk. Other likely residents of the site include the porcupine, deer mouse, montane vole, long-tailed vole, mountain cottontail, raccoon and striped skunk.

Overall, the May 2002 Walsh survey validated the findings of the earlier study, which concluded the site is not heavily utilized by wildlife and does not support critical habitat for any species of special concern. This is due to the low diversity and productivity of lodgepole pine forests and the relatively high level of human activity. The level of human use has only increased since the previous study as a result of the construction of athletic fields, disc golf, parking lot and the Waterdance subdivision. In addition, the trails are used throughout the year -- by skiers and snowshoers in the winter, and day hikers and bikers from spring through fall.

2.1.3 Conclusions

Based on the current level of human use, the existing vegetation, and limited availability of suitable wildlife habitat, none of the recreational scenarios proposed here would cause significant adverse ecological impacts. This conclusion includes consideration of all four types of adverse impacts potentially associated with human development and use: disturbance, habitat loss, habitat fragmentation and interference with wildlife movement. Nonetheless, measures could be incorporated in future recreational scenarios to minimize impacts and potentially increase ecological diversity:

- ➤ Preserve the wetland area in the southeastern corner, plus a 50- to 100-foot buffer.
- ➤ Preserve, or limit impacts to, the higher quality forest area in the northern portion of the site. This area also provides a wildlife connector to areas north and east of the site, the USFS campground and Crown Point.
- ➤ If disc golf is retained, construct "friendly fences" using split rails or pine posts to discourage incursions into sensitive areas such as slopes vulnerable to erosion or areas with a vegetative understory.

- ➤ Place felled trees beneath the pines in the disc golf area to discourage incursions and provide shelter for understory plants. Use vegetative mulch to reduce erosion and compaction. Plant native understory shrubs in these areas to further discourage off-trail use and help restore degraded areas.
- ➤ If a golf course is constructed, create greater species diversity by planting aspen, species of native conifers other than lodgepole pine, and various native tall shrubs.
- Restore the currently bare soil piles and disturbed area in the southeastern portion of the site.
- ➤ Implement an on-going noxious weed management program throughout the site.

Proper design and implementation of these measures will help to minimize unavoidable impacts to the currently limited ecological quality and wildlife use of the Peninsula site. Except for the few higher quality areas described above, issues associated with alternative uses for the site appear to be related primarily to broader social considerations and quality of the aesthetic and recreational experience (e.g., of cross-country skiers, hikers, and cyclists) rather than ecological sensitivities.

SITE ANALYSIS

A detailed site analysis was conducted prior to completing any planning studies. The purpose of this analysis was to understand the physical characteristics of the site and how they might affect the Town's ability to add new facilities. This evaluation looked at the existing landforms and vegetation, existing uses, significant off-site views, access and adjacent uses. The "Site Inventory and Analysis" map, on page 6, graphically summarizes this analysis.

The key findings of the Site Inventory and Analysis include:

- ➤ <u>Site High Point</u>. The most prominent landform on the site is a ridge running north to south along the east property line of the PRA. This is the high point of the site and the location for the Town's new water storage tank, which is located on Town land on the southern tip of this ridge. The tank was constructed in 2002 and the work included installation of a new 12″ potable water line extending from the tank west through the site.
- Eastern Zone. The eastern end of the PRA is a triangular parcel east of the main entry road for the USFS campground. This area includes the southern tip of the main ridgeline and other smaller ridges and hills. The far eastern area is unusable for park uses as it drops off sharply toward Highway 9. The forest in this area is more open, with some aspen and grassy clearings. The Town keeps a loose material storage area adjacent to a USFS service road that traverses this zone. The site's only wetland is also found on the southern tip of this area, adjacent to Highway 9. The east zone contains areas of steeply sloping terrain that would only be suitable for sledding or a ski jump.
- ➤ <u>Central Zone</u>. The central portion of the site, situated between the USFS entry drive on the east and the PRA entry on the west, is made up of a series of gently west-sloping hillsides. This portion of the site, especially its northern end, offers the highest quality forest, which should be preserved where possible. The sleigh ride/

MAP 1 - "SITE INVENTORY AND ANALYSIS"

barbeque/picnic facility is located in the north-central portion of this zone. An overhead power line runs southwest to northeast through the southern end of this zone. The relatively gentle terrain makes this area suitable for most of the uses in the proposed program. However, the northern half of the central zone will be more expensive to develop since the farther north facilities are placed on the site, the longer utility connections and vehicular access will need to be.

➤ 35-Acre Parcel. The only area of the PRA that has seen significant development is the 35-acre parcel, just west of the central zone. This is the area of the PRA Council has previously designated as the receiving site for new Town facilities. The terrain is relatively flat and because of this, the Town's main softball and multi-purpose fields were constructed here. The fields are also used for Nordic skiing lessons in the winter months. The PRA's Highway 9 access is located here, with the entry drive extending northeast 1,200′ into the site. The vehicular circulation system is made up of a series of one-way loops, which are confusing, especially for the first-time visitor. Parking for around 100 cars is provided east of the field complex.

The Nordic center building is south of the soccer field, sited between the entry drive and a southeast-facing slope. This slope is ideally suited for the Nordic Village included the proposed facilities program. It offers an ideal solar orientation and dramatic views to the west from the ridgeline (200' west of the Nordic Center). A drop-off area and handicap parking are provided south of the Nordic Center. The architecture of Nordic Center is compatible with the PRA setting, but the building is not large enough for all of the uses housed in it, prompting the idea of adding additional structures to create a Nordic Village.

The Town's skatepark was recently constructed south of the Nordic Center and east of the entry drive. The skatepark is very popular and well used by the youth of the community. However, the sound of skateboards slapping against the ramps carries to the Nordic Center and adjacent forest. The skatepark was constructed with the knowledge that it may need to be relocated if other uses are added to PRA, but the preference is to keep it in its current location. Parking for approximately 15 cars is provided just north of the skate park. Just to the south of the skatepark is the "Eye-of-the-Needle", a small cul-de-sac that currently has no dedicated use, other than over-flow parking.

Western Zone. The western portion of the site features a series of north-to-south ridges. The vegetation varies from dense pine forest to open areas of meadow grasses. This zone is home to the Town's 18-hole disc golf course, which extends on to the Denver Water Board's land to the north. The disc golf course is heavily used with up to 500 rounds a day being played. Disc golf's informal structure and very low cost make it popular with seasonal workers and youth. Unfortunately, the success of disc golf has resulted in serious degradation to the forest and understory vegetation, which, if left unchecked, will lead to erosion problems. The Town may need to take steps to restore the habitat and limit access. A use fee may eventually be required to fund restoration work. The Waterdance subdivision abuts the western property line. There have been conflicts with disc golf in the past, but relocating some of the holes has reduced this problem. A setback of 200' to 300' should be used for any future uses in this area. While the western zone's physical setting is suitable for a number of uses, the steep slope formed by the ridgeline on its east edge make it very difficult to access. In addition, this area is crossed by a number of utility lines and has a heavy concentration of trails.

- ➤ <u>Views</u>. The lodgepole forest covering most of the site generally limits off-site views. However, dramatic views of Buffalo Mountain and the adjacent peaks of the Gore Range are found on the ridgeline parallel to, and west of the main entry road. A second ridgeline just east of the sports fields' parking lot offers similar views. In some locations on the site, views to the Ten-Mile Range southwest of the site can be found.
- Trails. An extensive network of trails crisscrosses the entire PRA site (see "Existing Trails Map" on page 10), connecting to a larger trail network on the USFS land. Please note that the mapping for the existing trails varies from the actual locations on the ground in a number of instances. A detailed up-to-date survey of the existing trail system will be required in the areas where new facilities are proposed prior to beginning the detailed design. The trail system offers Nordic, snowshoe and sleigh ride trails. A number of informal social trails have also developed over the years. These same trails are used in the summer by hikers, joggers and bicyclists, and an occasional motorized vehicle, although these are prohibited on the PRA. Because of the density of the trail network, it will be virtually impossible to construct new improvements on the site without realigning some portions of the trail system.

INFRASTRUCTURE ANALYSIS

Loris Associates (domestic water / sanitary sewer) and RMH Group (electrical service) completed investigated the capacity of the utilities serving the PRA. Their findings follow.

2.1.4 Domestic Water, Sanitary Sewer and Drainage

- ➤ The Frisco Sanitation District has made available the equivalent of 45 residential sanitary sewer taps to serve the Peninsula Recreation Area. This equates to a sewage flow of 15,750 gallons per day (45 residences at 350 gallons / day / single family residence). All sewage from the Peninsula flows to a lift station in the Waterdance development. This should offer enough capacity to provide adequate service for any of the proposed uses in the PRA program. The sanitary sewer is generally limited to the west side of the PRA around Nordic center and sports fields. A sewer line extends through the site northeast to the USFS campground.
- ➤ Frisco Public Works Department is currently constructing a new 1.2 million gallon water tank near the high point of the Peninsula area. As part of the construction of the new tank, a 12-inch diameter water main has been installed through the PRA, adjacent to an existing roadway. With the addition of the 12″ water line, the Town will be able to supply the PRA with an adequate water supply for any of the development proposals currently being considered.
- ➤ Review of existing site conditions and topographic mapping indicates there are no detrimental drainage conditions on the site. No off-site flows enter the site. All site drainage outfalls to Dillon Reservoir, and any significant future development will be required to design and implement a set of water quality and erosion control best management practices. Storm water detention may be required if extensive impervious surfaces (parking lots and roof areas) are proposed. The size and location of any detention would be based upon the scale of the proposed development.

2.1.5 Electrical Service

An underground Xcel Energy single-phase line serves the Nordic Center and other

existing uses. This provides an adequate level of service for all of the current uses. If the existing single-phase service to the Nordic Center were extended to any additional small structures (small electrical load), cost would be around (\$15/linear foot).

➤ In order to serve a Multi-Purpose / Ice Arena / Performing Arts / Community Center -three-phase power is required. Xcel Energy has three-phase power available at the southeast corner of the intersection of Highway 9 and the PRA entry road. The cost of extending the three-phase line to the new Recreation Area would be (\$25-\$30/linear foot) which includes setting the transformer. If following an access road proves to be too costly, Xcel could do a direct route if given a utility easement.

MAP 2 - "EXISTING TRAILS MAP"

During the public input process of the 2001 *Parks and Recreation Master Plan,* Town residents offered a number of suggestions for improving park and recreation facilities throughout the Town of Frisco. Immediately following the completion of the Master Plan, the Town conducted a separate public meeting specifically focused on the Peninsula Recreation Area to discuss how it fit into the Town's recreation spectrum. The list of potential uses suggested during this process ranged from minimal improvements to larger scale facilities. As is usually the case, the list of the proposed improvements exceeded the capacity of the site and the Town's financial resources. Town Council evaluated all of the suggestions offered by the residents and developed a smaller program of potential uses to be evaluated during this land use planning process. The facilities included in the program were those that Council felt received the broadest support from the residents, were realistic for the Town to build and operate and satisfied specific needs in the community.

