United States Department of Agriculture

Forest Service

Pacific Southwest Region

Final Environmental Impact Statement

and Record of Decision on Future Use of the Echo Summit Ski Area Site

March, 1993

United States Department of Agriculture | Forest Service | Eldorado National Forest | 100 Forni Road Placerville, CA 95667 (916) 622-5061

Reply to: 1950

Date: April 16, 1993

Errata Sheet

Dear Friend of the Eldorado National Forest:

Please note the change below for the Final Environmental Impact Statement and Record of Decision on Future Use of the Echo Summit Ski Area Site you recently received.

Specific Comments

Page 1, Record of Decision, paragraph 1 under Reasons for Decision and other Alternatives Considered, line 1, replace "(Special Use Permit or MOU allowing snowmobile events)" with " Forest Service Preferred Alternative (Issue Permit or MOU with Potential for Expansion)"

For further information contact:

Diana Erickson
Echo Summit EIS Coordinator
Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Sincerely,

for JOHN PHIPPS
Forest Supervisor

RECORD OF DECISION
USDA-Forest Service

Final Environmental Impact Statement
Eldorado National Forest
Future Use of
Echo Summit Ski Area Site

El Dorado County, California
Eldorado National Forest

The Decision

It is my decision to implement Alternative 5 of the Final Environmental Impact Statement for Future Use of the Echo Summit Ski Area site. Under this alternative, a special use permit will be issued, or a Memorandum of Understanding (MOU) developed with another government agency, for use of the facilities with some potential for expansion.

If a suitable permittee or agency is not found within a reasonable period of time, then Alternative 2 will be implemented. Alternative 2 provides for removal of the building, ski lifts, and other facilities not needed for the Sno-Park, and restoration of the site.

Under Alternatives 2 and 5, the Management Emphasis and Description for Management Area 11 in the *Eldorado National Forest Land and Resource Management Plan* would be amended to provide for Developed Winter Sports sites that do not include downhill skiing. Management Emphasis will read "Operate and maintain existing winter sports sites, provide aesthetically pleasing, well maintained, fully equipped facilities for the pleasure and safety of Forest visitors. "Description will read "These are developed winter sports sites that are administered by the Forest Service and operated by the Forest Service, other government entities, or by private concessionaires under Special Use Permit. Uses vary by site, and may include downhill skiing, nordic skiing, and snowplay. Existing winter sports sites contained in Management Area Number 11 are..."

Reasons for Decision and other Alternatives Considered

Alternative 5 (Special Use Permit or MOU allowing snowmobile events) was chosen for its compatibility with the state Sno-Park and for continued open public access to the Pacific Crest Trail, hiking trails, and Nordic ski trails. This alternative was attractive due to the minimal cost that would be incurred by the Forest Service. These costs would be more than offset by the permit fees collected. Revenues would also be generated for state and local governments.

Alternative 1 (no action) was not selected because it did not resolve the issue of what to do with the existing ski area facilities.

Alternative 2 (Remove buildings and facilities / Restore Site) will be implemented if a permittee is not found for the chosen alternative. This alternative would result in the greatest improvement of environmental quality of the area's soil, water, wildlife, and fishery resources.

Alternative 3a (Special use Permit or MOU) was not selected since the likelihood of locating a permittee or agency with an economically viable use for the site was considered to be greater with the potential for expansion under Alternative 5.

Alternative 3b (Special Use Permit or MOU allowing snowmobile events), although similar to 3a, was not chosen due to the potential for additional traffic congestion on U.S. Highway 50 and limited parking during snowmobile events. Also, negative public comment was received on this alternative from the DEIS.

Alternative 4 (Forest Service Operation) was not chosen due to the associated high cost to the federal government.

Alternatives 6a (Permit for Downhill Ski Area), 6b (Downhill Ski Area with permittee operation of Sno-Park), and 6c (Permit for developed nordic ski area / snowboard park) were not chosen due to conflicts with the Sno-Park and with the existing Nordic ski use. Parking on site is limited for a developed winter sports facility.

Public Participation

The Eldorado National Forest conducted an active public involvement program. Federal, State, and local agencies have been informed and consulted throught the planning effort. Forest users have had an opportunity to participate.

A Notice of Intent to prepare an EIS for the plan was published in the Federal Register on October 21, 1991. Public scoping meetings were held in Placerville on April 30, 1991, and November 1, 1991, and in South Lake Tahoe on November 13, 1991. A Notice of Availiability of the DEIS and proposed Plan was published in the Federal Register on November 27, 1992. The comment period lasted through January 15, 1992.

Findings Required by Other Laws

Alternative 5 is consistent with the *Eldorado National Forest Land and Resource Management Plan* as amended by this decision.

Environmentally Preferred Alternative

Alternative 2 would be preferred environmentally, where the Ski Lodge, chair lifts, and all facilities other than those being utilized for the Sno-Park and Pacific Crest Trail parking would be removed. All disturbed areas (21 acres) would be revegetated with native trees, grasses, and riparian vegetation.

This alternative would result in the greatest improvement of environmental quality to the area's soil, water, wildlife, and fishery resources. This alternative will be implemented if no adequate permittee can be found.

Implementation

The plan will be implemented as soon as practicable, but no sooner than 30 days after the Notice of Availability of the FEIS, and Record of Decision appears in the *Federal Register.*

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 217. Any written notice of appeal of this decision must be fully consistent with 36 CFR 217.9, "Content of a Notice of Appeal," including the reasons for appeal. The appeal must be filed with Ronald E. Stewart, Regional Forester, no later than 45 days after the date of legal notice of the decision in the Mountain Democrat. Appellants must submit two copies of the Notice of Appeal.

For further information contact Beth Paulson; Eldorado National Forest; 100 Forni Road; Placerville, CA 95667; or call at (916) 622-5061.

Contact Person

Questions related to this decision may be addressed to Diana Erickson; Eldorado National Forest; 100 Forni Road; Placerville, CA 95667; Phone: (916) 622-5061

JOHN PHIPPS
Forest Supervisor

MAR 31 1993
Date

Final Environmental Impact Statement

on the Future Use of

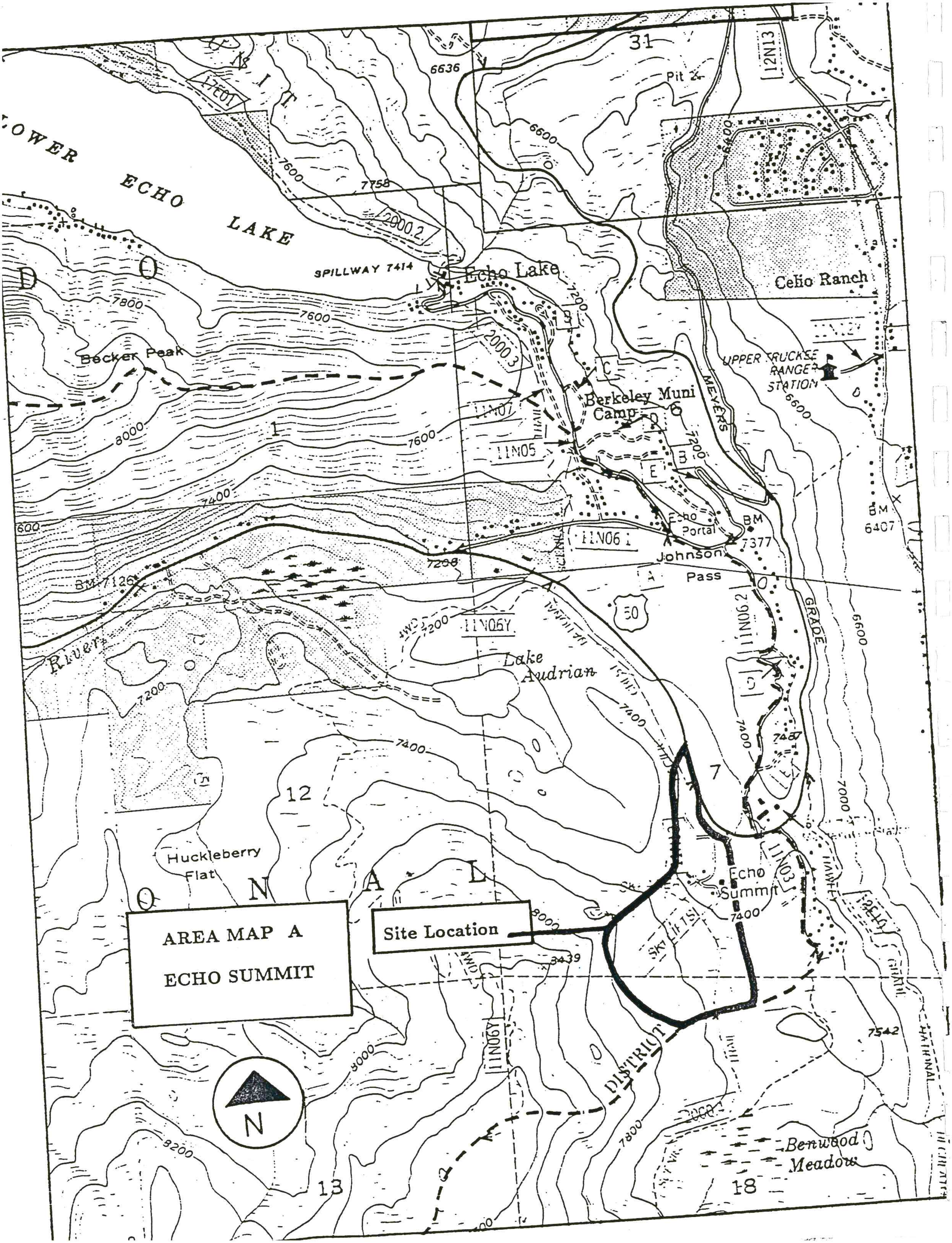
ECHO SUMMIT SKI AREA SITE

El Dorado County, California
Eldorado National Forest

Responsible Agency:	USDA Forest Service
Responsible Official:	John Phipps Forest Supervisor Eldorado National Forest
Information Contact:	Diana Erickson Eldorado National Forest 100 Forni Road Placerville, CA 95667 Phone: (916) 622-5061

Abstract:

This Final Environmental Impact Statement documents the analysis of 9 alternatives for future use of the former Echo Summit ski area facilities and site on the Placerville Ranger District, Eldorado National Forest. The study site is located in El Dorado County, California. Alternatives considered are No Action (Alternative 1), Remove Building and Facilities/Restore Site (Alternative 2), Issue Special Use Permit (Alternative 3a), Special Use Permit including Snowmobile Events (Alternative 3b), Forest Service Operation (Alternative 4), Special Use Permit with Potential for Expansion (Alternative 5), Permit for Downhill Ski Area (Alternative 6a), Downhill Ski Area with Permittee operated Sno-Park (Alternative 6b), and Permit for Developed Nordic Skiing/Snowboard Area. Six of the Alternatives studied would result in an amendment to the Eldorado National Forest Land and Resource Management Plan.