The program of potential uses to be studied in the Peninsula Recreation Area Land Use Plan is listed below. The first five facilities were considered the highest priorities by Council, and include:

NORDIC VILLAGE

- ➤ Two to Three Additional Buildings (Approximately 10,000 sq. ft. total). Potential Facilities:
 - o Fun Club / Nordic Center / Equipment Sales
 - Events Building (Enclosed structure for weddings, reunions, etc. Similar to Breckenridge's Carter Park shelter.)
 - Lockers (For High School Team)
 - Sleigh Ride Concession
 - Food Service:
 - Warming Kitchen
 - Possible Restaurant?
 - Additional Storage
 - Additional Restrooms (Existing restrooms too small.)
 - Parking

SLEDDING/SKI JUMP

- ➤ 10 Meter Ski Jump
- ➤ Walk-up Sledding Hill
- Parking

MULTI-PURPOSE/ICE ARENA/PERFORMING ARTS/COMMUNITY CENTER

- ➤ One sheet of ice with lockers (4) and support facilities
 - o Doubles as convention, large exhibit and performance space
- Meeting Rooms / Community Rooms
- Small Exhibit Space(s)
- Small Aerobics / Weight Room(s)
- Catering Kitchen
- ➤ Support Facilities (Staff Offices, Storage, Restrooms, Lobby, HVAC, etc.)

Parking

GOLF COURSE

- Options to be studied include:
 - o Full-Size -- 18-hole
 - Full-Size -- 9-hole
 - o Executive (9 or 18 holes)
 - o Par 3 (9 or 18 holes)
 - No golf course
- Clubhouse/Pro Shop with Golf Cart Storage
- Parking
- Maintenance Building and Yard

SUMMER/WINTER TRAIL IMPROVEMENTS ON THE 217 ACRES

- Only on Town-Owned Land
- Upgrade/Formalize Trail Signage
- ➤ New Connections to Existing and New Facilities
- ➤ Improvements Called for in the 20-Year Permit Plan

The sixth facility on the program was considered a lower tier priority that would only be feasible if it shared infrastructure and support facilities with other uses in the PRA.

AMPHITHEATER

- ➤ Shared Parking and Facilities Where Possible
- > 300 to 500 Seats on the Low End
- > 1,000 to 1,500 Seats on the High End

An expansion of a park or recreation area should never be discussed without acknowledging the need for a commensurate increase in staffing, maintenance facilities and equipment. The *Goals and Policies* of the Parks Master Plan states that maintenance facilities and capacity should be increased proportionally as new uses are added at the PRA.

4 Preliminary Land Use Concepts

In order to give Council and the citizens of Frisco a complete understanding of the possibilities offered by the Peninsula Recreation Area, five different Preliminary Land Use Concepts were developed, using the program described in Chapter 3. A facility-by-facility pro/con analysis was also completed for each Concept. The five scenarios were submitted to staff and Council for review and comment. Council's review included an afternoon worksession to discuss the alternatives in detail.

PLANNING ASSUMPTIONS

The following assumptions were used in developing the Preliminary Land Use Concepts. They were developed based on input from Town Council and Staff, the previous experience of the consultant team on similar projects, recommendations contained in the ecological analysis and typical site planning principles.

- 1. The current Highway 9 PRA access to remain. Existing entry gate is very well detailed with materials and finishes in keeping with the PRA setting and uses.
- 2. No new access points off Highway 9 are proposed under the assumption that CDOT would not approve a third access road into the PRA site.
- 3. Golf course options considered included a full-size 18-hole course, 9-hole courses (full-size and executive/par-3) as well as no golf course at all. It should be noted that this analysis has been performed to identify site capacity and is not a substitute for more detailed design. If the voters of Frisco were to approve golf at the PRA, a complete golf course design would be required. Detailed design would, in all likelihood, lead to other hole locations/layouts than those shown in these preliminary Concept plans.
- 4. A full-size 18-hole golf course could be constructed, but might restrict other program elements such as the Multi-Purpose Center and Amphitheater. In addition, large areas of the better quality stands of trees may need to be removed to accommodate a standard full-size golf course.
- 5. Dual use of parking lots has been a given in concept development. Parking has not been designed to accommodate peak demand for all uses, at one time. Events would need to be programmed to avoid overlap (e.g. would not schedule a large concert at the amphitheater at the same time as a softball game and/or a large convention).
- 6. All parking lot bubbles are sized to include snow storage and tiered into separate bays where possible to maintain existing vegetation and to provide screening.
- 7. The existing soccer and softball fields and associated parking should be preserved if at all possible.
- 8. The existing skatepark and disc golf can be relocated, but should be left intact if possible.
- 9. Where possible, new improvements have avoided higher quality forest areas, the small wetland area and steep slopes.
- 10. The addition of park improvements at the PRA will necessitate upgrading maintenance facilities and capacity.
- 11. If a golf course were approved and constructed, a dedicated maintenance facility would be needed. However, park maintenance operations could be housed in the same facility.

- 12. While north-facing slopes are preferred for the ski jump and sledding hill, the site offers very few slopes with that orientation. Therefore, northwest-facing slopes have been used where possible.
- 13. Due to safety concerns, disc golf cannot co-exist/run parallel with a standard golf hole.
- 14. The lack of topographic mapping with one or two foot contour intervals makes detailed grading studies impossible.
- 15. The presence of the existing Nordic Center Building dictates that the Nordic Village be clustered in that area.
 - ➤ The shallow southeast-facing slope to the west of the existing building is very well suited to this use and affords spectacular views to the northwest.
- 16. The Family Ice Skating area is assumed to be a shallow basin flooded in the winter with chiller units. Adding a shade structure would greatly improve the quality of the ice.
 - A year-round pond could be used, but would be difficult or impossible to chill. Weak ice in warm weather may limit use and create safety concerns.
 - ➤ Placing the skating area next to the Multi-Purpose Center ice arena would allow dual use of ice arena mechanical and ice maintenance equipment.
 - ➤ It is possible to flood a concrete slab to create an ice skating area. The concrete pad could be used for in-line hockey in the summer. However, a winter ice skating/summer in-line hockey facility should not be located next to the Multi-Purpose Center's patios.
 - ➤ The Town would need to decide if dasher boards are needed to accommodate ice hockey. This, however, would limit informal ice-skating use unless a second informal ice skating area was provided in addition to outdoor ice hockey.

A "Pro/Con" analysis has been completed for each of the five preliminary concept plans developed for the PRA. This analysis is intended to highlight the primary benefits and concerns different applications of the program might create and aid in the evaluation of the concept plans. The pro/con analyses are intended thorough, but not all-inclusive. Some potential benefits or impacts may have been inadvertently omitted.

CONCEPT A - SEE MAP ON PAGE 17

CIRCULATION	N/PARKING
Pro	Con
Existing entry maintained, vehicular circulation system simplified with road hierarchy improved (number of confusing one-way loops reduced).	Additional costs to demolish existing park roads, to remove trees and to construct the new internal park road/parking system.
Skatepark parking unchanged.	➤ Overflow parking for the Nordic Village at Multi-purpose Center, up to 1,000′ away.
 Parking: Approximately 300 spaces provided for the Multi-Purpose Center. 40 - 50 Nordic Village parking spaces may not be adequate for some events. 40 - 50 parking spaces off USFS entry for Ski Jump. 	➤ Winter maintenance (800 LF) needed for the USFS access road and a new gate added. Nordic trail crossings would need to be maintained (consolidated?).

➤ The road over the water line from the new
Town water storage tank has been
abandoned to allow construction of the
Multi-Purpose Center.

	EXISTING FACILITIES			
	Pro		Con	
>	Most existing facilities would not be affected by new improvements.	>	Sleigh ride barn/stable would need to be relocated to accommodate the Multi-Purpose Center	
A		A	Disc Golf would need to be relocated to accommodate the golf course.	

EXISTING WINTER	/SUMMER TRAILS
Pro	Con
> Trails on the east side of the site are generally unaffected.	➤ The Multi-purpose Center/Amphitheater complex would require re-routing some trails.
Most winter-use trails would not need to be re-routed (except where crossing a golf green).	
	Some trails would now run along the edge of golf holes changing the character of the winter/summer trail experience in the northwest half of the PRA. Setting goes from lodgepole pine forest to a forest edge condition.

	MULTI-PURPOSE / CONVENTION CENTER / ICE ARENA		
	Pro		Con
>	Adequate setback from Highway 9. Minimal	\checkmark	Longer runs will be required to connect to
	impact from road noise.		some utilities (e.g. sanitary sewer).
>	Would sit higher than the ballfields with	\checkmark	Tree removal would be required.
	very good views over the fields to the west.		
	Setting the building +/- 100' from the		
	ridgeline obscures views of the ballfields		
	and maintains mountain views.		
\triangleright	Slopes appear to be suitable for proposed		
	use.		

	NORDIC VILLAGE			
	Pro		Con	
A	Buildings clustered around a southeast facing central courtyard with excellent northwestern views off the rear.	A	Limited close in parking available.	
\	Good relationship to sledding hill.	A	Some trail segments/starting points will need to be re-aligned.	
		>	Limited of tree removal will be required.	

	AMPHITHEATER			
	Pro		Con	
A	Natural bowl ideal for amphitheater. Larger size (1,500 seat) shown.	A	Potential for road noise since site is only 400' to 500' from Highway 9. Sound berms may be needed along highway.	
~	Shared use of Multi-Purpose Center Parking.	A	Tree removal would be required.	

	GO	LF	
	Pro	Con	
>	A full-size nine-hole golf course is accommodated	> One hole is on Denver Water Board lar	nd.
>	More compatible with adjacent homes than Disc Golf.	➤ The Disc Golf Course would need to relocated either on-site or to anoth location off-site.	
>	One of the Nordic Center buildings could be used for the clubhouse (potential for dual use).	Tree removal would be required.	
>	Could create a more diverse habitat for wildlife than a continuous lodgepole forest, as discussed in the Wildlife report.	Increasing wildlife use could create so user conflicts (e.g. elk on golf course or nearby residential lots).	

10 METER SKI JUMP			
Pro	Con		
Located on area already disturbed by	Requires maintaining a portion of the		
water tank construction.	USFS access road in the winter		
Parking in an area already disturbed by	Separated from other uses in the park.		
loose materials storage.			
Terrain suitable for the use.	➤ Limited amount of tree removal would		
	be required since area already disturbed		
	by construction of the water tank.		
	➤ Some winter-use trails would need to be		
	re-aligned.		

	SLEDDING HILL		
	Pro		Con
\	Strong linkage with Nordic Village's restrooms, warming and food service facilities.	A	Some winter-use trails would need to be re-aligned.
>	Terrain suitable for the use.	>	Limited of tree removal will be required.
		>	Parking 600' away.

	FAMILY SKATING AREA			
	Pro		Con	
>	Strong linkage to the Multi-Purpose Center's restrooms and food service facilities.	~	Separated from the other winter uses.	
>	Ice Arena equipment available to maintain outdoor ice rink.	>	Tree removal would be required.	
>	Amenity for the Multi-Purpose Center.			