AREA MAP A
ECHO SUMMIT
Site Location
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LOWER ECHO LAKE
Echo Lake
SPILLWAY 7414
Becker Peak
Berkeley Muni Camp
Celio Ranch
UPPER TRUCKEE RANGER STATION
MEYERS
Echo Portal
Johnson Pass
BM 7377
BM 6407
BM 7126
Lake Audrian
Huckleberry Flat
Echo Summit
Benwood Meadow
DISTRICT
GRADE
Pit
River
11N05
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Summary

The following is a summary of the final environmental impact statement for future use of the former Echo Summit ski area facilities and site on the Placerville Ranger District, Eldorado National Forest.

Proposed Action

The USDA Forest Service proposes to issue a special use permit or Memorandum of Understanding (M.O.U.) for operation and management of the former Echo Summit Ski Area lodge and to remove lifts and other facilities at the site which are not compatible with the selected use. The site is located south of U.S. Highway 50, just west of Echo Summit.

Purpose and Need

The site being studied was first developed as the "Nebelhorn Ski Area" in 1947. It is located south of Lake Tahoe along the heavily traveled U.S. Highway 50 corridor. It is easily accessible to the Pacific Crest Trail, Desolation Wilderness, Lake Tahoe, Echo Lake, and major ski areas. It is entirely on national forest land. Elevation of the base facilities is approximately 7,500 feet. At one time there were approximately 25 kilometers of cross country ski trail associated with the site. Destinations included Benwood Meadow, Echo Lake, and Lake Audrain. Following a series of foreclosures, the Small Business Administration acquired the facilities in 1989. With the assistance of the State, the Forest Service acquired the facilities from the Small Business Administration in 1990. A part of this agreement provided for operation of a Sno-Park winter parking area and use of the site for snow play in the winter months. Other current uses of the site include nordic skiing on marked but ungroomed routes, and hiking in the summer months. The former ski lodge has been boarded up and has received little maintenance since it was acquired by the Forest Service. Ski lifts and other facilities remain on site, posing some safety and vandalism concerns.

The *Eldorado National Forest Land and Resource Management Plan*, published in 1988, classified this site as Management Area 11, Existing Winter Sports Site, a designation that was consistent with its use at that time. If Alternatives 2, 3a, 3b, 3c, 4, or 5 of this environmental impact statement are selected, the *Eldorado National Forest Land and Resource Management Plan* will be amended. The Standards and Guidelines for Management Area 11 would be revised to provide for Developed Winter Sports sites that do not include downhill skiing.

The current condition of the former ski area facilities being vacant and unused is not consistent with *Eldorado National Forest Land and Resource Management Plan* direction. Although a portion of the site is being used for dispersed snow play in conjunction with the State operated Sno-Park, the lodge and other ski area facilities are not being used for public benefit. Since the site is no longer occupied or managed by a permittee, public safety, deferred maintenance, and the potential for vandalism are major concerns contributing to the need for this environmental impact statement.

Issues to be Considered

A consolidated list of issues was developed from public comments submitted through scoping meetings, letters, drop in visits, and phone calls, as well as concerns of the Forest Service Interdisciplinary Team.

Issues used to Compare Alternatives:

1. Ensure compatibility with existing State Sno-Park Operation and with the Forest Service and State of California Joint Powers Agreement.

2. Improve public safety for snow play recreationists.

3. Protect and enhance watershed, soils, wildlife and downstream fisheries resources.

4. Provide recreation opportunities to public in a variety of economic classes.

5. Continue to maintain open access through the site along the Pacific Crest Trail and other popular hiking trails to the existing ungroomed nordic ski trails, and for the annual Echo to Kirkwood nordic ski race.

6. Meet current and projected demand for developed downhill and cross country ski area facilities in the region.

7. Utilize existing building for year round use.

8. Mitigate noise from snowmobile events that could conflict with backcountry experience and have possible impacts on wildlife.

9. Mitigate traffic congestion on U.S. Highway 50.

10. Maintain revenue to Federal, State, and local governments by issuing a special use permit for use of the site.

11. Minimize costs incurred by the Forest Service, and ultimately by the taxpayer, for implementing the alternative.

Alternatives Including the Proposed Action and their Effects

Alternative 1 (No Action)

The existing ski lodge and other buildings, lifts, and facilities would remain on site but would not be used.

This alternative does not resolve the issue of what to do with the existing ski area facilities. The facilities would continue to deteriorate over time and may be accelerated by vandalism, due to a lack of presence at the site. The existing ski lifts would present hazards to snow players. A discrepancy would continue to exist in the Eldorado National Forest Land and Resource Management Plan. *Potential revenues to Federal, state, and local governments would be foregone.*

Alternative 2 (Removal of Building & Facilities/Site Restoration)

The ski lodge, chair lifts, and all facilities other than those being utilized for the Sno-Park and Pacific Crest Trail parking would be removed. All disturbed areas (21 acres) would be revegetated with native trees, grasses, and riparian vegetation.

This alternative would result in the greatest improvement of environmental quality of the area's soil, water, wildlife, and fishery resources. Public safety would be enhanced by removal of the existing facilities. Potential revenues to Federal, state, and local governments would be foregone.

Alternative 3a (Issue Special Use Permit or M.O.U.)

The Forest Service would issue a prospectus for operation by a business or non-profit organization under Special Use Permit, or they would enter directly into a Memorandum of Understanding (M.O.U.) with another government agency, for management and operation of the Lodge building for year round public use. Parking would be developed for up to 100 vehicles in conjunction with the Lodge use. There would be no other expansion of facilities. Lifts and unnecessary outbuildings would be removed and disturbed areas (19 acres) would be revegetated with native trees, grasses, and riparian vegetation.

This alternative would provide year-round use of the Lodge for public benefit while allowing restoration on the remainder of the site. This alternative is compatible with the state Sno-Park and provides for continued open public access to the Pacific Crest Trail, hiking trails, and Nordic ski trails. Minimal costs would be incurred by the Forest Service and would be more than offset by permit fees collected. Revenues would be generated for state and local governments.

Alternative 3b (Issue Permit or M.O.U. and Allow Snowmobile Events)

Similar to Alternative 3a in that a permit or M.O.U. would be issued for use of the building; however, in addition, occasional closed course snowmobile events would be allowed on site on a permit basis.

Effects of this alternative would be similar to Alternative 3a, except for the potential for additional traffic congestion on U.S. Highway 50 during snowmobile events.

Alternative 4 (Forest Service Operation)

Similar to Alternative 3a, except that the building and site would be operated by the Forest Service as a year-round public information center that could also be available for other services, such as book sales, food and beverage services, and conference space.

Effects of this alternative would be similar to Alternative 3a. This alternative would also enhance public information by providing interpretation of resources. This alternative would have the highest cost to the federal government of any alternative, which would be partially offset by revenues generated from rentals and other uses. Minimal revenues would be provided to state and local governments.

Alternative 5 Forest Service Preferred Alternative (Issue Permit or M.O.U. with Potential for Expansion)

The Forest Service would issue a prospectus for operation by a buisness or non-profit organization under a special use permit, or they would enter directly into a Memorandum of Understanding (MOU) with another government agency, for year-round management of the lodge building and adjacent area. Additional construction would be limited to those areas that have already been disturbed by construction or parking. This alternative is similar to Alternative 3a, except less area (12 acres) would be revegetated with native trees, grasses, and riparian vegetation.

Effects of this alternative would be similar to Alternative 3a; however, benefits to water, wildlife, fishery, and soils resources would not be as great because less of the site would be restored.

Alternative 6a (Permit for Downhill Ski Area)

Issue permit for operation of site as a family oriented downhill ski resort, with the additional attractions of Nordic Ski trails. Additional parking for up to 100 cars would be developed.

The existing buildings would be utilized for public benefit. In addition, the area available for snow play in conjunction with the Sno-Park would be significantly reduced. Open public access to Nordic ski trails would be restricted because trails would be groomed and a fee would be required. Recreational opportunities would be expanded through developed downhill and cross country ski facilities, although demand for additional facilities of this type is not high. Resources would not be enhanced or restored beyond minimal work needed. Revenues would be generated to the Federal Government through special use permit fees collected from the permittee. Revenues would also be generated for state and local governments.

Alternative 6b (Downhill Ski Area with permittee operated Sno-Park)

Similar to Alternative 6a, except that Sno-Park facilities would be operated by the permittee. Total vehicle parking in this alternative would not exceed 300 cars.

This alternative would be similar to Alternative 6a, except that the permittee operation of the state Sno-Park would be a violation of state law and would be unacceptable to the state.

Alternative 6c (Permit for Snowboard Park and/or Nordic Ski Area)

Similar to Alternative 6a, except that instead of a downhill ski area, the site would be used as a snowboard area and/or as a developed cross country ski area providing groomed trails, ski lessons, ski rentals, and day lodge. Existing lifts would be removed. A smaller rope tow may be installed at the option of the permittee. The westernmost ski slope would not be within the permit area and would be managed by the Forest Service as an open snow play area in conjunction with the Sno-Park.

The public would continue to have open access to the westernmost ski slope for snow play. If groomed Nordic ski trails are developed, open public access to existing groomed ski trails would be restricted. Recreational opportunities would be expanded through developed snowboarding and/or cross country skiing facilities. ■

Purpose and Need

Proposed Action

The USDA Forest Service proposes to issue a special use permit or enter into a Memorandum of Understanding (MOU) for operation and management of the former Echo Summit Ski Area lodge, and to remove lifts and other facilities at the site that are not compatible with the selected use. The site is located south of U.S. Highway 50 west of Echo Summit.

Purpose and Need

The site being studied was first developed as the "Nebelhorn Ski Area" in 1947. It is located approximately 10 miles west of South Lake Tahoe along the U.S. Highway 50 corridor. It is easily accessible to the Pacific Crest Trail, Desolation Wilderness, Lake Tahoe, Echo Lake, and major ski areas. It is entirely on national forest land. Elevation of the base facilities is approximately 7,500 feet. At one time there were approximately 25 kilometers of cross country ski trail associated with the site. Destinations included Benwood Meadow, Echo Lake, and Lake Audrain. In 1985 the Echo Summit Ski Area Development Plan was prepared to study expansion of the ski area to make it more competitive. A Forest Service Environmental Assessment prepared in 1989 by the Placerville Ranger District identified Echo Summit as a high priority site for development of a State Sno-Park. Following a series of foreclosures, the Small Business Administration acquired the facilities in 1989. With the assistance of the State, the Forest Service acquired the facilities from the Small Business Administration in 1990. A part of this agreement provided for operation of a Sno-Park winter parking area and use of the site for snow play in the winter months. Other current uses of the site include nordic skiing on marked but ungroomed routes, and hiking in the summer months. The former ski lodge has been boarded up and has received little maintenance since it was acquired by the Forest Service. Ski lifts and other facilities remain on site, posing some safety and vandalism concerns.

The *Eldorado National Forest Land and Resource Management Plan* (1989), classified this site as Management Area 11, Existing Winter Sports Site, a designation that was consistent with its use at that time. Management direction for the area was to operate and maintain existing downhill skiing sites and to encourage existing winter sports permittees to develop cross country skiing in conjunction with their downhill operation. The area was closed to off highway vehicle use. Under Alternative 1, No Action, an amendment to the *Eldorado National Forest Land and Resource Management Plan* would be required because a discrepancy would continue to exist between the Plan and the existing use of the site. If Alter-

natives 2, 3a, 3b, 4, 5, or 6c of this environmental impact statement are selected, the *Eldorado National Forest Land and Resource Management Plan* will be amended to reflect the change in use of the Echo Summit site. Alternatives 6a and 6b, resuming use of the site as a downhill ski area, are consistent with the current *Eldorado National Forest Land and Resource Management Plan* classification.