MAP 3 - "PRELIMINARY LAND USE CONCEPT A"

CONCEPT B - SEE MAP ON PAGE 21

CIRCULATI	ON/PARKING
Pro	Con
Existing entry maintained; vehiculation system simplified with roat hierarchy improved (number of confusir one-way loops reduced).	d roads, to remove trees and to construct the
 Parking: Approximately 300 spaces provided for the Multi-Purpose Center. 40 - 50 Nordic Village parking spaces may not be adequate for some events. 40 - 50 parking spaces off USFS entry for Ski Jump 	The road over the water line from the new Town water storage tank has been abandoned to allow construction of the Multi-Purpose Center.
No winter maintenance needed for USI access road.	S

	EXISTING FACILITIES			
	Pro		Con	
>	Most existing facilities would not be affected by new improvements.	\wedge	One to two disc golf holes would need to be re-aligned to accommodate the golf	
	by new improvements.		course.	
	The Skatepark is moved to the Eye of the		Skatepark is relocated to the Eye of the	
	Needle, reducing the noise impact on other		Needle (additional cost).	
	park uses. The Skatepark is compatible			
	with the Highway 9 road noise.			
		>	The sleigh ride barbeque area may need	
			to be relocated.	

EXISTING WINTER/	SUMMER TRAILS	
Pro	Con	
Most winter-use trails would not need to be re-routed (except where crossing a golf green).	➤ The Multi-purpose Center/Amphitheater complex would require re-routing some trails.	
	Some trails would run along the edge of golf holes changing the character of the winter/summer trail experience in some areas. Setting goes from lodgepole pine forest to a forest edge condition.	
	Three to five trails would need to be rerouted for summer use. Summer use of trails along some of the golf holes may need to be restricted.	

	MULTI-PURPOSE / CONVENTION CENTER / ICE ARENA			
	Pro		Con	
\triangleright	Setback from Highway 9 would greatly limit	\checkmark	Longer runs will be required to connect	
	road noise.		some utilities (e.g. sanitary sewer).	
>	Would sit higher than the ballfields with	\checkmark	Tree removal would be required.	
	very good views over the fields to the west.		_	
	Setting the building +/- 100' from the			
	ridgeline obscures views of the ballfields			
	and maintains mountain views.			
>	Slopes in this area appear to be shallow			
	enough to allow a construction of this type			
	of structure.			

NORDIC VILLAGE			
Pro	Con		
➤ Buildings clustered around a southeast facing central courtyard with excellent northwestern mountain views off the rear.	0 , 01		
Adequate close in parking provided.	➤ Limited tree removal would be required.		
	Poor connection to sledding hill, ski jump and outdoor ice rink		

	AMPHITHEATER			
	Pro		Con	
>	Smaller amphitheater linked to the Multi-	A	Terrain not as well suited to an	
	Purpose Center.		amphitheater as the southern amphitheater location.	
\	Support facilities could be included in the Multi-Purpose Center. Potential for dual use of staff.	A	Adequate close in parking provided.	
~	Shared use of Multi-Purpose Center Parking.	~	Tree removal would be required.	

	GO		
	Pro		Con
>	A full-size nine-hole golf course is	\checkmark	Two to three Disc Golf holes would need
	accommodated.		to be re-aligned.
>	Two holes located in the poorer quality	\triangleleft	A freestanding clubhouse and parking are
	forest east of the USFS access road.		needed.
>	Golf holes dispersed around the site,	V	Tree removal would be required.
	reducing impact to the trail system.		
>	Could create a more diverse habitat for	\checkmark	Increasing wildlife use could create some
	wildlife than a monolithic lodgepole forest,		user conflicts (e.g. elk on golf course or in
	as discussed in the Wildlife report.		nearby residential lots).

1

	10 METER SKI JUMP		
	Pro		Con
>	Strong linkage to Ice-Skating and Sledding	A	Need to construct restrooms in the
	Hill creating a winter sports park.		warming hut or a 700' walk is needed.
A	Terrain suitable for the use.	A	Tree removal would be required.
>	Parking provided.		

	SLEDDING HILL		
	Pro	Con	
A	Strong linkage to Ice-Skating and Ski Jump creating a winter sports park.	Restrooms would need to be constructed in the warming hut or a 700' walk is needed.	
\triangleright	Terrain suitable for the use.	Tree removal would be required.	
>	Parking provided		

FAMILY SKATING AREA			
Pro	Con		
Strong linkage to Sledding Hill and Ski Jump creating a winter sports park.	Restrooms would need to be constructed in the warming hut or a 700′ walk is needed.		
Parking provided	Tree removal and grading to create a level area would be required.		

MAP 4 - "PRELIMINARY LAND USE CONCEPT B"

CONCEPT C - SEE MAP ON PAGE 25

	CIRCULATION	N/PARKING
	Pro	Con
A	Existing entry maintained; vehicular circulation system simplified with road hierarchy improved (number of confusing one-way loops reduced). Both east/west roads connecting the Nordic Village to the USFS access road maintained.	changes the "pine forest" character of the current PRA entry experience.
>	Parking:	
>	Approximately 250 spaces provided for the Multi-Purpose Center.	
A	40 - 50 parking spaces provided for the Nordic Village. Multi-Purpose Center parking available for overflow. 40 to 50 spaces provided for the Ski Jump and relocated Skatepark area.	
~	No winter maintenance needed for USFS access road.	

EXISTING FACILITIES			
Pro	Con		
Most existing facilities would not be affected	Disc golf would need to be relocated to		
by new improvements.	accommodate the par-3 golf course either		
-	on-site or to another location off-site.		
	Skatepark is relocated to accommodate		
	the Multi-Purpose Center (additional		
	cost).		

EXISTING WINTER / SUMMER TRAILS			
Pro	Con		
Most winter-use trails would not need to be re-routed (except where crossing a gol- green).	1 1 , 1		
	➤ Some trails would now run along the edge of golf holes changing the character of the winter/summer trail experience in the northeast corner of the PRA. Setting goes from lodgepole pine forest to a forest edge condition.		
	Three to five trails would need to be re- routed for summer use. Summer use of trails along some of the golf holes may need to be restricted.		

	MULTI-PURPOSE / CONVENTION CENTER / ICE ARENA		
	Pro		Con
\triangleright	With proper site planning and tree	A	Proximity to Highway 9 would mean
	thinning some mountain views can be		outdoor patios would be adversely
	obtained to the southwest and northwest.		affected by road noise.
>	Slopes in this area appear to be shallow	>	Tree removal would be required.
	enough to allow a construction of this type		
	of structure.		
>	Proximity to existing utility lines means		
	shorter utility runs than northern site.		

NORDIC VILLAGE		
Pro	Con	
Buildings clustered around a souther facing ridgeline with excellent northwest mountain views off the rear. Uses a lin walkway as the organizing element rate than a courtyard.	ern need to be re-aligned.	
Adequate close in parking provided.	➤ Limited tree removal would be required.	
Good relationship to sledding hill.		

	AMPHITHEATER			
	Pro	Con		
	Natural bowl ideal for an amphitheater.	➤ Up to a 1,200′ walk from the Multi- Purpose Center parking lot.		
A	Large amphitheater linked to the Multi- Purpose Center.	Potential for road noise since site is only 400' to 500' from Highway 9. Sound berms may be needed along highway.		
A	Support facilities could be included in the Multi-Purpose Center. Potential for dual use of staff.	> Tree removal would be required.		
>	Shared use of Multi-Purpose Center Parking.			

	GO	LF	
	Pro		Con
>	A nine-hole par-3 golf course is	>	One and one-half holes are on Denver
	accommodated.		Water Board land.
>	One of the Nordic Center buildings could	>	The Disc Golf Course would need to be
	be used for the clubhouse (potential for		relocated either on site or to another
	dual use).		location off site. (Note: The par-3 course
			could be sited on the southeast portion of the
			site and disc golf would not need to be moved,
			however, there would be a larger impact to
			winter/summer trails and forested areas.)
>	More compatible with adjacent homes than	>	Tree removal would be required.
	Disc Golf.		_
>	Could create a more diverse habitat for		Increasing wildlife use could create some
	wildlife than a mature lodgepole forest.		user conflicts (e.g. elk on golf course or in
	0 1		nearby residential lots).

	10 METER SKI JUMP			
	Pro		Con	
A	Strong linkage between the Skatepark and Ski Jump.	A	Restrooms would need to be constructed in the warming hut or a 900' walk is needed.	
>	Terrain suitable for the use.	A	Tree removal would be required.	
\	Head-in parking provided along the existing park road.			

	SLEDDING HILL			
	Pro		Con	
>	Strong linkage with Nordic Village's restrooms, warming and food service facilities.	>	Some winter-use trails would need to be re-located.	
>	Terrain suitable for the use.	>	Limited amount of tree removal would be required.	
>	Close-in parking is available.			

	FAMILY SKATING AREA			
	Pro	Con		
A	Strong linkage with the Multi-Purpose Center's restrooms and food service facilities.	Separated from the other winter uses.		
>	Ice arena equipment available to maintain ice.	> 500' to 900' walk from parking.		
>	Amenity for the Multi-Purpose Center.	Tree removal and grading to create a level area would be required.		

MAP 5 - "PRELIMINARY LAND USE CONCEPT C"

CONCEPT D - SEE MAP ON PAGE 29

	CIRCULATION	1/P	PARKING
	Pro		Con
\	Existing entry and vehicular circulation system maintained. Both east/west roads connecting the Nordic Village to the USFS access road maintained.	A	Existing circulation system can be confusing to new park users.
	Parking:	V	Winter maintenance (1,000 LF) needed for
>	Approximately 300 spaces provided for the Multi-Purpose Center.		the USFS access road and a new gate added. Nordic trail crossings would need
>	40 - 50 parking spaces provided for the Nordic Village. Multi-Purpose Center parking available for overflow, but 400' away.		to be maintained (consolidated?).
>	60 to 100 spaces provided for the Ski Jump and Sledding Hill.		
>	Skatepark parking eliminated and combined		
	with the Multi-Purpose Center parking.		

	EXISTING FACILITIES		
	Pro	Con	
>	The goal for Concept D was to maintain as	>	
	many of the existing park facilities as		
	possible. Only the Skatepark parking lot		
	and some lower quality tree stands would be		
	affected by new improvements.		

EXISTING WINTER / SUMMER TRAILS		
Pro Con		
➤ Most winter/summer-use trails would not	➤ The Multi-purpose Center/Amphitheater	
be affected by new improvements	complex and the winter sports facilities	
	would require some minor trail re-routing.	

	MULTI-PURPOSE / CONVENT	ΓΙΟ	N CENTER / ICE ARENA
	Pro		Con
>	With proper site planning and tree	>	Proximity to Highway 9 would mean
	thinning some mountain views can be		outdoor patios would be adversely
	obtained to the southwest and northwest.		affected by road noise.
>	Slopes in this area appear to be shallow enough to allow a construction of this type	A	Tree removal would be required.
	of structure.		
>	Proximity to existing utility lines means		
	shorter utility runs than northern site.		

	NORDIC VILLAGE			
	Pro		Con	
>	Buildings clustered around a southeast	A	Some trail segments/starting points will	
	facing central courtyard with excellent		need to be re-aligned.	
	northwestern mountain views off the rear.		_	
>	Limited close in parking provided, but	>	Limited amount of tree removal would be	
	overflow parking within 400' at the Multi-		required.	
	Purpose Center.		-	
>		>	Not linked to other winter sports uses.	