The current condition of the former ski area facilities being vacant and unused is not consistent with *Eldorado National Forest Land and Resource Management Plan* direction. Although a portion of the site is being used for dispersed snow play in conjunction with the State operated Sno-Park, the lodge and other ski area facilities are not being used for public benefit. Since the site is no longer occupied or managed by a permittee, public safety, deferred maintenance and the potential for vandalism are major concerns contributing to the need for this environmental impact statement.

Decision To Be Made

The decision to be made following this environmental impact statement is whether to issue a special use permit or MOU for operation of the former Echo Summit Ski area facilities, do nothing, or remove the facilities and restore the site. The decision will specify a general range of acceptable summer and winter uses for the site and facilities if a permit is to be issued. ■

Issues to be Considered

A series of public scoping meetings was held on the future use of the former ski area facilities and site. Meetings were held in Placerville on April 30, 1991, and November 1, 1991 and in South Lake Tahoe on November 13, 1991. A copy of the public comments recorded at those meetings is included in Appendix A. In addition to comments received at the scoping meetings, the Forest Service received approximately 20 letters and numerous phone calls from businesses and individuals commenting on future use of the ski area facilities and site. The consolidated list of issues below was derived from both public comments and concerns of the Forest Service Interdisciplinary Team for the project.

Issues used to Compare Alternatives:

1. **Ensure compatibility with existing State Sno-Park Operation and with the Forest Service and State of California Joint Powers Agreement.**

   Considerable support for the Sno-Park was expressed by the public and the California Highway Patrol as the Sno-Park provides a safer alternative for snow play than sites located right on U.S. Highway 50. Concern was also expressed that the needs of snow play recreationists need to be considered even though they are not an organized user group, and therefore not highly vocal in the planning process. Maintaining free access to slopes for snow play was indicated as being important. A need was expressed for sales of State Sno-Park tickets at the Echo Summit site. The Forest Service provided a person on site during heavy use weekends in 1992 to monitor Sno-Park use. Many people arrived at the site without Sno-Park permits. Permits could be sold on site through a lodge permittee, manned booth, or self serve vending machine.

2. **Improve public safety for snow play recreationists.**

   Existing lift towers pose a hazard. Current use patterns could lead to accidents. Different types of use could be separated (people going uphill vs/people sliding downhill; sledders, sliders, etc.). A concern was expressed that medical help should be available on site for accidents. Cost of liability insurance was questioned if snow play was managed by a permittee. A need was expressed for a public telephone at the site, especially in the winter where there is potential to get snowed in if CalTrans does not plow the road right away. Emergency numbers for CalTrans and medical services should be posted.

Other public information services on recreation trails/opportunities at the site would also be beneficial.

3. **Protect and enhance watershed, soils, wildlife, and downstream fisheries resources.**

   The site is located in the headwaters of the American River, and contains areas classified as wetlands.

4. **Provide recreation opportunities to public in a variety of economic classes.**

   Not everyone can afford to outfit the family for downhill skiing at major ski resorts. Smaller resorts such as Echo Summit tend to be somewhat less costly due to lower ticket prices. Nordic Skiing and snow play provide even lower cost winter sports alternatives.

5. **Continue to maintain open access through the site along the Pacific Crest Trail and other popular hiking trails in the area, to the existing ungroomed nordic ski trails, and for the annual Echo to Kirkwood nordic ski race.**

   The portion of the Pacific Crest Trail passing through the former ski area is poorly marked and hard to follow. A clear route should be established and marked through the area. Alternatives involving exclusive use of the site could inhibit use of trails in the area by the public. Concern was expressed that a downhill skiing facility might block access to backcountry skiing to Benwood Meadow, Bryan, Sayles Canyon, and Lake Audrain. Grooming of existing nordic ski trails would change the experience and restrict open access.

6. **Meet current and projected demand for developed downhill and cross country ski area facilities in the region.**

   It is becoming more difficult to locate suitable sites and develop new Alpine facilities. There is currently a lack of developed (groomed) nordic skiing facilities in the U.S. Highway 50 corridor.

7. **Utilize existing building for year-round use**

   The lodge represents a sizeable capital investment; to remove it seems wasteful. Most of the public comments suggest that the building should be kept and put to use for the public good. Year-round use would provide the greatest service to the public, and continued presence on site would help to reduce vandalism problems.

8. **Mitigate noise from snowmobile events that could conflict with backcountry experience and have possible impacts on wildlife.**

9. **Mitigate traffic congestion on U.S. Highway 50.**

   Traffic could be a concern if people park on the other side of U.S. Highway 50 and cross back over to the site. Other possible concerns include large numbers of people entering or exiting the site at once, such as for a special event.

10. **Maintain Revenue to Federal, State, and local governments by issuing a special use permit for use of the site.**

11. **Minimize Costs incurred by the Forest Service, and ultimately by the taxpayer, for implementing the alternative.**

    One time expenses such as removal of the building and restoration of the site could be very expensive. Also of concern are ongoing annual expenses such as special use permit administration. Administrative expenses are compounded with operations that are marginal in terms of economic feasibility. The stability of funding for the selected use should be considered. Cost becomes especially crucial in a time of constrained Forest Service budgets.

Additional Issues that are Addressed in Coordination Requirements:

12. Protect existing water systems on site that service the recreation residence tract to the east, and CalTrans maintenance station on the north side of U.S. Highway 50. ■

Alternatives Including Proposed Action

Alternative 1 (No Action)

Use of Building:

The existing ski lodge and other buildings, lifts, and facilities would remain on site but would not be used. The buildings would remain boarded up for security.

Use of Site:

Current operation of the area as a State Sno-Park in the winter to accommodate cross-country skiers and snow players would be continued. Portable toilets would continue to be provided during the Sno-Park season. During the summer, the road accessing the Sno-Park parking area would be gated. Pacific Crest Trailhead parking would be maintained outside the gate near the entrance to the site.

A portion of one of the former ski runs with the associated flat area at the bottom would continue to be maintained for snow play use such as inner tubes, discs, sleds, etc. This area, depicted on the map for Alternative 1, may require removal of rocks, stumps, or young trees for hazard reduction. The system of ungroomed nordic ski trails which is currently being marked would continue to be available for cross country skiing. Destinations include Lake Audrain to the west and Benwood Meadows area to the south. Open access to the area would be maintained, including the Pacific Crest Trail and the Echo to Kirkwood Route. The site would continue to be used for staging the annual Echo to Kirkwood Ski race.

Site Restoration:

To protect soil and water resources and meet *Eldorado National Forest Land and Resource Management Plan* Standards and Guidelines, the following standard practices would be implemented:

1) Establish vegetative cover on disturbed sites to prevent erosion and sedimentation.

2) Insure that erosion control structures are stabilized and working.

3) Minimize erosive effects of water concentrated by man made drainages and features.

4) Disperse runoff from disturbed areas, and;

5) Decrease sediment load from disturbed areas.

The minimal restoration work would be handled by current Forest Service personnel, with possible assistance from volunteers.

Land Management Plan

Under the No Action Alternative, an amendment to the *Eldorado National Forest Land and Resource Management Plan* would be required because the site would not be managed as a downhill ski area as stated in the existing plan.

Alternative 2 (Removal of Building & Facilities/Site Restoration)

Use of Building:

The ski lodge, chair lifts, and all facilities other than those being utilized for the Sno-Park and Pacific Crest Trail parking would be removed. Removal might be done under contract to the private sector, selling salvage rights to the highest bidder.

Use of Site:

Operation of the area as a State Sno-Park in the winter to accommodate cross-country skiers and snow players would be continued. Portable toilets would continue to be provided during the Sno-Park season. During the summer, the road accessing the Sno-Park parking area would be gated. Pacific Crest Trailhead parking would be maintained outside the gate near the entrance to the site. Clear markers for the Pacific Crest Trail would be installed. An unstaffed interpretive display would be provided near the trail head.

A portion of one of the former ski runs with the associated flat area at the bottom would continue to be maintained for snow play use such as inner tubes, discs, sleds, etc. This area, depicted on the map for Alternative 2, may require removal of rocks, stumps, or young trees for hazard reduction. The system of ungroomed nordic ski trails that is currently being marked would continue to be available for cross country skiing. Destinations include Lake Audrain to the west and Benwood Meadows area to the south. Open access to the area would be maintained, including the Pacific Crest Trail and the Echo to Kirkwood Route. The site would continue to be used for staging the annual Echo to Kirkwood Ski race.

Site Restoration:

A detailed restoration plan would be developed for the site and reviewed by the Forest Service Interdisciplinary Team prior to any ground disturbing action. Following removal of all buildings, lifts, septic tanks, and leach lines, excess fill from building pads and parking areas not to be used for the Sno-Park would be removed and/or reshaped to restore a near natural drainage pattern. Existing drainage facilities such as ditches or pipes that are not needed would be removed (Restoration Areas 4, 5, and 6 on Map C). Where possible, the soil mantle would be replaced. Old access roads and ski slopes will be restored by reshaping disturbed and eroded areas to create more natural drainage patterns and installing permanent erosion control structures such as rolling dips in place of water bars (Restoration Areas 1, 2 and 3 on Map C). Heavy equipment would be utilized in areas where it would not cause excessive disturbance to existing vegetation. Areas disturbed by building, lift, parking and septic removal, grading for erosion control, and other site work would be revegetated with native trees, grasses, and riparian vegetation as appropriate. Approximately 21 acres would be restored or improved. Trees would be replanted on the

ski slopes in areas other than those identified for snow play to break up visual impact of the clearings. The restoration plan would incorporate effectiveness monitoring.

Restoration work not included in the removal contract would be accomplished by Forest Service personnel with the possible assistance of volunteers. Small contracts for equipment time and/or purchases of plant materials would be anticipated.

Land Management Plan

Under the removal and restoration alternative, the Standards and Guidelines for Management Area 11 in the *Eldorado National Forest Land and Resource Management Plan* would be amended to provide for Developed Winter Sports sites that do not include downhill skiing. Revised text would be the same as in Alternative 3a.

Alternative 3a (Special Use Permit or M.O.U.)

The Forest Service would issue a prospectus for operation by a business or non-profit organization under a special use permit, or they would enter directly into a Memorandum of Understanding (M.O.U.) with another government agency, for year-round management of the lodge building and adjacent area. The permittee or agency could act as site manager, with portions of the operation run by other entities. The permittee or agency would be responsible for necessary repairs, maintenance, and any remodeling needed on the building. Credit may be given against permit fees for this work. The existing workshop building could be used by the permittee if needed. If not needed, it would be removed. The existing ski lifts and various ticket sales and other outbuildings would be removed.

Use of Building:

The building could be used for a wide variety of institutional or public service purposes under this alternative. Emphasis in the selection process would be on uses with an environmental emphasis or providing of services and/or recreation opportunities to the general public. Some of the suggested uses might also incorporate cooperative projects benefiting the Forest Service, such as research or work projects. Suggested uses include:

- Education activities for the disabled
- Classroom/lecture areas that could be used by county schools, Boy and Girl Scouts, Sierra Club, Search and Rescue, Nordic Ski Patrol, and county recreational programs
- University field station for senior thesis research projects, biology and ecology field studies, Campus ministry retreats, student leadership training sessions, faculty or staff retreats, or other workshops
- Youth work training Center (such as a CCC camp)
- Summer camp for schools or youth organizations such as Boy Scouts, Girl Scouts, and church groups
- Meeting space for government entities (Forest Service, County, etc.) or other businesses and organizations for conferences, training sessions and workshops).
- "Community Center" or meeting site for local organizations
- Space rental for private parties, conferences, weddings
- Overnight lodging or "Bunk & Breakfast" (support was expressed for an "Alpine Kiells/Donner Spitz Haute" type facility like the one that exists at Donner Summit, to include low-key lodging, showers, and outdoor skills education)
- Warming hut or area for nordic skiers and snow players
- Cafe or other food service
- Other concessions (books, maps, outdoor equipment)
- Nordic ski school/lessons and touring
- Nordic ski rental; snow play equipment rental
- Area/work room for the Nordic Ski Patrol/Forest Service Volunteers to use as a base
- Information center or display and public telephone

- "Santa's Workshop" - Service organization use to make toys for needy children
- Sales of Sno-Park and/or other permits on site
- Space for Colleges and Universities to hold workshops, field trips/lectures, and/or use as a field station for biological research.
- Cultural arts center with art exhibits and workshops
- Musical events, concerts and workshops

Expansion of Facilities:

While there is some potential for remodeling the existing lodge building to create meeting space and limited overnight accommodations, there would be no additional buildings or new facilities permitted under this alternative. Existing decks could be modified if necessary. The existing storage building may be used, if needed, by the permittee. There would be some site disturbance associated with drilling a well to meet water quality standards and reconstruction or repair of the septic system.

A parking area separate from the Sno-Park lot would be developed for 10 to 100 vehicles, depending upon the requirements of the selected permittee and use. The 100 vehicle limit is considered to be maximum summer capacity of the disturbed area previously used by the ski resort for parking after the portion allocated to the Sno-Park is subtracted out. The area that may be used for parking is delineated on the Map for Alternative 3a. It consists of primarily of fill material, and some of it is already paved. The parking may be graveled or paved and would be developed in accordance with a site plan approved by the Forest Service. Parking layout would be designed to preserve existing vegetation. Winter parking capacity of the same area is estimated to be somewhat lower (80 vehicles) due to snow storage requirements.

Use of Site:

A portion of the site would continue to be used during the winter as the Echo Summit Sno-Park parking lot for the benefit of nordic skiers and snow players. Capacity of the Sno-Park lot when it is improved in 1992 will be 147 cars. Parking in this lot would be available for use by the lodge permittee if needed during the summer months. If this parking is not needed by the permittee, the road into the lot would be gated during the summer. Pacific Crest Trailhead parking would be maintained outside the gate near the entrance to the site. An unstaffed interpretive display would be provided near the trail head. A clearly marked route for the Pacific Crest Trail would be provided through the site.

A portion of one of the former ski runs with the associated flat area at the bottom would continue to be maintained for snow play use such as inner tubes, discs, sleds, etc. This area, depicted on the map for Alternative 2, may require removal of rocks, stumps, or young trees for hazard reduction. The system of ungroomed nordic ski trails that is currently being

marked would continue to be available for cross country skiing. Destinations include Lake Audrain to the west and Benwood Meadows area to the south.

Open public access to the area would be maintained, including the Pacific Crest Trail and the Echo to Kirkwood Route. Clear markers for the Pacific Crest Trail would be installed. The site would continue to be used for staging for the annual Echo to Kirkwood Ski race.

Site Restoration:

All ski lifts and any unnecessary outbuildings would be removed and sold or otherwise disposed of through a one time contract to the private sector. Restoration work on portions of the site not included in the permit would be accomplished by Forest Service personnel with the possible assistance of volunteers. Small contracts for equipment time and/or purchased of plant materials would be anticipated.

A detailed restoration plan would be developed for the site and reviewed by the Forest Service Interdisciplinary Team prior to any ground disturbing action. Excess fill from areas not used for the lodge, lodge parking or Sno-Park would be removed and/or reshaped to restore a near natural drainage pattern (Restoration Areas 4 and 5 on Map D). Existing drainage facilities such as ditches or pipes that are not needed would be removed. Where possible, soil mantle would be replaced. Old access roads and ski slopes would be restored by reshaping disturbed and eroded areas to create more natural drainage patterns and installing permanent erosion control structures such as rolling dips in place of waterbars (Restoration Areas 1, 2 and 3 on Map D). Heavy equipment will be utilized where it will not cause excessive disturbance to existing vegetation. Areas disturbed by septic reconstruction, well drilling, ski lift removal, parking development, grading for erosion control, or other site work would then be revegetated with native trees, grasses and riparian vegetation as appropriate. Approximately 19 acres would be restored or improved. Trees would be replanted on the ski slopes in areas other than those identified for snow play to break up visual impact of the clearings. The restoration plan would incorporate effectiveness monitoring.

Land Management Plan

Under Alternative 3a, the Management Emphasis and Description for Management Area 11 in the *Eldorado National Forest Land and Resource Management Plan* would be amended to provide for Developed Winter Sports sites that do not include downhill skiing.

Management Emphasis will read "Operate and Maintain existing winter sports sites. Provide an aesthetically pleasing, well maintained, fully equipped facilities for the pleasure and safety of Forest visitors."

Description will read "These are developed winter sports sites that are administered by the Forest Service and operated by the Forest Service, other government entities, or by private concessionaires under Special Use Permit. Uses may include downhill skiing, nordic skiing, and snowplay. Existing winter sports sites contained in Management Area Number 11 are..."

Alternative 3b (Special Use Permit or MOU Allowing Snowmobile Events)

This alternative is similar to Alternative 3a in that a special use permit or MOU would be entered into for use of the building; however, in addition, occasional closed course snowmobile events would be allowed on site on a permit basis. Key requirements for this type of event include adequate and reliable snow cover and adequate parking. The type of event proposed is called a Sno-Cross. This is a closed course event of about 1/2 to 1 mile in length. The event is the equivalent of a motorcross event for motorcycles. The proposal would be to use the eastern portion of the area where the flatter terrain is located, from about the lower chair lift to the eastern boundary of the study area. The actual course would vary from time to time. A typical layout for the course is shown on the Map for Alternative 3b. The course would be approximately 50 to 100 feet wide at the starting point, narrowing to 20 feet wide for the rest of the course. It would be created over the snow with no grading of earth or removal of trees. The course would cross over several ephemeral drainages; however, at the time of the events the drainages should not be running and should have adequate snow cover. Actual layout of the route for snowmobile events may vary slightly from year to year.

Approximately 4 events each season would be permitted, about once per month during the December to March period. The special event permit process would be utilized in allowing this event, and permit applicants would be subject to all applicable regulations. Portions of the area to be used for the events would be separated by temporary snow fencing from the rest of the area during the actual event for public and participant safety. Spectators would not be allowed on the event course. This would leave the western portion of the main slope open to the public at all times.

Approximately 100 to 200 participants are expected at each event, with an additional 100 to 200 spectators. Based on 2 1/2 people per car, 80 to 160 cars could be generated; however, the maximum capacity of the parking area available to a permittee is estimated to be 100 cars (or 250 people). Since the policy of the State is not to displace the general public from the Sno-Park lot, particularly on weekends when it is most heavily used for open snow play, the permittee for the snowmobile events would be responsible for arranging other forms of transportation such as shuttles to handle numbers of people in excess of 250. Since the location proposed for event parking coincides with that for the lodge, the event permittee would need to coordinate with the lodge permittee on use of and plowing of the parking area. Additional temporary restroom facilities would be provided by event permittee as required for the snowmobile events.

Alternative 4 (Forest Service Operation)

Similar to Alternative 3, except that the building and site would be operated by the Forest Service. It is anticipated that a small staff of new employees would be needed for operation and maintenance. Additional functions could include interpretive displays and programs, an information center for entrance to the Lake Tahoe Basin, and a Forest Service training center. Other suggestions include a Forest Service information and interpretive center, with displays or demonstrations on how special management practices can be carried out with minimal effect on the environment, for example, special yarding of hazard trees, survival training site, and meeting area for a variety of groups. Use of the site as a Forest Service information and interpretive center would provide an opportunity to showcase the national forests and their uses. Portions of the building could be rented out for public overnight use such as is done with the Loon Lake Chalet. The building could house a Forest Service museum depicting the history and work of the Forest Service. Gift shop, books, maps, etc. and public restrooms would be included. Several self guided nature trails could be provided that interpret the plants and ecology of the area. A variety of interpretive programs could be offered. The museum could also have a section for the plants, animals, ecology and protection of the Tahoe Basin.

Land Management Plan

Under Alternative 4, the Management Emphasis and Description for Management Area 11 in the *Eldorado National Forest Land and Resource Management Plan* would be amended to provide for Developed Winter Sports sites that do not include downhill skiing. Revised text would be the same as in Alternative 3a.

Alternative 5
Forest Service Preferred Alternative (Special Use Permit or MOU with Potential for Expansion)

The Forest Service would issue a prospectus for operation by a business or non-profit organization under a special use permit, or they would enter directly into a Memorandum of Understanding (MOU) with another government agency, for year-round management of the lodge building and adjacent area. This alternative is similar to Alternative 3a, with the exception that some possible expansion might be included. Possible expansion might include construction of additional buildings, trailer pads, and decking. Any additional construction would be limited to those areas that have already been disturbed by construction or parking. The permittee or agency could act as site manager, with portions of the operation run by other entities. The permittee or agency would be responsible for necessary repairs, maintenance, and any remodeling needed on the building. Credit may be given against permit fees for this work. The existing workshop building could be used by the permittee if needed. If not needed, it would be removed. The existing ski lifts and various ticket sales and other outbuildings would be removed.

Use of Building:

The building could be used as a youth work-training center (such as a CCC camp), educational facility, Cultural Arts Center (accommodating indoor and outdoor concerts, art exhibits, performances, and demonstrations), and/or any of the other uses described in Alternative 3a. An organization holding permit might provide a number of services to the public such as food and beverages. Emphasis in the selection process would be on providing services and/or recreation opportunities to the general public. Some of the suggested uses might also incorporate cooperative projects benefiting the Forest Service, such as research or work projects.

Expansion of Facilities:

This alternative has potential for expansion of facilities on the site. Expansion is defined as construction of additional buildings, trailers/trailer pads, decking, or other structures outside of the existing building footprints. A number of letters received suggested a need for additional space for dormitories or overnight accommodations for 25 to 50 people during the summer months. This might be accomplished with a permanent structure or temporary structures such as trailers. Other proposals involving expansion include additional decking or stage shell for outdoor events, an ice skating rink, and/or RV parking. Conceivably additional decking and land coverage would be necessary.

Potential expansion would be limited to those areas already impacted by the ski area such as building pads and compacted ground used previously for parking. Wet areas of the site would be avoided. A rough delineation of the areas with potential for expansion is shown on the map for Alternative 5. Permit shall require a site specific proposal and time frame for such expansion so that other restoration work on the site can take place.