	AMPHITHEATER			
	Pro		Con	
A	Natural bowl ideal for an amphitheater.	A	Potential for road noise since site is only 400' to 500' from Highway 9. Sound berms may be needed along highway.	
>	Smaller amphitheater linked to the Multi-Purpose Center.	A	Tree removal would be required.	
>	Support facilities could be included in the Multi-Purpose Center. Potential for dual use of staff.			
>	Shared use of Multi-Purpose Center Parking.			

GOLF (NOT INCLUDED IN CONCEPT D)

10 METER	SKI JUMP
Pro	Con
> Strong linkage with Sledding Hill.	> Requires maintaining a portion of the USFS access road (800 LF) in the winter.
Located on north-facing slope, most favorable orientation.	Composting restrooms would need to be constructed in the warming hut (no sanitary sewer available) or port-a-johns provided.
> Terrain suitable for the use.	Limited amount of tree removal would be required.
 Parking located in an area already disturbed by loose material storage. 	> Separated from other uses in the park.

SLEDDING HILL			
Pro	Con		
> Strong linkage with Ski Jump.	➤ Requires maintaining a portion of the USFS access road (800 LF) in the winter.		
> Terrain suitable for the use.	Limited amount of tree removal would be required since area already disturbed by construction of the water tank.		
	Composting restrooms would need to be constructed in the warming hut (no sanitary sewer available) or port-a-johns provided.		
	Separated from other uses in the park.		

	FAMILY SKATING AREA			
	Pro		Con	
A	Strong linkage with the Multi-Purpose Center's restrooms and food service facilities.	A	Separated from the other winter uses.	
~	Ice Arena equipment available to maintain ice.	A	Tree removal and grading to create a level area would be required.	
>	Amenity for the Multi-Purpose Center.			

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MAP 6 - "PRELIMINARY LAND USE CONCEPT D"

18-HOLE GOLF COURSE OPTION - SEE MAP ON PAGE 32

CIRCULATION/I			PARKING	
Pro			Con	
A	Existing entry maintained; vehicular circulation system simplified with road hierarchy improved (number of confusing one-way loops reduced).	A	Additional costs to demolish existing park roads, to remove trees and to construct the new internal park road/parking system.	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Parking: 40 - 50 parking spaces provided for the Nordic Village may not be adequate for some events. 40 - 50 parking spaces off USFS entry for Ski Jump.	A	Winter maintenance (800 LF) needed for the USFS access road and a new gate added. Nordic trail crossings would need to be maintained (consolidated?).	
		A	The south road connecting the Nordic Village to the USFS access has been abandoned to allow construction of the golf course	

EXISTING FACILITIES			
Pro	Con		
➤ A number of existing facilities would not be	Disc golf would need to be relocated to		
affected by new improvements.	another site to accommodate the golf		
·	course.		
	Skatepark is relocated to accommodate the golf course clubhouse and parking		
	(additional cost).		
	➤ Sleigh ride barn/stable and barbeque		
	would need to be relocated to		
	accommodate the golf course.		

	EXISTING WINTER /	'SU	MMER TRAILS
	Pro		Con
>	Winter-use trails would need to be re-routed	\checkmark	Trails would need to be re-routed for
	where crossing golf greens and tee boxes.		summer use. Summer use of trails along
			some of the golf holes may need to be
			restricted.
		\checkmark	Some rails would now run along the
			edge of golf holes changing the character
			of the winter/summer trail experience in
			the northwest half of the PRA. Setting
			goes from lodgepole pine forest to a
			forest edge condition.

MULTI-PURPOSE / CONVENTION CENTER / ICE ARENA (NOT INCLUDED)

	NORDIC VILLAGE			
	Pro		Con	
>	Buildings clustered around a southeast	\wedge	Limited close in parking available.	
	facing central courtyard with excellent			
	northwestern views off the rear.			
>	Good relationship to sledding hill.	\wedge	Some trail segments/starting points will	
			need to be re-aligned.	
		\triangleright	Limited amount of tree removal would be	
			required.	

AMPHITHEATER (NOT INCLUDED)

	GO	LF	
	Pro		Con
>	A full-size 18-hole golf course is	V	Some holes are on Denver Water Board
	accommodated		land.
\triangleright	May be more compatible with adjacent	V	The Disc Golf Course would need to be
	homes than Disc Golf.		relocated to another location off-site.
>	Some cost savings and operational	V	Tree removal would be required.
	advantages to combining Park and Golf		
	maintenance.		
>	Could create a more diverse habitat for		
	wildlife than a monolithic lodgepole forest		
	as discussed in the Wildlife report.		

10 METER SKI JUMP			
Pro	Con		
Located on area already disturbed by water tank construction.	Requires maintaining a portion of the USFS access road (800 LF) in the winter		
 Parking is provided. 	 Separated from other winter uses in the park. 		
> Terrain suitable for the use.	Limited amount of tree removal would be required since area already disturbed by construction of the water tank.		
	Some winter-use trails would need to be re-aligned.		

SLEDDING HILL		
	Pro	Con
>	Strong linkage with Nordic Village's restrooms, warming and food service facilities.	
A	Terrain suitable for the use.	Limited amount of tree removal would be required.

FAMILY SKATING AREA (NOT INCLUDED)

MAP 7 - "18-HOLE GOLF COURSE OPTION"

Following the Council worksession, a Preferred Land Use Concept was produced. This plan was based on the comments and suggestions from Town Council and staff and is a combination of ideas contained in a number of the schemes. The Preferred Plan is, as much as possible, a consensus plan utilizing the ideas that were felt to be best fit for the Peninsula Recreation Area.

AREAS OF CONSENSUS

Reaching consensus on a concuptual plan such as the PRA Land Use Plan is not a scientific endeavor. Not everyone will fully support all of the proposed uses or their arrangement on the site. In addition, individual comments must be interpreted and synthesized into a coherent plan. As such, it is helpful to identify those areas where there appeared to be the most consensus.

There was clearly a consensus that golf should be included in the Land Use Plan in the most sensitive layout possible. This would allow the residents of Frisco to fully understand its impact and decide for themselves if it is an appropriate use. There was also strong consensus that a full-size 18-hole course was not feasible, as it would create too great of an impact on the PRA. Most felt disc golf and standard golf were not compatible and a separation between uses was required. The level of agreement was lower on the best location for golf on the site. The majority felt that disc golf should remain where it is (or move only one or two holes) and traditional golf course should be located in the north-central and eastern portions of the site. The layout should avoid sensitive habitats and the existing trail system whenever possible.

There was no clear consensus on the type of golf course, other than it should less than full-size. Most seemed to favor a full-size 9-hole layout (which is shown on the Preferred Concept Plan), but an executive layout also received support. The current 9-hole plan illustrates a course playing from 2,950 to 3,600 in length, depending on the tee box location. There was also a suggestion for a Par 54, 3,400 yard, "Signature Course". There was no consensus on the golf clubhouse location, but the idea of combining the Nordic Center and the golf clubhouse did receive support based on the efficiency and dual use it offered. There was agreement that if golf was added to the PRA, the golf and park maintenance operations should be combined.

Because this Land Use Plan is limited to studying only the land use implications of golf, the decision on what type of course should be built would require more detailed design and pro forma studies. This would likely require "an affirmative vote of the electorate" to be authorized.

There was strong agreement that the new uses should be sited closer Highway 9, and clustered around the existing uses. This means the Multi-Purpose Center location shown in Concept C and D was preferred. This places the Multi-Purpose Center in an area of shallow to moderate slopes (6% - 12%), providing from 12′ to 17′ in elevation change across the width of the building. While some grading would be required to construct the center, it would not be beyond what is typically performed for a building of this scale. In addition, the grade change would allow the blank sides of the structure to be buried, reducing the building's mass and providing walkout opportunities off two levels. (It should be noted that this is close to the

location for the Multi-Purpose Center shown in the 1994 master plan.) Most liked the idea linking the Family Skating Area and the Amphitheater with the Multi-Purpose center. The road noise from Highway 9 was a concern, but most felt outdoor uses could be buffered by berms, Multi-Purpose Center building or other sound buffering/site planning techniques.

- ➤ There were questions regarding the need/demand for an amphitheater given the proximity of Dillon's amphitheater. However, if additional study supported the idea, there was consensus for a smaller facility that could hold 500 to 750 spectators (expandable to 1,000 or 1,500 seats) on a combination of fixed and lawn seating. Again, there was concern about locating the amphitheater so close to Highway 9, but the operational efficiency presented but pairing the facility with the Multi-Purpose Center seemed to outweigh this concern.
- ➤ It was understood that the Family Skating Area would probably not provide an ice surface suitable for competitive hockey, but the idea of an informal skating area was still attractive. There appeared to be support for constructing a concrete base for the ice skating area that could be used for in-line skating or hockey in the summer.
- ➤ There was strong support for the Nordic Village concept and most seemed satisfied with the layouts proposed. The idea of grouping buildings around a central courtyard was well received.
- All agreed the skatepark should be left in its current location, unless a significant benefit was obtained by moving it. Some expressed support for the idea linking the skatepark with the ski jump as shown on Concept C.
- There appeared to be support for reconfiguring the circulation system in the 35-acre parcel to reduce/eliminate the one-way loop system.

Preferred Land Use Plan - See map on Page 37

	CIRCULATION	<u> </u>	PARKING
	Pro		Con
A	Existing entry maintained; vehicular circulation system simplified with road hierarchy improved (number of confusing one-way loops reduced).	A	Parking on either side of the entry drive changes the "pine forest" character of the current PRA entry experience.
>	Parking:	>	The east/west roads connecting the
A A A	Approximately 225 spaces provided for the Multi-Purpose Center in two lots. 80 - 100 parking spaces provided in two lot for the Nordic Village/golf clubhouse. The Multi-Purpose Center parking available for overflow. 40 to 50 spaces provided for the Skatepark area, which could serve as overflow parking for the Multi-Purpose Center.		Nordic Village to the USFS access road have been re-aligned to accommodate new uses.
>	No winter maintenance needed for USFS		
	access road.		

	EXISTING FACILITIES			
	Pro		Con	
>	Most existing facilities (skatepark sports		Sleigh ride corral/maintenance area will	
	fields, disc golf) would not be affected by		need to be relocated.	
	new improvements. The golf course could			
	be planned to minimize impacts to the Sleigh			
	ride dinner camp			

EXISTING WINTE	SUMMER TRAILS		
Pro	Con		
Most winter-use trails would not need to b	The Multi-purpose Center/Amphitheater		
re-routed (except where crossing a go	complex would require re-routing some		
green or tee box).	trails.		
	Some trails would now run along the		
	edge of golf holes changing the character		
	of the winter/summer trail experience in		
	the northeast corner of the PRA. Setting		
	goes from lodgepole pine forest to a		
	forest edge condition.		
	➤ Three to five trails would need to be re-		
	routed for summer use. Summer use of		
	trails along some of the golf holes may		
	need to be restricted.		

Note: Map 9, on page 38, illustrates the alignment of the existing trails (as currently mapped by the town) over the preferred concept plan. Again, actual trail locations will need to be confirmed prior to beginning the detailed design of any facility.

	MULTI-PURPOSE / CONVENT	ГΙΟ	N CENTER / ICE ARENA
	Pro		Con
\triangleright	With proper site planning and tree	V	Proximity to Highway 9 would mean
	thinning some mountain views can be		outdoor patios would be adversely
	obtained to the southwest and northwest.		affected by road noise.
~	Slopes in this area appear to be shallow enough to allow a construction of this type of structure.	\(\rightarrow\)	Tree removal would be required.
>	Proximity to existing utility lines means shorter utility runs than northern site.		

	NORDIC VILLAGE			
	Pro		Con	
A	Buildings clustered around a southeast facing ridgeline with excellent northwestern mountain views off the rear.	A	Some trail segments/starting points will need to be re-aligned.	
\triangleright	Adequate close in parking provided.	\wedge	Limited tree removal would be required.	
>	Good relationship to sledding hill.			

	AMPHITHEATER			
	Pro		Con	
>	Natural bowl ideal for an amphitheater.	V	Up to a 1,000' walk from the Multi-	
			Purpose Center parking lot.	
>	Small (750 spectator) amphitheater linked	V	Potential for road noise since site is only	
	to the Multi-Purpose Center.		400' to 500' from Highway 9. Sound	
			berms may be needed along highway.	
>	Support facilities could be included in the	V	Tree removal would be required.	
	Multi-Purpose Center. Potential for dual			
	use of staff.			
>	Shared use of Multi-Purpose Center			
	Parking.			

GOLF			
Pro	Con		
A full-size nine-hole golf course is	➤ 800′ walk from clubhouse/parking to the		
accommodated.	1st tee and 9th green		
One of the Nordic Center buildings could	Tree removal would be required.		
be used for the clubhouse (potential for	_		
dual use/shared staffing).			
> Could create a more diverse habitat for			
wildlife than a mature lodgepole forest.			
> Only minor adjustment of the northeast			
most disc golf hole may be needed.			
Areas of better quality forest avoided			

10 METER SKI JUMP			
Pro	Con		
Close enough to the Nordic Center to allow staff oversight and use of restrooms, warming and food service.			
Terrain suitable for the use.	Separated from Family Skating Area.		
➤ Good connection to Sledding Hill			

	SLEDDING HILL			
	Pro		Con	
>	Strong linkage with Nordic Village's restrooms, warming & food service facilities.	>	Some winter-use trails would need to be re-located.	
>	Terrain suitable for the use.	>	Limited amount of tree removal required.	
>	Close-in parking is available.			

	FAMILY SKATING AREA				
	Pro		Con		
>	Strong linkage with the Multi-Purpose	>	Separated from Sledding Hill and Ski		
	Center's restrooms & food service facilities.		Jump.		
>	Ice arena equipment available to maintain	>	500' to 900' walk from parking.		
	ice.				
>	Amenity for the Multi-Purpose Center.	>	Tree removal/grading required to create a		
	-		level area.		

MAP 8 - "PREFERRED CONCEPT PLAN"

MAP 9 - "PREFERRED CONCEPT PLAN WITH EXISTING TRAILS"

PREFERRED LAND USE CONCEPT OPTIONS

Because there appeared to be less unanimity regarding the locations for the sledding hill, ski jump, golf clubhouse, maintenance facility and the skatepark, additional options are included here to help visualize the benefits each provides.

5.1.1 Preferred Land Use Option I

This option includes the following variations from the Preferred Concept Plan: (see Map 10 on page 40).

- The skate park has been moved to the north and paired with the ski jump to create the "X games" area. This concept groups users of similar interests, and probably similar ages (although the skatepark will probably only be used when snow has been cleared). This concept has the added benefit of creating more flexibility to properly re-design the circulation system and create better proximity for the Multi-Purpose Center parking.
- ➤ The sledding hill is again shown near the Nordic Village and a shared golf clubhouse/Nordic Center is used. Moving the skatepark also provides more room to site close in parking for the clubhouse/Nordic Center.

5.1.2 Preferred Land Use Option II

This second option illustrated the following variations: (see Map 11 on page 41).

- ➤ The sledding hill and ski jump are shown on the east side of the site, off the USFS entry road. While this means additional snow plowing in the winter to keep the road open, it provides a north orientation for the ski jump. The sledding hill is also in an area already disturbed by water line construction. A composting restroom or portajohns will be needed and a warming hut would be another beneficial amenity. There was also a suggestion that the starting point for the sleigh ride may be moved here, eliminating conflicts that are occurring in the present location.
- A freestanding golf clubhouse is also shown on this plan. Building a freestanding golf clubhouse will eliminate potential problems of overlapping start-up/shut-down operations with the Nordic Center in the spring and fall. It will also allow the Number 1 tee box and Number 9 green for the golf course to be located closer to the clubhouse. Moving the golf clubhouse also makes it easier to keep the skate park in its current location.

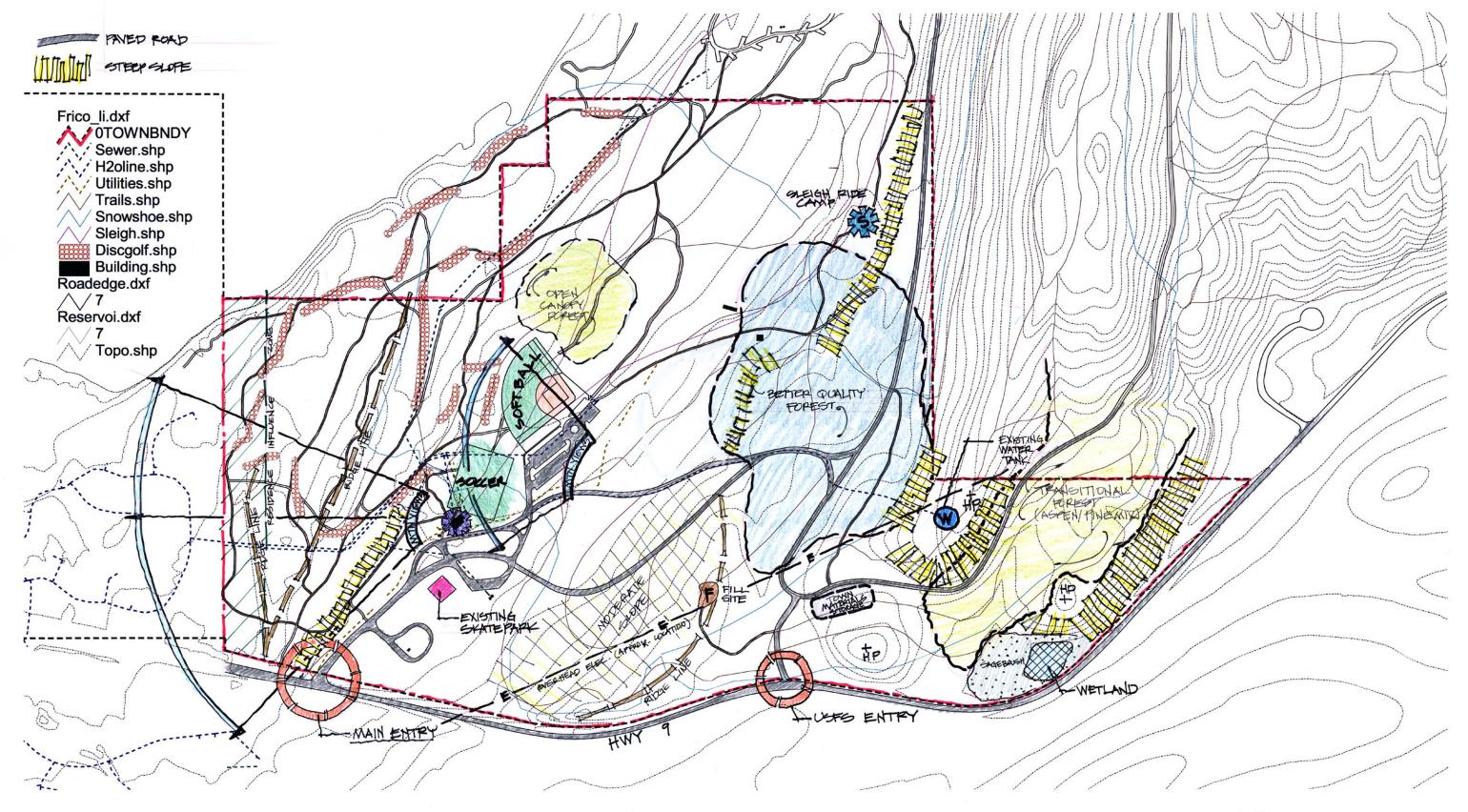
MAP 10 - "PREFERRED CONCEPT PLAN OPTION I"

MAP 11 - "PREFERRED CONCEPT PLAN OPTION II"

5.1.3 Other Suggested Uses and Ideas

During the review process, a number of facilities not in the program established by Council were suggested. These include:

- A central Parks Maintenance Yard that is up to five acres in size. This would not only house the maintenance operations for the park/golf course, but the other park uses as well.
- Add a play structure for younger children at the softball field and/or the Fun Club building.
- Curling, bocce ball and shuffleboard facilities.
- ➤ Lighted golf holes (could potentially be used for lighted cross country skiing in the winter).
- ➤ Locating the amphitheater on the western shore of the PRA with the audience viewing toward the reservoir.
- A separate gathering place for the sleigh ride and perhaps making it a winter/summer use.
- Architecturally linking the amphitheater to the Multi-Purpose Center.
- ➤ Detailed construction and operational costs will be needed before informed choices can be made. This will need to be done later if not a part of this study.
- Coordinate on-going forest maintenance work with the approved master plan.
- ➤ Need a grade-separated access to the PRA over/under Highway 9.