A parking area separate from the Sno-Park lot would be developed for 10 to 100 vehicles, depending upon the requirements of the selected permittee and use. The 100-vehicle limit is considered to be maximum summer capacity of the disturbed area previously used by the ski resort for parking after the portion allocated to the Sno-Park is subtracted out. The area that may be used for parking is delineated on the Map for Alternative 3a. It consists primarily of fill material, and some of it is already paved. The parking may be graveled or paved and would be developed in accordance with a site plan approved by the Forest Service. Parking layout would be designed to preserve existing vegetation. Winter parking capacity of the same area is estimated to be somewhat lower (80 vehicles) due to snow storage requirements.

Use of Site:

A portion of the site would continue to be used for Echo Summit Sno-Park facilities for the benefit of Nordic Skiers and snow players. An open slope with associated flat area at the bottom would be maintained for snow play use such as inner tubes, discs, sleds, etc. A portion of one of the ski runs may need some removal of stumps or young trees for hazard reduction. A system of marked but ungroomed nordic ski trails would be continued. Destinations include Lake Audrain to the west and Benwood Meadows area to the south.

Open access to the area for hiking and backcountry nordic skiing would be maintained, including the Pacific Crest Trail and the Echo to Kirkwood Route. The site would continue to be used for staging for the annual Echo to Kirkwood Ski race.

Site Restoration:

Ski lifts and any unnecessary outbuildings would be removed and sold or otherwise disposed of. A detailed restoration plan would be developed for the site and reviewed by the Interdisciplinary Team prior to any ground disturbing action. Excess fill from areas not used for the lodge, lodge parking, Sno-Park or additional facilities would be removed and/or reshaped to restore a near natural drainage pattern (Restoration Areas 4 and 5 on Map E). Existing drainage facilities such as ditches or pipes that are not needed would be removed. Where possible, soil mantle would be replaced. Old access roads and ski slopes would be restored by reshaping disturbed and eroded areas to create more natural drainage patterns and installing permanent erosion control structures such as rolling dips in place of waterbars (Restoration Areas 1, 2 and 3 on Map E). Heavy equipment will be utilized where it will not cause excessive disturbance to existing vegetation. Areas disturbed by construction of facilities, septic reconstruction, well drilling, ski lift removal, parking development, grading for erosion control, or other site work would then be revegetated with native trees, grasses and riparian vegetation as appropriate. Approximately 12 acres would be restored or improved. Trees would be replanted on the ski slopes

in areas other than those identified for snow play to break up visual impact of the clearings. The restoration plan would incorporate effectiveness monitoring.

Land Management Plan

Under Alternative 5, the Management Emphasis and Description for Management Area 11 in the *Eldorado National Forest Land and Resource Management Plan* would be amended to provide for Developed Winter Sports sites that do not include downhill skiing. Revised text would be the same as in Alternative 3a.

Alternative 6a (Permit for Downhill Ski Area)

Issue permit to continue operation of site as a family oriented downhill ski resort, with the additional attraction of groomed nordic ski trails.

Use of Building:

The building would be operated by the permittee as a ski lodge during the ski season. Hot and cold food and beverage service would be provided to people using the site for snow play, as well as to skiers. Other aspects of the operation would include Alpine and Nordic ski equipment rentals, snow play equipment rentals, downhill ski school, nordic ski school, and ski shop sales.

Summer uses of building could include food and beverage sales, convention center, RV parking, summer camp with tents, shower rooms, concerts, weddings, paid parking, and other opportunities which would serve the public.

Expansion of Facilities:

There would be no construction of additional buildings under this alternative. A third ski lift would be reinstalled at the same location as where one previously existed. Repairs/upgrades would be done to existing ski lifts, water, and septic systems as necessary to meet health and safety codes.

Use of Site:

The area under permit would cover the same 7 acres for the lodge and 115 acres for the ski area as in the previous Ski Echo-Tahoe operation, reduced by the area to remain open for snow play. Chair lifts 1 and 2 and the surface lift would be reopened. The downhill runs would remain the same except the bottom of the Magnum Run would be roped off from the downhill skiers and would be operated as a snow play area by the permittee. Some removal of young trees that have grown on the ski slopes is anticipated, especially on the lower portions of the westernmost run to be used for skiing and snow play.

A parking area separate from the Sno-Park lot would be developed for up to 100 vehicles. The 100 vehicle limit is considered to be maximum summer capacity of the disturbed area previously used by the ski resort for parking after the portion allocated to the Sno-Park is subtracted out. The area that may be used for parking is delineated on the map for Alternative 6a. It consists primarily of fill material, and some of it is already paved. The parking may be graveled or paved and would be developed in accordance with a site plan approved by the Forest Service. Parking layout would be designed to preserve existing vegetation. Winter parking capacity of the same area is estimated to be somewhat lower (80 vehicles) due to snow storage requirements. Due to the limited parking available

for a downhill ski area, other options for transportation such as public transit would need to be explored.

Included would be a nordic center with 25 to 35 miles of groomed ski trails. Ski trails would be extended to Echo Lakes. The ski trail would be like that at Royal Gorge Nordic Center.

The Sno-Park parking would be operated by the permittee, with a fee charged for use and a percentage of each permit sold paid to the State. An information station would be provided at the parking lot entrance. The snow play area would be managed by the operator; rules and regulations for public safety, groomed slopes, and some supervision. A tow system might be needed for snow play. Insurance would be needed. Parking plowed by operator rather than CalTrans to insure it is a top priority.

Site Restoration:

An erosion control plan would be developed by permittee and the Forest Service to correct drainage problems within the permit area. Special attention would be given to the area at the top of the ski runs (Restoration area 3 on Map F) and to the drainage behind the Lodge (Restoration Area 4 on Map F) where ditches should be replaced with a more permanent drainage system conforming with the natural terrain, such as drain pipes. Previously impacted areas that are not used for parking would be restored (Restoration Area 5 on Map F). If slope grooming is proposed, it would also be covered in the erosion control plan. Heavy equipment would be utilized where it would not cause excessive disturbance to existing vegetation. Areas disturbed by septic reconstruction, erosion control grading, parking development, and other site work would be revegetated with native trees, grasses, and riparian vegetation as appropriate. Methods to be used for effectiveness monitoring would be included in the erosion control plan. Restoration work on portions of the site not included in the permit would be accomplished by existing Forest Service personnel with the possible assistance of volunteers.

Alternative 6b (Downhill Ski Area with Snow Play Separate)

This alternative is similar to Alternative 6a, except that the existing Sno-Park parking lot would be managed by the permittee rather than the State, and combined with the additional 100-car parking for the downhill ski area. A higher than normal fee would be charged for use of the Sno-Park, with a percentage of the fee paid to the State. The balance would be kept by the permittee to cover snow removal and other services. In this alternative, the snow play area would be included in the permit and managed by the ski area permittee.

Alternative 6c (Permit for Developed Nordic Skiing/Snowboard area)

This alternative is similar to Alternative 6a, except that instead of a downhill ski area, the site would be used as a developed cross country ski area providing groomed trails, ski lessons, ski rentals, and day lodge and/or as a snowboard park. If a permit is issued for use as a developed nordic ski area, up to 25 km of groomed nordic ski trails and/or ski skating lanes would be provided, similar to those proposed under Alternative 6a. Actual routes would be submitted by the permittee for Forest Service Interdisciplinary Team review prior to authorization. The lower portion of the easternmost ski run could be included in permit area as a telemark practice hill.

If a permit is issued for use as a developed snowboard park, the easternmost ski run would be developed and managed for snowboard use by the permittee. This area would not be open to general snow play associated with the Sno-Park. Several "half pipes" might be developed for snowboarder use. A typical configuration would be approximately 8 feet deep and 20 feet wide by 50 yards long. The lower 1/4 of the half pipes are typically created by grading a shallow trench in the earth with a berm on each side. The remaining top 3/4 of the pipe may be built up with packed snow or hay bales with snow cover. The final shaping is done with a snow cat once sufficient snow cover exists.

The developed nordic ski trail system and snowboard area might be combined under this alternative. The lodge building would be operated by the permittee. Appropriate uses are similar to Alternative 6a and include food and beverage service and equipment rentals.

Under this alternative, the westernmost ski slope would remain outside the permit area for management by the Forest Service as an open snow play hill in conjunction with the State Sno-Park. Permittee would have the option of installing a smaller rope tow or chair lift on the eastern slope where it would not interfere with the snow play hill. It is anticipated that the easternmost ski lift would be removed by the Forest Service however, the possibility of using it in conjunction with a snowboard park would be considered if needed. The westernmost ski lift would be removed.

Land Management Plan

Under Alternative 6c, the Management Emphasis and Description for Management Area 11 in the *Eldorado National Forest Land and Resource Management Plan* would be amended to provide for Developed Winter Sports sites that do not include downhill skiing. Revised text would be the same as in Alternative 3a.

Alternatives Considered but Eliminated from Detailed Study

Juvenile Facility:

One of the concepts identified in the public scoping meetings was to use the lodge and site as a juvenile facility for the El Dorado County Probation Department. Some of the concerns indicated in the meetings were possible vandalism to adjacent properties, and restriction of public use and enjoyment of the site, whether actual or perceived. In subsequent conversations, representatives of the County indicated they were no longer interested in this use, and it was dropped from the alternatives considered in detail.

Land Exchange:

The possibility of including the building and a small area for parking for use in the Forest's land exchange program was also considered. This alternative was eliminated from detailed study for several reasons.

The majority of suitable parking area has been dedicated to meet the needs of the State Sno-Park program. Thus it would be very difficult to define a logical parcel of land that would adequately serve the building's parking and outbuilding needs.

Exchanging a portion of the Echo Summit site would not result in a self-sufficient unit, since the septic system associated with the building overlaps land serving the Sno-Park area. This use of national forest land would have to be authorized by a Forest Service special use permit.

The limited useable area at this location presents a real potential for conflicts between the Sno-Park operation and a private operation over which neither the State or Forest Service has any control.

Most of the private land along the U.S. Highway 50 corridor has been subdivided and developed into lot size properties. In addition, this area contains more than 600 recreation residential lots authorized by Forest Service special use permits. As a result, many of the more desirable sections of this relatively narrow, scenic canyon are occupied by private cabins on public land. With this in mind, land adjustment planning has been directed toward retaining the remaining useable land in public ownership.■

Coordinating Requirements

The following coordinating requirements will apply to the alternatives specified:

1) The water system serving Echo Summit Permittee Association (Echo Road, Echo Summit North, and Echo Summit South recreation residence tracts) will be located prior to any on the ground disturbance and provisions made to protect the system or repair any damage as part of the project plans.

2) Should an alternative be selected that involves issuance of a prospectus for a special use permit, when proposals are received, the Interdisciplinary Team will reconvene to conduct any additional analysis needed. If Alternative 5 is selected, and the permittee proposes concert events, this analysis will address potential effects of noise on wildlife (considering frequency, times, and duration of events).

3) For all alternatives involving restoration work, a detailed restoration plan will be developed for the alternative selected according to concepts described in the alternative.