FRISCO PENINSULA RECREATION AREA

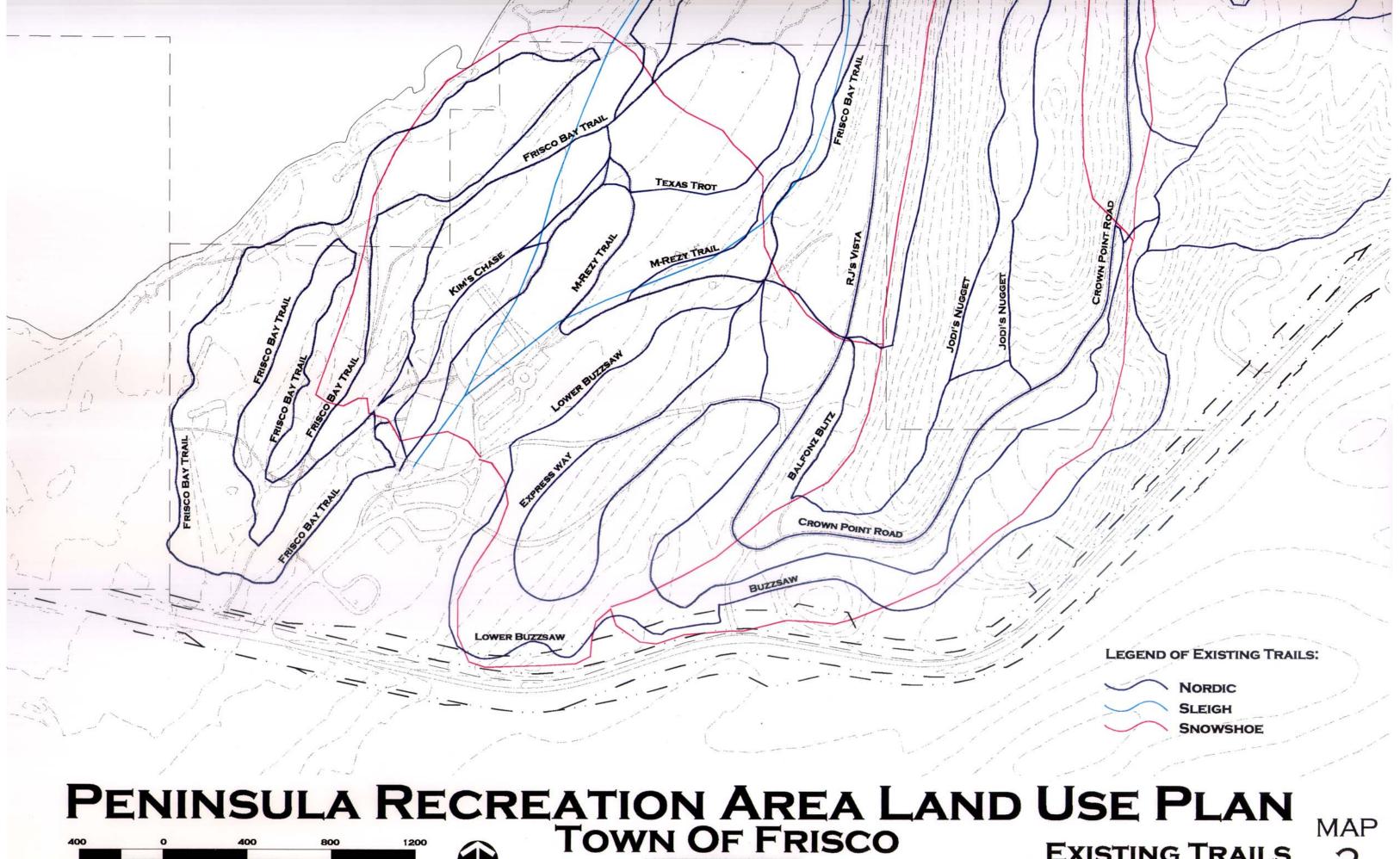
Winston Associates

200 0 200 400 600 800 1000 Feet SCALE: 1" = 200'

SITE INVENTORY AND ANALYSIS

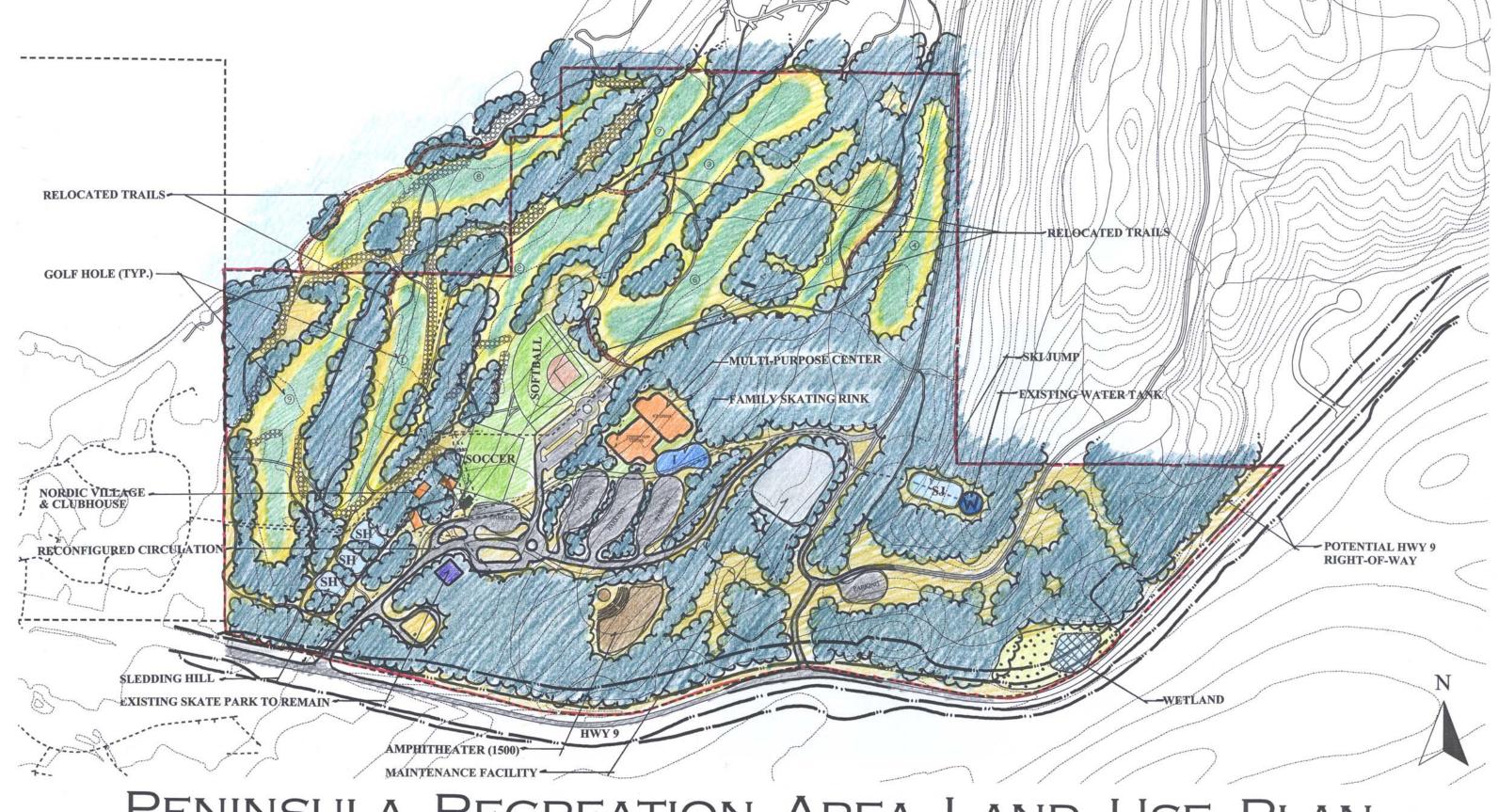


Map 1



SCALE: 1"=400"

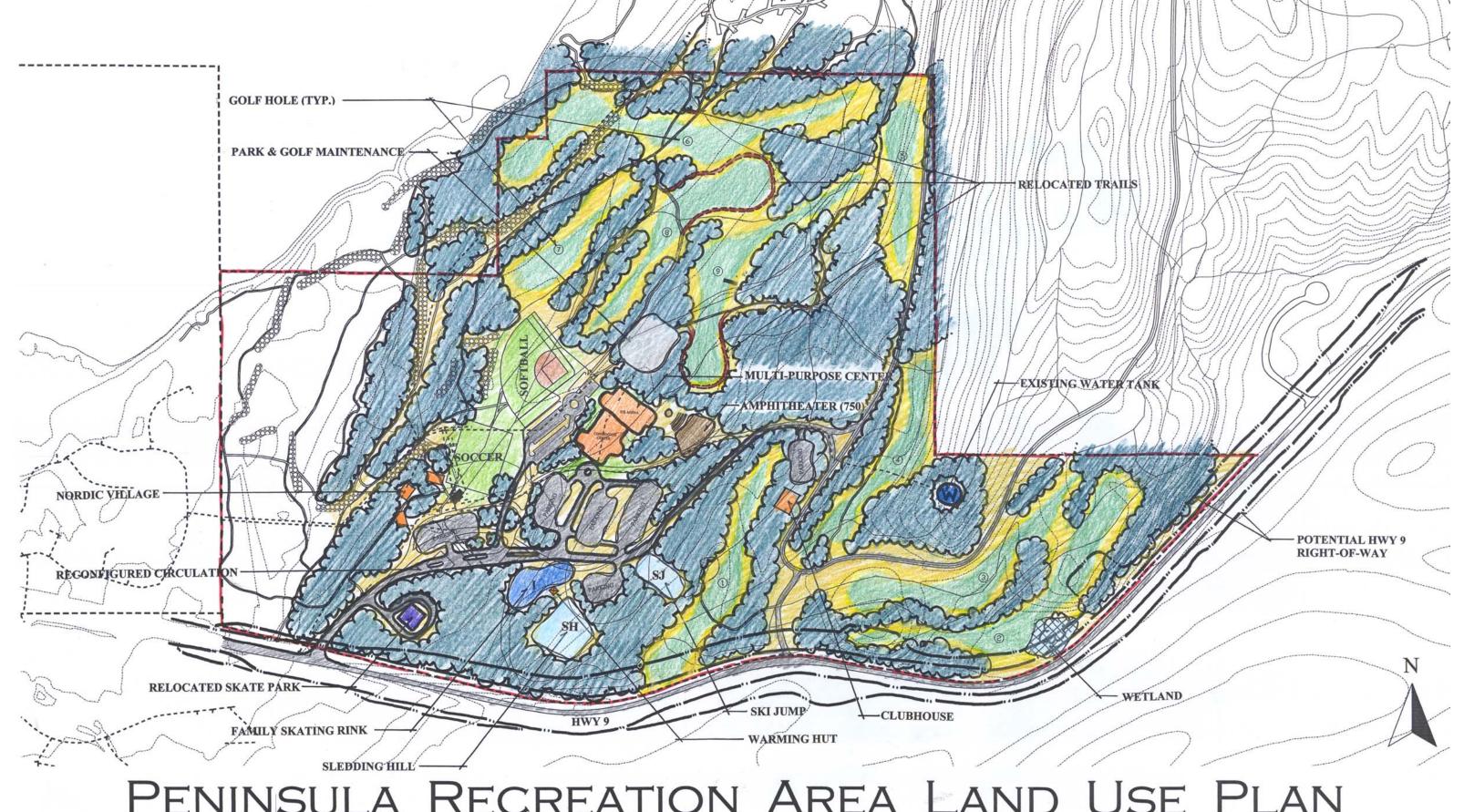
EXISTING TRAILS
BASE MAP



200 0 200 400 600 800 1000 Feet SCALE: 1" = 200'