4) For all alternatives involving land disturbing action in wetlands, an on site jurisdictional wetlands delineation would be completed.

5) For all proposed land disturbing actions in jurisdictional wetlands, consultation with the Army Corp of Engineers will be required to determine what, if any, permits are needed under Section 404 of the Clean Water Act.

6) Best Management Practices, listed in the Appendix, will be followed in all alternatives.

7) All plans for use of the site will be coordinated/ reviewed by California Department of Recreation for compatibility with the Echo Summit Sno-Park operation.

8) Under Alternatives 2, 3a, 3b, 4, 5, 6a, 6b, and 6c, an archaeological survey will be conducted following removal of existing fill, and/or structures that were already in place during the 1976 archaeological survey. This will insure that any previously buried, undocumented historic properties are discovered and appropriately treated prior to completion of restoration activities.

9) Under Alternatives 3a, 3b, 4, 5, 6a, 6b and 6c, traffic at the intersection with U.S. Highway 50 will need to be monitored to determine the effects the additional parking capacity and vehicles have on the safety of the intersection with U.S. Highway 50. Mitigation could include: Westbound lane - enlarge the left turn pocket and utilize the existing passing lane

as an acceleration lane. Eastbound lane - install a right turn pocket (deceleration lane) for access to site.

10) Special events, such as snowmobile races and summer concerts, may require California Highway Patrol presence to assure the safe flow of traffic, similar to that which takes place at Sierra Ski Ranch during peak hours. The proponent of such an event would be required to coordinate any such event with the California Highway Patrol and CalTrans. The permittee may be required to pay the State for the additional resources required by the event. Events should be encouraged not to occur during times when U.S. Highway 50 is expected to have slow moving traffic that would cause further traffic backups and idling cars.

11) Any proposed uses that involve biological research that could impact fish, wildlife, or sensitive plant species or habitat will be submitted to Forest Service biologists for further review and analysis prior to approval.

12) If the site is used as an interpretive facility, consider installation of an air quality monitoring site. It can be used not only to collect more air quality data, needed in Eldorado County, but serve as an educational tool for visitors to the site. In addition, brochures, outdoor exhibits, and other interpretative tools can address the air quality issues that face the Class I areas of the Forest Service, Eldorado County, the Tahoe Basin, California, and the country.

13) Requirements for permittees to utilize car pooling, bussing, and other alternatives to vehicular traffic will be included in Special Use Permit where applicable and feasible. Buses on site should be encouraged not to run their engines longer than necessary to warm up.

14) If wood burning devices are used they should be Environmental Protection Agency approved for air quality protection.

15) The permittee (alternatives 3a,3b,5,6a,6b,and 6c) or the Forest Service (Alternative 4) shall coordinate with El Dorado County on standards to be met for potable water and sewage disposal systems.

16) If future parking expansion beyond 300 cars is proposed, then an air quality model must be run to determine the effects of ozone, particulate matter less than 10 microns, and carbon monoxide on the air quality.

17) Under Alternatives 3a, 3b, 4, 5, 6a, 6b, and 6c, all buildings will conform to County, State, and Uniform Building Codes. An emergency and evacuation plan will be developed.

18) Under Alternatives 6a, 6b, and 6c, if snowmaking equipment is used, further analysis of diesel emissions will be required.

19) Under all alternatives, Federal civil rights regulations will be applied, including monitoring for adherence to these regulations to ensure equal employment opportunities, services, housing, recreation opportunities and access. The Forest Service and any operators of the site will follow a policy of non-discrimination and will promote active participation by all segments of the public.

20) Under Alternatives 3a, 3b, 4, 5, 6a, and 6c, if the combined number of parking of parking areas associated with other permitted use at the site exceeds 200, then the peak traffic and total traffic generated by the site will be reviewed by CalTrans to determine whether an eastbound right turn lane off of Highway 50 is necessary as a part of the permit or construction project resulting in the additional parking.■

Comparison of Alternatives

Alternative 1 (No Action)

This alternative does not resolve the issue of what to do with the existing ski area facilities. The facilities would continue to deteriorate over time and may be accelerated by vandalism, due to a lack of presence at the site. The existing ski lifts would present hazards to snow players. A discrepancy would continue to exist in the Eldorado National Forest Land and Resource Management Plan. *Potential revenues to Federal, state, and local governments would be foregone.*

Alternative 2 (Removal of Building & Facilities/Site Restoration)

This alternative would result in the greatest improvement of environmental quality of the area's soil, water, wildlife, and fishery resources. Public safety would be enhanced by removal of the existing facilities. Potential revenues to Federal, state, and local governments would be foregone.

Alternative 3a (Issue Special Use Permit or MOU)

This alternative would provide year-round use of the Lodge for public benefit while allowing restoration on the remainder of the site. This alternative is compatible with the State Sno-Park and provides for continued open public access to the Pacific Crest Trail, hiking trails, and Nordic ski trails. Minimal costs would be incurred by the Forest Service and would be more than offset by permit fees collected. Revenues would be generated for state and local governments.

Alternative 3b (Issue Permit or MOU and Allow Snowmobile Events)

Effects of this alternative would be similar to Alternative 3a, except for the potential of additional traffic congestion on U.S. Highway 50 during snowmobile events. Some increase in noise and air pollution could be anticipated. Large crowds associated with the events could displace other recreation use at the sight on event weekends.

Alternative 4 (Forest Service Operation)

Effects of this alternative would be similar to Alternative 3a. This alternative would also enhance public information by providing interpretation of resources. This alternative would have the highest cost to the Federal government of any alternative, which would be partially offset by revenues generated from rentals and other uses. Minimal revenues would be provided to state and local governments.

Alternative 5 Forest Service Preferred Alternative (Issue Permit or MOU with Potential for Expansion)

Effects of this alternative would be similar to Alternative 3a; however, benefits to water, wildlife, fishery, and soils resources would not be as great because less of the site would be restored.

Alternative 6a (Permit for Downhill Ski Area)

The existing buildings would be utilized for public benefit. In addition, the area available for snow play in conjunction with the Sno-Park would be significantly reduced. Open public access to Nordic ski trails would be restricted because trails would be groomed and a fee would be required. Recreational opportunities would be expanded through developed downhill and cross country ski facilities, although demand for additional facilities of this type is not high. Resources would not be enhanced or restored beyond minimal work needed. Revenues would be generated to the Federal government through special use permit fees collected from the permittee. Revenues would also be generated for state and local governments.

Alternative 6b (Downhill Ski Area with permittee operated Sno-Park)

This alternative would be similar to Alternative 6a, except that the permittee operation of the State Sno-Park would be a violation of State law and would be unacceptable to the State.

Alternative 6c (Permit for Snowboard Park and/or Nordic Ski Area)

Development of a groomed Nordic ski trail system would coincide, for the most part, with the existing marked but ungroomed Nordic trail system, reducing opportunities for backcountry skiers while increasing opportunities for track skiers. The limited terrain does not permit two independant trail systems. Developed snowboarding, if part of the permittees proposal, would result in an increased variety of recreation opportunities. ■

	Compatible with State Sno-Park Operation	Public safety for snow play	Protection and enhancement of watershed, soils, wildlife habitat, and downstream fisheries resources.	Recreation opportunities for a variety of economic classes	Maintain access to PCT and other existing hiking and ungroomed nordic ski trails. Continue Echo to Kirkwood nordic race.	Meet demand for developed winter sports facilities	Utilize existing building for year round use.	Noise impacts on backcountry experience, nearby residences or wildlife	Traffic congestion on Highway 50	Revenue to Federal, State and local governments	Costs incurred by Forest Service
Alternative 1 No Action	Existing Sno-Park operation would continue but there would be no on site ticket sales. Approx. 12.4 acres are available for snow play and additional 7.2 acres used by nordic skiers.	Existing lift towers, outbuildings and debris on site pose potential hazards. There are no telephones, warming areas or medical services at site.	Erosion control work would be done to prevent serious problems. There would be a gradual improvement in wildlife habitat over time as vegetation grows back on site.	The existing trails, Sno-Park and associated snow play and ungroomed nordic routes fill a need for low cost winter recreation.	Open access to hiking and ungroomed nordic ski trails would remain. No additional public information facilities would be provided.	No developed winter sports facilities would be provided under this alternative.	Building would be unused, and would continue to deteriorate due to lack of repairs and vandalism. The site would continue to be used for year round dispersed recreation.	No new noise impacts would occur.	No new traffic would be generated on Highway 50 (existing Sno-Park traffic would continue).	No revenues would be generated to Federal, State or local governments other than those collected by the State for Sno-Park permits.	Minimal costs would be incurred, although deferred maintenance and inflation could make future disposition of the facilities more costly.
Alternative 2 Remove buildings and facilities / Restore Site	Existing Sno-Park operation would continue, although there would be no uses of facilitites that might enhance it. This alternative has the lowest potential for user conflicts and allows maximum flexibility for future Sno-Park expansion.	Public safety would be enhanced by removal of lift towers and buildings, however no telephones, warming areas or medical services would be available at the site.	This alternative would provide the greatest net benefit to watershed, soils, and wildlife habitat through restoration of 21 acres of forest and wetland/riparian vegetation.	The existing trails, Sno-Park and associated snow play and ungroomed nordic routes fill a need for low cost winter recreation.	Open access to hiking and ungroomed nordic ski trails would remain. No public information facilities are provided for under this alternative.	No developed winter sports facilities would be provided under this alternative.	Potential uses of the lodge and other buildings would be forgone. The site would continue to be used for summer and winter dispersed recreation.	No new noise impacts would occur.	No new traffic would be generated on Highway 50 (existing Sno-Park traffic would continue).	Any potential revenues to Federal, State or local governments would be forgone.	This alternative would have the highest one time cost to the Forest Service except for Alternative 4, Forest Service Operation. Special funding sources would be required for removal and restoration. Future costs would be minimal.
Alternative 3a Special Use Permit or M.O.U.	Approx 12.4 acres would remain open for snow play. Compatibiltiy with the Sno-Park operation would be considered in final selection of a permittee. Services offered at lodge could complement Sno-Park operation.	Public safety would be enhanced through removal of lifts and outbuildings. Installation of public telephones, warming area, and possible medical services at the lodge would also improve public safety.	Potential for impacts to vegetation vary with uses proposed. This alternative would result in a net benefit to watershed, soils, and wildlife habitat through restoration of 19 acres of forest, wetland & riparian vegetation.	The existing trails, Sno-Park and associated snow play and ungroomed nordic routes fill a need for low cost winter recreation. The lodge might serve as a base for a variety of additional recreation activities.	Open access to hiking and ungroomed nordic ski trails would remain. Interpretation and/or information on recreation opportunities may be provided at lodge building or Kiosk.	No developed winter sports facilities would be provided under this alternative.	Year round use would be encouraged through selection of permitee and mix of uses included in permit.	Any impacts due to noise would be minimal for most of the proposed uses other than concerts. Potential impacts of noise would be considered in selection of a permittee and in establishing permit conditions.	Traffic impacts could vary from high (in the case of a large gathering such as a concert) to minimal (administrative use by an organizaiton).	Revenues would be generated to the Federal government through Granger Thye Permit fees. Revenues to State and local governments would vary depending on type of use authorized.	Of the alternatives studied, cost to Forest Service would be moderate. Special funding sources would be required for removal and restoration. There would be a recurring annual cost for permit administration.
Alternative 3b Special Use Permit or M.O.U. allowing snowmobile events	Approx. 12.4 acres would remain open for snow play. Compatibility with Sno-Park would be similar to Alternative 3a, however conflicts could occur on event weekends due to limited parking available at site.	Public Safety for snow play would be similar to Alternative 3a, with traffic control and safety measures included in snowmobile event permit.	Protection and enhancement of watershed, soils, wildlife and fisheries habitat would be similar to Alternative 3a. Additional impacts from over the snow events would be negligible.	Low cost summer and winter recreation opportunities would be provided for as in alternative 3a. Snowmobile events would add opportunities for another user group.	Access to hiking and ski trails would remain as in Alternative 3a, with the exception of the area used for events on sceduled event days. Coordination of event dates and courses would allow both Echo to Kirkwood race and snowmobile events to take place.	No contunuous developed winter sports facilities would be provided under this alternative, however expressed need for snowmobile event facilities would be met.	Year round use would be encouraged through selection of permittee and mix of uses included in permit.	Snowmobile noise could have an adverse effect on goshawks, great grey owls and furbearers. Noise is likely to be heard from nearby residences and nordic ski routes. Impacts would be limited to four weekends per year.	Traffic impacts would be similar to alternative 3a with the exception of snowmobile event weekends, which could result in considerable traffic congestion and parking problems.	Revenues to Federal, State and local governments would be similar to that in alternative 3a.	Costs to the Forest Service would be similar to those in Alternative 3a, with additional time required to administer event permit.