WINSTON ASSOCIATES

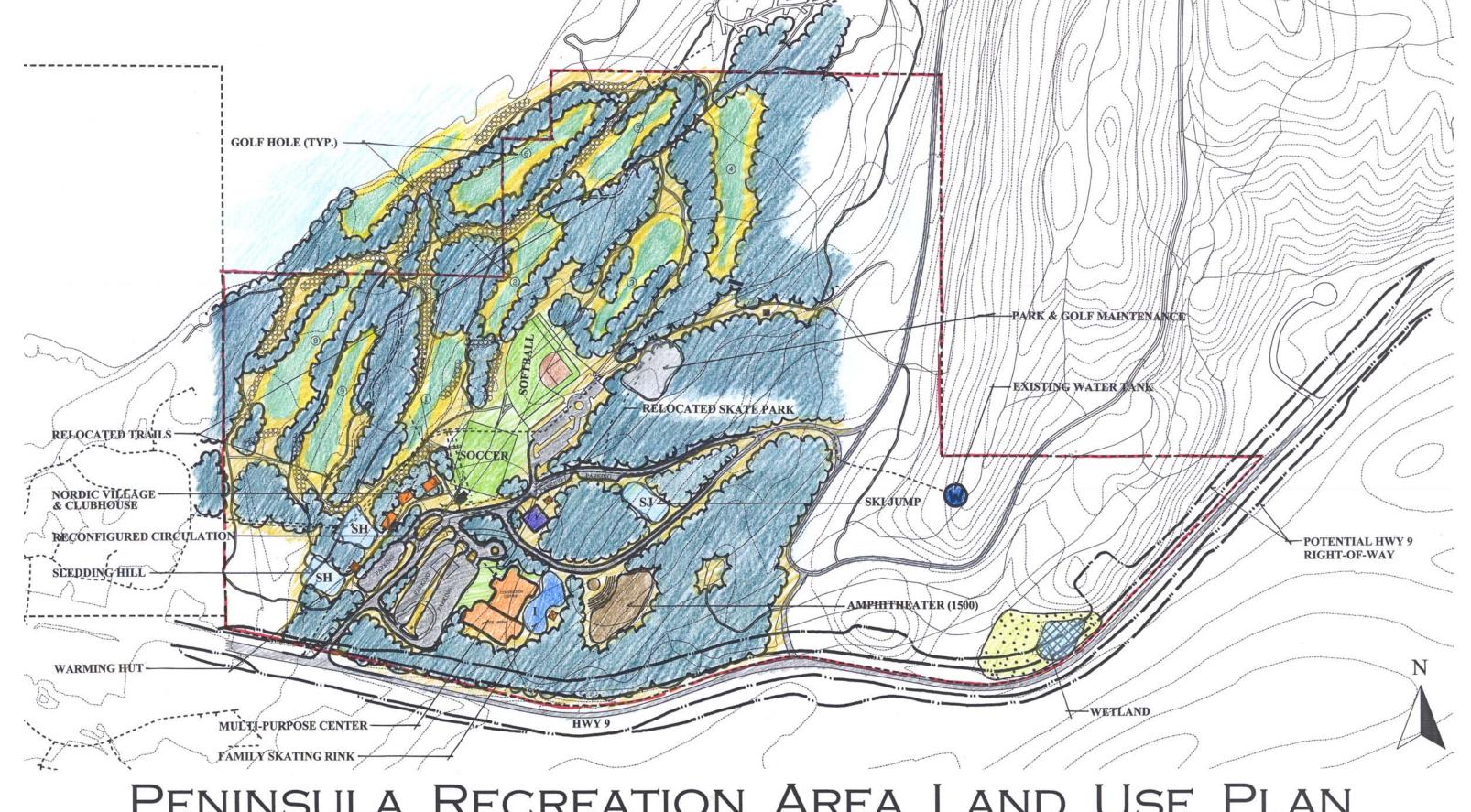
CONCEPTA MAP



200 0 200 400 600 800 1000 Feet SCALE: 1" = 200'

Winston Associates

CONCEPT B MAI



200 0 200 400 600 800 1000 Feet SCALE: 1" = 200'

Winston Associates

CONCEPT C MAP

MARCHARIT

5

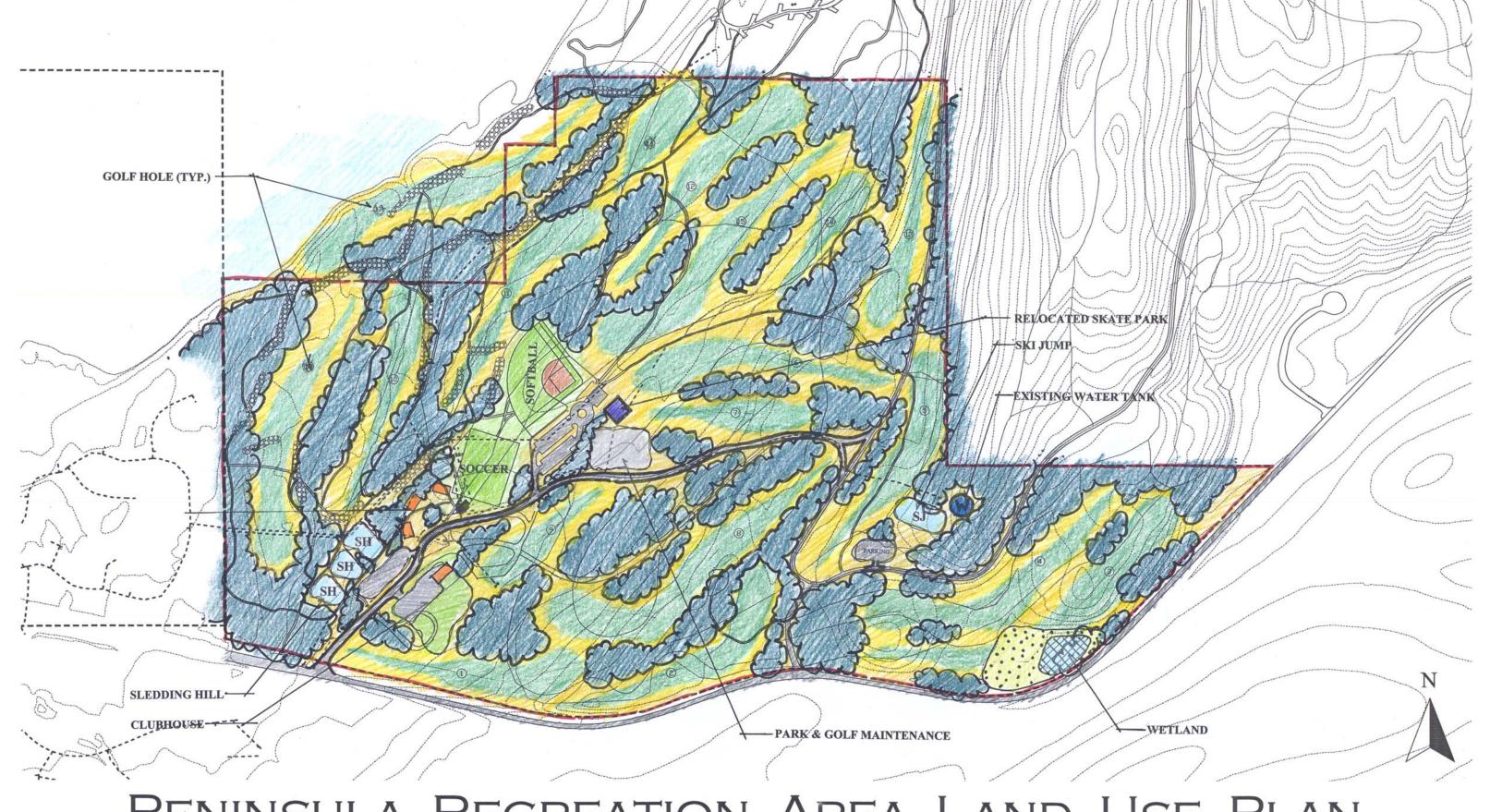


200 0 200 400 600 800 1000 Feet SCALE: 1" = 200'

WINSTON ASSOCIATES

CONCEPT D

MAP



200 0 200 400 600 800 1000 Feet SCALE: 1" = 200'



18-HOLE GOLF COURSE OPTION

MAP





PENINSULA RECREATION AREA LAND USE PLAN

400 0 400 800 1200 SCALE: 1"=400"