Table 1 Comparison of Alternatives
(continued)

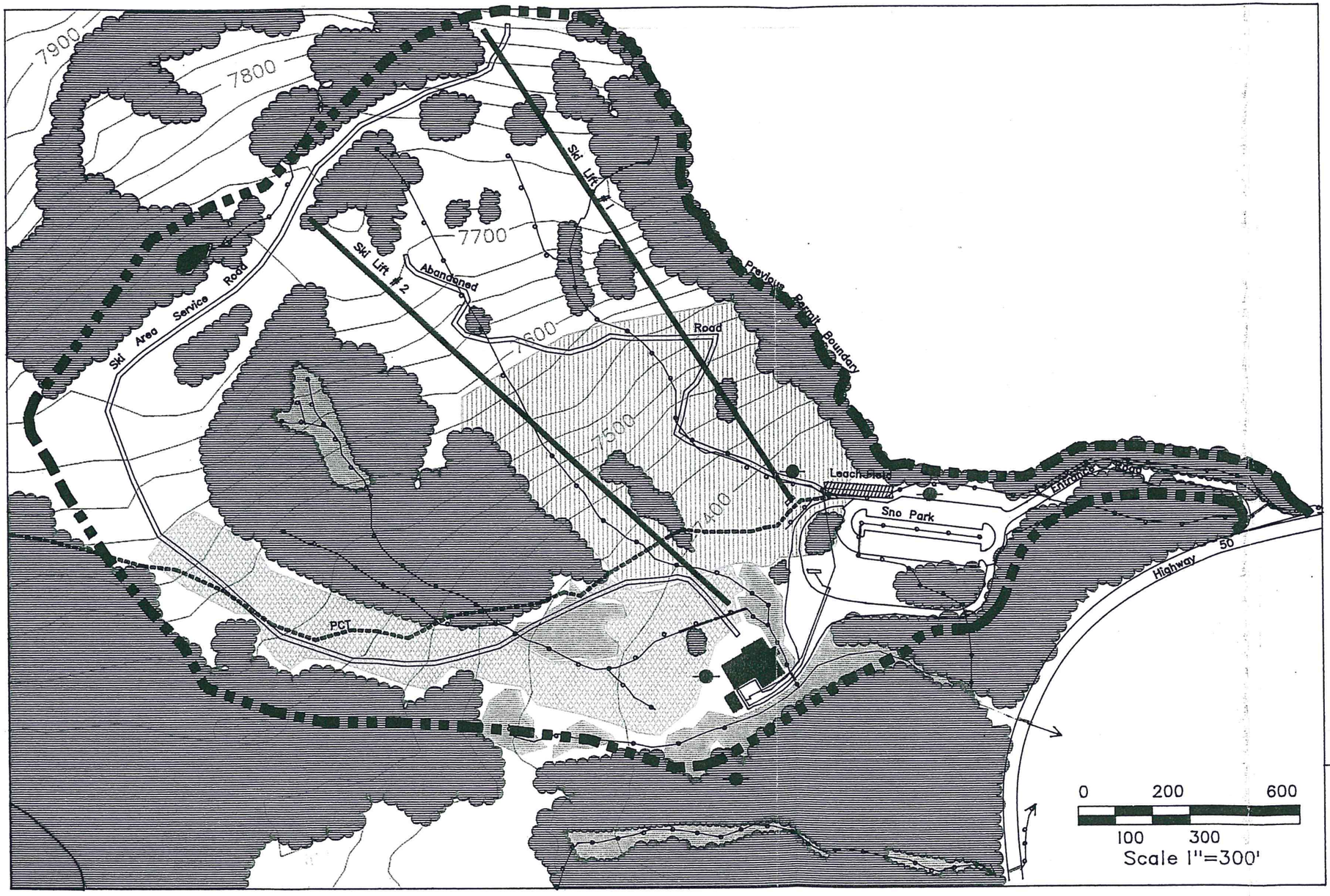
	Compatible with State Sno-Park Operation	Public safety for snow play	Protection and enhancement of watershed, soils, wildlife habitat, and downstream fisheries resources.	Recreation opportunities for a variety of economic classes	Maintain access to PCT and other existing hiking and ungroomed nordic ski trails. Continue Echo to Kirkwood nordic race.	Meet demand for developed winter sports facilities	Utilize existing building for year round use.	Noise impacts on backcountry experience, nearby residences or wildlife	Traffic congestion on Highway 50	Revenue to Federal, State and local governments	Costs incurred by Forest Service
Alternative 4 Forest Service Operation	Approx. 12.4 acres would remain open for snow play. Warming area, and possible food and beverages operated by concessionaire could enhance Sno-Park operation.	Public safety would be enhanced through removal of lifts and outbuildings. Installation of public telephones, warming area, and possible medical services at the lodge would also improve public safety.	This alternative would result in a net benefit to watershed, soils, and wildlife habitat through restoration of 19 acres of forest, wetland & riparian vegetation, with some interpretation provided.	The existing trails, Sno-Park and associated snow play and ungroomed nordic routes fill a need for low cost winter recreation. The lodge might serve as a base for a variety of additional activities.	Open access to hiking and ungroomed nordic ski trails would remain. Interpretation and/or information on recreation opportunities may be provided at lodge building.	No developed winter sports facilities would be provided under this alternative.	Forest Service would manage the building, all in in part, for year round use.	No new noise impacts would occur.	Impact on highway 50 would be minimal, unless space was rented for meetings or events involving large numbers of people at one time.	Some revenues may be genterated to the Federal government through rental of meeting space and/or permit for food & beverage service. Revenues to State and local governments would be minimal.	This alternative would have the highest one time and recurring cost to the Forest Service. Special funding sources would be required for removal/restoration and for staffing of facility.
Alternative 5 Special Use Permit or M.O.U. with potential for expansion	Approx. 12.4 acres would remain open for snow play. Compatibiltiy with the Sno-Park operation would be considered in selection of a permittee. Services offered at lodge could complement Sno-Park operation.	Public safety would be enhanced through removal of lifts and outbuildings. Installation of public telephones, warming area, and possible medical services at the lodge would also improve public safety.	Potential for impacts to vegetation vary with uses proposed. This alternative would result in a net benefit to watershed, soils, and wildlife habitat through restoration of nearly 19 acres of forest, wetland & riparian vegetation.	The existing trails, Sno-Park and associated snow play and ungroomed nordic routes fill a need for low cost winter recreation. The lodge might serve as a base for a variety of additional recreation activities.	Open access to hiking and ungroomed nordic ski trails would remain. Interpretation and/or information on recreation opportunities may be provided at lodge building or Kiosk.	No developed winter sports facilities would be provided under this alternative.	Year round use would be encouraged through selection of permitee and mix of uses included in permit.	Noise impacts would be minimal for most of the proposed uses other than concerts. Potential impacts of noise would be considered in selection of a permittee and in establishing permit conditions.	Traffic impacts could vary from high (in the case of a large gathering such as a concert) to minimal (administrative use by an organizaiton).	Revenues would be generated to the Federal government through Granger Thye Permit fees. Revenues to State and local governments would vary depending on type of use authorized.	Of the alternatives studied, cost to Forest Service would be moderate. Special funding sources would be required for removal and restoration. There would be a recurring annual cost for permit administration.
Alternative 6a Permit for Downhill Ski Area	Area available for snow play would be reduced to 1.4 acres, resulting in crowding. Inadequate parking for ski area could create conflicts with Sno-Park. Services provided by permittee could complement Sno-Park operation.	Reduced area available for snow play would create hazardous conditions due to crowding. Installation of public telephones, warming area, and possible medical services at the lodge would improve public safety.	There would be little to no change in effects on natural resources. Some native vegetation would be restored around the Sno-Park, and work necessary to prevent erosion would be done by permittee.	Existing low cost snow play and ungroomed nordic skiing opportunities would be reduced, to be replaced by developed downhill and groomed nordic skiing. Ticket prices would probably be lower than those at larger ski resorts.	Hiking trails would not be affected. Existing ungroomed nordic ski routes would be converted to groomed routes, and use fees would be charged. Provisions could be made in permit for continuation of Echo to Kirkwood race.	This alternative would maximize developed downhill skiing and developed nordic skiing opportunities.	Emphasis would be on winter recreation, however permittee would be encouraged to pursue year round use of the facilities. Possible off season uses would be similar to those considered in alternative 3a.	Any impacts due to noise would be minimal for most of the proposed uses. Potential impacts of noise would be considered in selection of a permittee and in establishing permit conditions.	Traffic impacts to highway 50 would be minimal, however limited parking on site could cause conflicts with Sno-Park, and cars could back up outside of designated parking areas, potentially affecting highway traffic.	Revenues would be generated to the Federal government through Granger Thye Permit fees. Revenues to State and local governments would vary depending on ski area revenues.	Costs incurred by Forest service would be minimal compared with other alternatives since permittee would be responisble for repair work on building and lifts. There would be a recurring annual cost for permit administration.
Alternative 6b Downhill Ski Area with permittee operation of Sno Park	Proposal to charge greater than face value for Sno-Park permits to cover costs of managing Sno-Park would be a violation of State law. Other concerns similar to alternative 6a.	Concerns similar to alternative 6a.	Effects would be similar to those in alternative 6a	Effects would be similar to those in alternative 6a	Effects would be similar to those in alternative 6a	Effects would be similar to those in alternative 6a	Effects would be similar to those in alternative 6a	Effects would be similar to those in alternative 6a.	Effects would be similar to those in alternative 6a.	Revenues would be similar to those in alternative 6a.	Costs would be similar to those in alternative 6a.
Alternative 6c Permit for developed nordic ski area/ snowboard park	Approx 12.4 acres would continue to be available for snow play. Food and beverages, equipment rentals, warming area, and other services offered at lodge could complement Sno-Park operation.	Public safety would be enhanced through removal of lifts and outbuildings. Installation of public telephones, warming area, and possible medical services at the lodge would also improve public safety.	Potential for impacts to vegetation vary with uses proposed. This alternative would result in a net benefit to watershed, soils, and wildlife habitat through restoration of 4 acres of forest, wetland & riparian vegetation.	Low cost snow play opportunities would continue, however costs for nordic skiing would be higher on groomed trails. Ticket prices for nordic skiing & snowboarding would probably be lower than those at larger ski resorts.	Hiking trails would not be affected, however existing ungroomed nordic ski routes would be converted to groomed routes with use fees. Provisions could be made in permit for continuation of Echo to Kirkwood race.	Developed snowboard area and/or groomed nordic ski trails would be provided, opportunities which are not currently available in the Highway 50 corridor.	Emphasis would be on winter recreation, however permittee would be encouraged to pursue year round use of the facilities. Possible off season uses would be similar to those considered in alternative 3a.	Any impacts due to noise would be minimal for most of the proposed uses. Potential impacts of noise would be considered in selection of a permittee and in establishing permit conditions.	Traffic impacts to highway 50 would be minimal, however limited parking on site could cause conflicts with Sno-Park, and cars could back up outside of designated parking areas, potentially affecting highway traffic.	Revenues would be generated to the Federal government through Granger Thye Permit fees. Revenues to State and local governments would vary depending on permittee revenues.	Of the alternatives studied, cost to Forest Service would be moderate. Special funding sources would be required for removal and restoration. There would be a recurring annual cost for permit administration.