TOWN OF FRISCO

PREFERRED CONCEPT WITH EXISTING TRAILS

мар **9**



PENINSULA RECREATION AREA LAND USE PLAN Town Of Frisco







OPTION 1

MAP 10



PENINSULA RECREATION AREA LAND USE PLAN



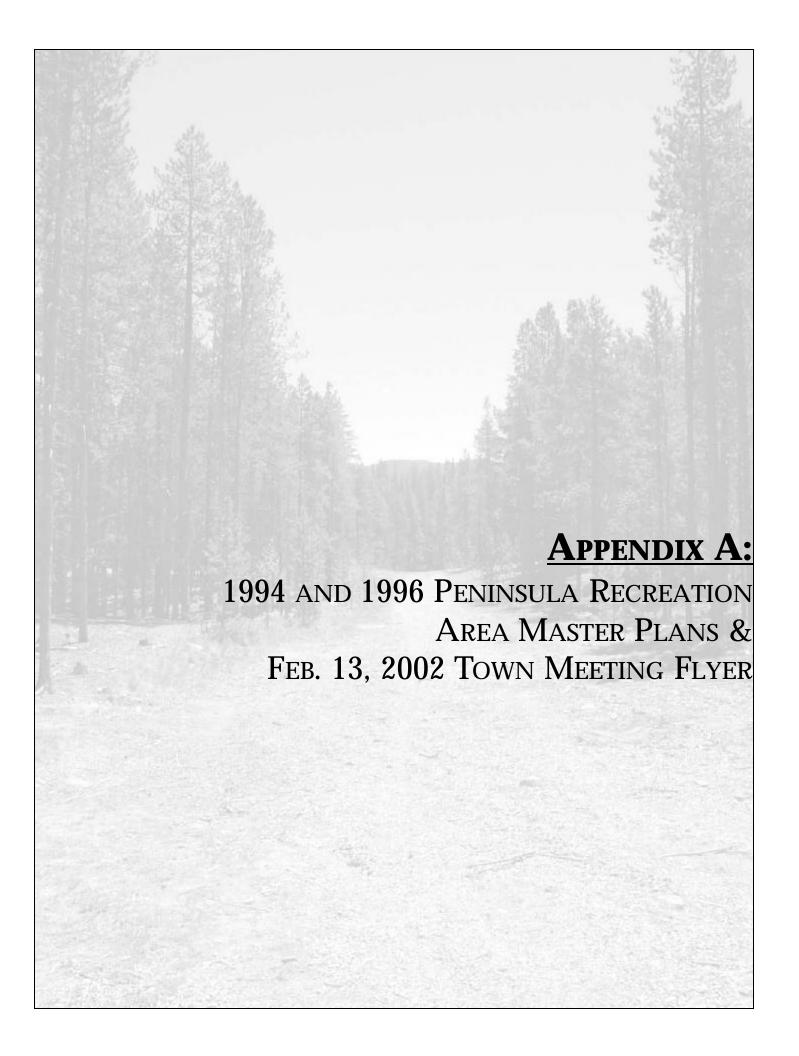


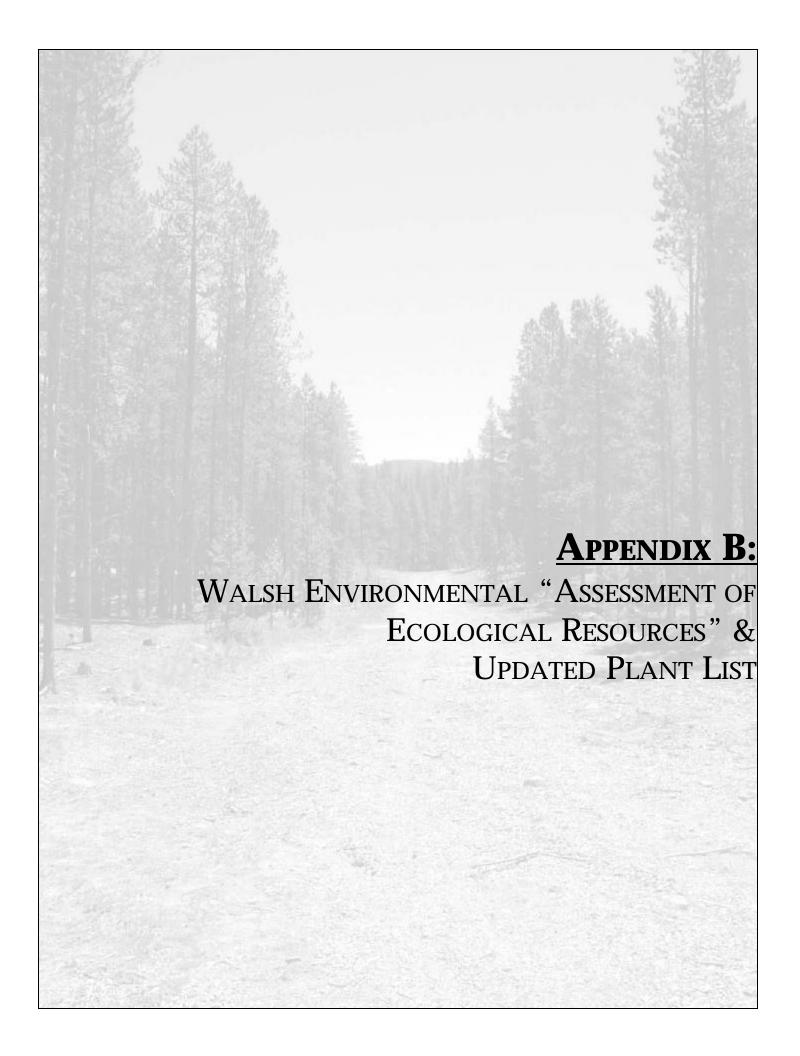
TOWN OF FRISCO



OPTION 2

Map **11**





Assessment of Ecological Resources The Peninsula Recreation Area Land Use Plan, Frisco, Colorado

Introduction

A site visit was conducted on May 30, 2002, by Dr. Allen Crockett and Ms. Maureen O'Shea-Stone of Walsh Environmental Scientists and Engineers, LLC, in conjunction with Mr. Paul Kuhn and Mr. Jason Gilliland of Winston Associates. The 219-acre project site was traversed on foot, visually assessed, and photographed. An earlier inventory and assessment of the site (Cooper *et. al.* 1990) was reviewed to provide background information on site conditions and serve as a basis for assessing ecological changes during the past 12 years. Based on observations during the May 2002 site visit, Walsh ecologists concur with most of the results and conclusions of the previous assessment.

Vegetation

The site is dominated by variations of lodgepole pine forest, with a sparse understory of low-growing shrubs (especially Canada buffaloberry and dwarf juniper), wildflowers, and grasses. Much of the ground beneath the tree canopy is either bare soil or dense needle litter. In general, lodgepole pine forests are known for their low species diversity and low productivity of both plants and wildlife, and this situation is quite evident in the Frisco Peninsula area.

Open areas between trees support more diverse meadow communities of grasses, sedges, and wildflowers and are most common in the western part of the site. A series of parallel north-south ridges ascend toward a ridgeline near the western boundary, which is the highest part of the site. These ridges are forested with a dense cloak of lodgepole pine. On the eastern side of this ridge system, the terrain descends sharply and supports a more open forest of lodgepole pine, intermixed with small pockets of aspen glades and grassy meadows.

An updated list of common plants that occur onsite is presented in Table 1. This includes a few species not noted on the Peninsula site during the previous survey and represents the current understanding of plant species distributions in Colorado as well as revisions to taxonomic nomenclature. Taxonomic authorities for the changes in species names and geographic distributions are Weber and Wittmann (1992, 2001).

The only wetlands onsite are in a small area at the extreme southeastern corner, inside a curve of State Highway 9. These appear to have once occupied a bow in a narrow forest drainage. However, this hydrological connection has been severed by the construction of the highway. As a result, the wetlands appear to be becoming drier, based on shifts in species dominance. No other plant communities of special interest present within the Peninsula site.

Almost all of the vegetation of the site appears to have experienced a significant amount of physical disturbance in the past due to logging or tree thinning, road and trail construction, and other human use. Major areas of surface disturbance include piles of soil and rock in the southern part of the site, west of the Forest Service road, and the barren area associated with construction of a water tank northeast of the soil and rock piles.

No pristine, unique, or unusually high-quality areas were found within the Peninsula site. However, the forest in the northern portion, especially on the west-facing sides of the ridges, appears to be the most diverse in terms of plant species and tree age. The greater diversity is reflected by the presence of conifers other than lodgepole pine—viz., Douglas-fir, subalpine fir, and Engelmann spruce—as well as by more abundant aspen and a greater variety of herbaceous species in the understory. Because of the higher quality of the forest and associated wildlife value in this area, it should be given consideration for preservation or otherwise minimizing development or recreational impacts.

In general, plant communities on the site are in relatively good health. Some mistletoe infection was observed in lodgepole pine throughout the site, but not at a level of special concern. The Town of Frisco has undertaken the removal of beetle-killed and beetle-infested trees in the past, and no significant areas of bark beetle infestation were observed during the May 2002 site survey. Although the site is generally relatively free of weeds, some noxious weeds were noted in areas of surface disturbance such as along near trails, in parts of the disc golf course, and adjacent to the parking lot. Noxious weeds observed include Canada thistle, musk thistle, and scentless chamomile. The last species is of particular concern because it is rapidly becoming a serious land management problem in nearby mountain towns such as Breckenridge. Walsh ecologists recommend that any land use plan for the site include weed management, especially the eradication and monitoring of scentless chamomile.

Visible changes to vegetation have occurred onsite in the intervening 12 years since the first survey. These appear to be due to development of facilities and increased visitor use of the area, mostly in the southern half of the site. The athletic fields and parking lot occupy an area that formerly supported a meadow of nodding brome, sedge, and potentilla (cinquefoil). The number of social trails also appears to have increased substantially throughout the area. The most dramatic impacts to vegetation and soils are in the vicinity of the disc golf course. The heavy off-trail use of this area has resulted in widespread trampling of herbaceous vegetation and shrubs, resulting in soil erosion. Many trees have sustained multiple, severe limb breaks and trunk injuries.

Wildlife

All of the few songbirds observed during the site visit were noted in the relatively more open forest along the western and eastern edges of the site and in the area of mixed conifers described above. Species seen or heard included Hammond's flycatcher, cordilerran flycatcher, mountain chickadee, yellow-rumped warbler, chipping sparrow,

and pine siskin. All of these are arboreal species that spend most or all of their time in the canopies of coniferous forests. Birds normally associated with aspen or more diverse spruce/fir forests are mostly lacking from the site, as are ground-nesting birds and species associated with a shrub understory. No birds were seen or heard in the denser interior forest

A few piles of American elk fecal pellets in the open forests of the northeastern part of the site were the only signs of use by this species observed during the site visit. Cooper et. al. (1990) found evidence of use by elk and mule deer only in the northwestern part of the site, where the largest grass areas occur. They also noted greater use north of the site boundaries, as evidence by increased numbers of fecal pellets, particularly near the Crown Point area where timbering operations have created large areas of grass-dominated vegetation.

Carnivores likely to occur include the coyote and red fox. Although neither species was observed, both are common in similar habitats adjacent to mountain communities throughout the region. One den on the side of a ridge adjacent to the disc golf course appeared to be that of a red fox. Black bears could occur as irregular transients; mountain lions are much less likely to occur due to the surrounding development and relatively low use by deer or other prey species.

The only small mammal observed onsite during the May 2002 survey was the pine squirrel (red squirrel or chickaree), which feeds on the seeds of lodgepole pine. Small burrows along the forest edges are probably those of the golden-mantled ground squirrel and/or the least chipmunk. A larger rodent, the porcupine, probably also occurs onsite, as do native mice such as the deer mouse, montane vole, and long-tailed vole. The mountain cottontail, raccoon, and striped skunk are also likely residents.

Overall, the May 2002 survey by Walsh agrees with the findings of the earlier study by Cooper *et al.* (1990), which concluded that the site is not heavily utilized by wildlife and does not support critical habitat for any species of special concern. This is due to a combination of the low diversity and productivity of lodgepole pine forests and the relatively high level of human activity on, and surrounding, the Peninsula. Indeed, the level of human activity has increased since the previous study as a result of construction of the athletic fields, disc golf course, and parking lot, as well as new residential development along the southwestern side of the site. The trails are used throughout the year—by skiers in the winter, and day hikers and bikers from spring through fall.

Minor migration routes for elk and deer that reportedly once skirted the southwestern portion of the site probably no longer exist due to the increased human use, adjacent development, and highway traffic.

Conclusions

The Peninsula site is dominated by a dense forest of even-aged lodgepole pine, which supports a low diversity and productivity of vegetation and wildlife. Small areas of more

open forest and a wetland area near the southeastern corner provide most of the ecological variety and interest.

Based on these onsite conditions, and the limitations on wildlife use associated with current human use both onsite and in surrounding areas, none of the potential recreational scenarios for the site would cause significant adverse ecological impacts. This conclusion includes consideration of all four types of adverse impacts potentially associated with human development and use: disturbance, habitat loss, habitat fragmentation, and interference with wildlife movement. Nonetheless, a few measures could be incorporated into project design for future recreational scenarios to minimize any unavoidable impacts and potentially increase ecological diversity:

- Preserve, or limit impacts to, the higher quality forest area that currently supports more diverse tree species and a richer understory in the northern portion of the site. This area also provides a wildlife connector to areas east of the site, the USFS campground area, and Crown Point site to the north of the site.
- Preserve the wetland area in the southeastern corner, plus a 50- to 100-foot buffer.
- If disc golf is retained, use "friendly fences" along portions of the disc golf course, place natural obstacles and native mulch beneath the pines, and plant native understory shrubs (e.g., Canada buffaloberry, waxflower (jamesia), wax currant, and dwarf juniper) to discourage off-trail use and help to restore currently severely degraded areas.
- If a golf course is constructed, create greater species diversity by planting aspen, species of native conifers other than lodgepole pine, and various native tall shrubs.
- Restore the currently bare soil piles and disturbed area in the southeastern corner of the site.

Proper design and implementation of these measures will help to minimize unavoidable impacts to the currently limited ecological quality and wildlife use of the Peninsula site. Except for the few relatively higher quality areas described above, issues associated with alternative uses for the site appear to be related primarily to broader social considerations and quality of the aesthetic and recreational experience (e.g., of cross-country skiers, hikers, and cyclists) rather than ecological sensitivities *per se*.

Citations

Cooper, D.J., T.R. Cottrell, R.W. Thompson, and D. Yates. 1990. *The Peninsula: Vegetation, Wildlife, Soils, and Wetlands Inventory*. Prepared for Town of Frisco, Colorado. October.

Spackman, S.B., B. Jennings, J. Coles, C. Dawson, M. Minton, A. Kratz, and C. Spurrier. 1997. *Colorado Rare Plant Field Guide*. Prepared for the Bureau of Land Management,

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Weber, W.A. and R.C. Whittmann. 1992. *Catalog of the Colorado Flora*. University Press of Colorado. Niwot, Colorado.

Weber, W.A., and R. C. Whittmann. 2001. *Colorado Flora: Western Slope*. University Press of Colorado. Boulder, Colorado.