USDA Forest Service

Eldorado National Forest

Echo Summit EIS

Alternative 1
No Action



Legend

- Streams – Ephemeral
- Streams– Perennial
- Ponds
- Roads
- Snowplay – Sliding
- Snowplay – Nordic Skiing
- Previous Permit Boundary
- Riparian Areas
- Coniferous Trees
- Culverts
- Trails – Pacific Crest Trail (PCT)
- Buildings
- Powerpoles
- Existing Ski Lifts
- Sewerlines

Date
May 27, 1992

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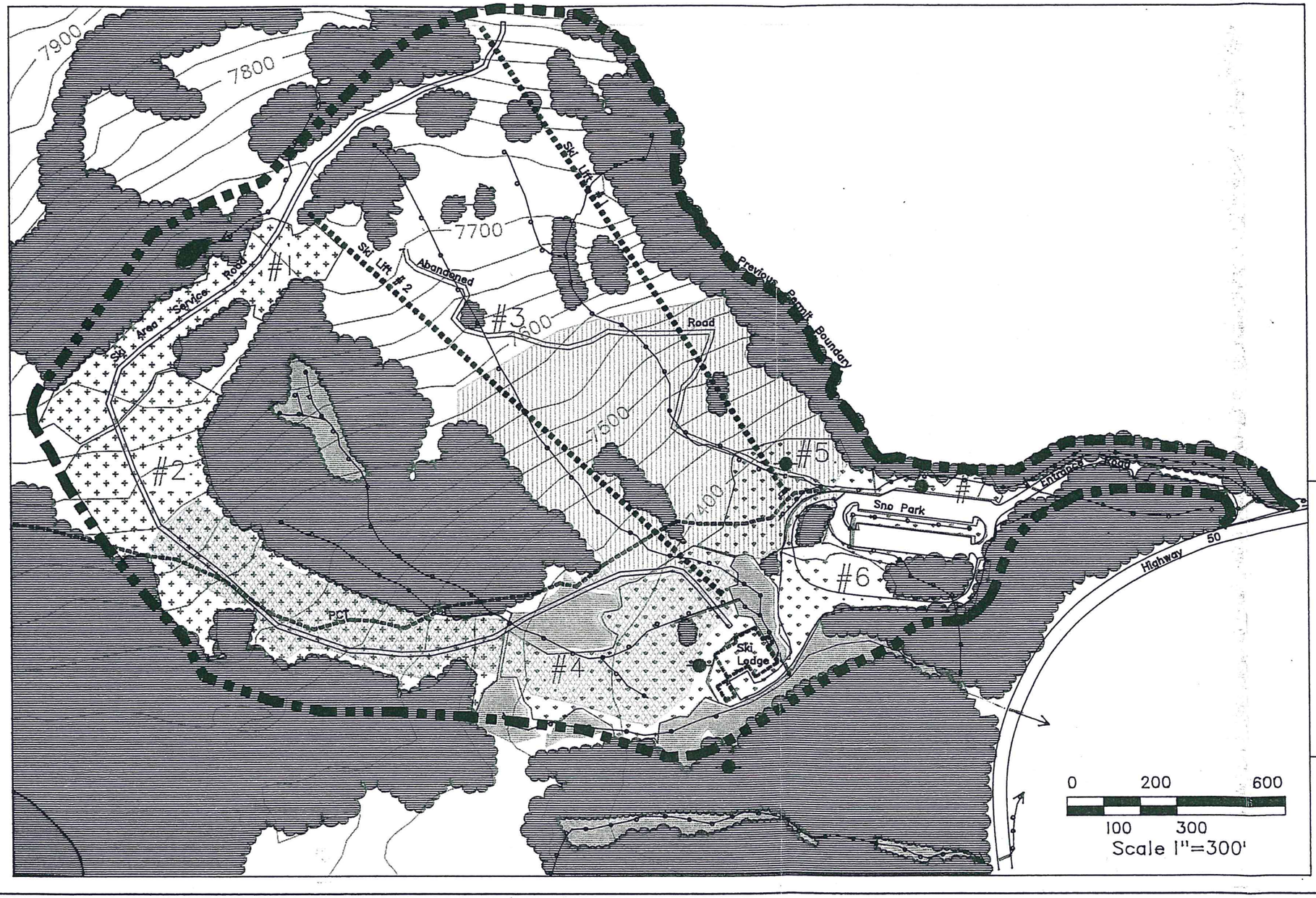
Eldorado N.F.

USDA Forest Service Eldorado National Forest

Echo Summit EIS



Alternative 2 Removal/ Restoration

Legend

- Streams – Ephemeral
- Streams– Perennial
- Ponds
- Roads
- Snowplay – Sliding
- Snowplay – Nordic Skiing
- Previous Permit Boundary
- Riparian Areas
- Coniferous Trees
- Culverts
- Trails – Pacific Crest Trail (PCT)

Removal and Restoration Areas

- Buildings to be Removed
- Powerpoles
- Existing Ski Lifts to be Removed
- Restore Vegetation (Dry)
- Restore Vegetation (Wet)

Date
May 27,1992

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Map D

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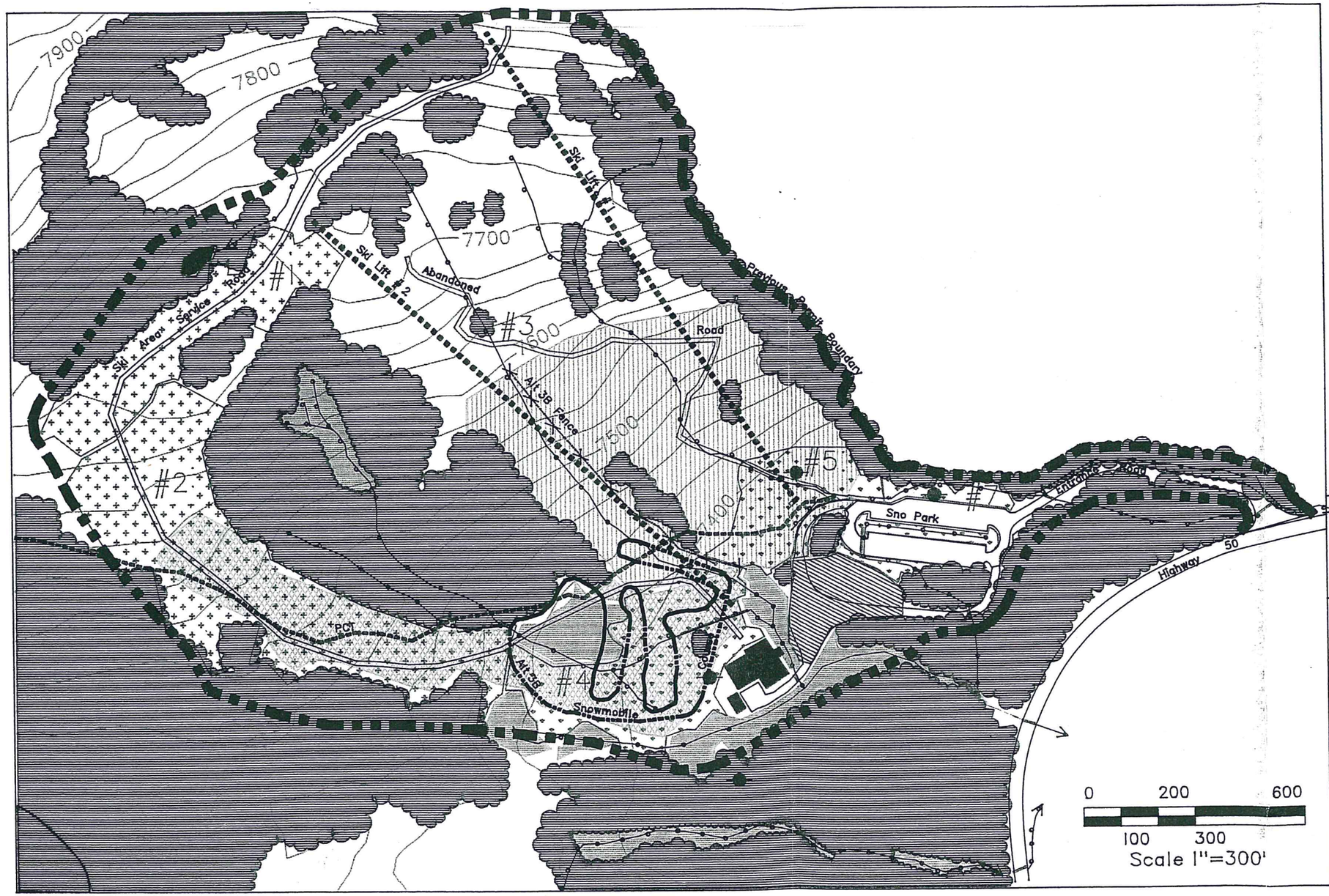
Echo Summit EIS

Alternatives 3a 3b & 4
Special Use Permit/
M.O.U. or Forest Service
Operation



Legend

- Streams – Ephemeral
- Streams– Perennial
- Ponds
- Roads
- Snowplay – Sliding
- Snowplay – Nordic Skiing
- Previous Permit Boundary
- Riparian Areas
- Coniferous Trees
- Culverts
- Trails – Pacific Crest Trail (PCT)
- Buildings
- Powerpoles
- Area Available for Parking

Alternative 3B Only

- Typical Snowmobile Course
- Fence (During Snowmobile Events)

Removal and Restoration Areas

- Existing Ski Lifts to be Removed
- Restore Vegetation (Dry)
- Restore Vegetation (Wet)

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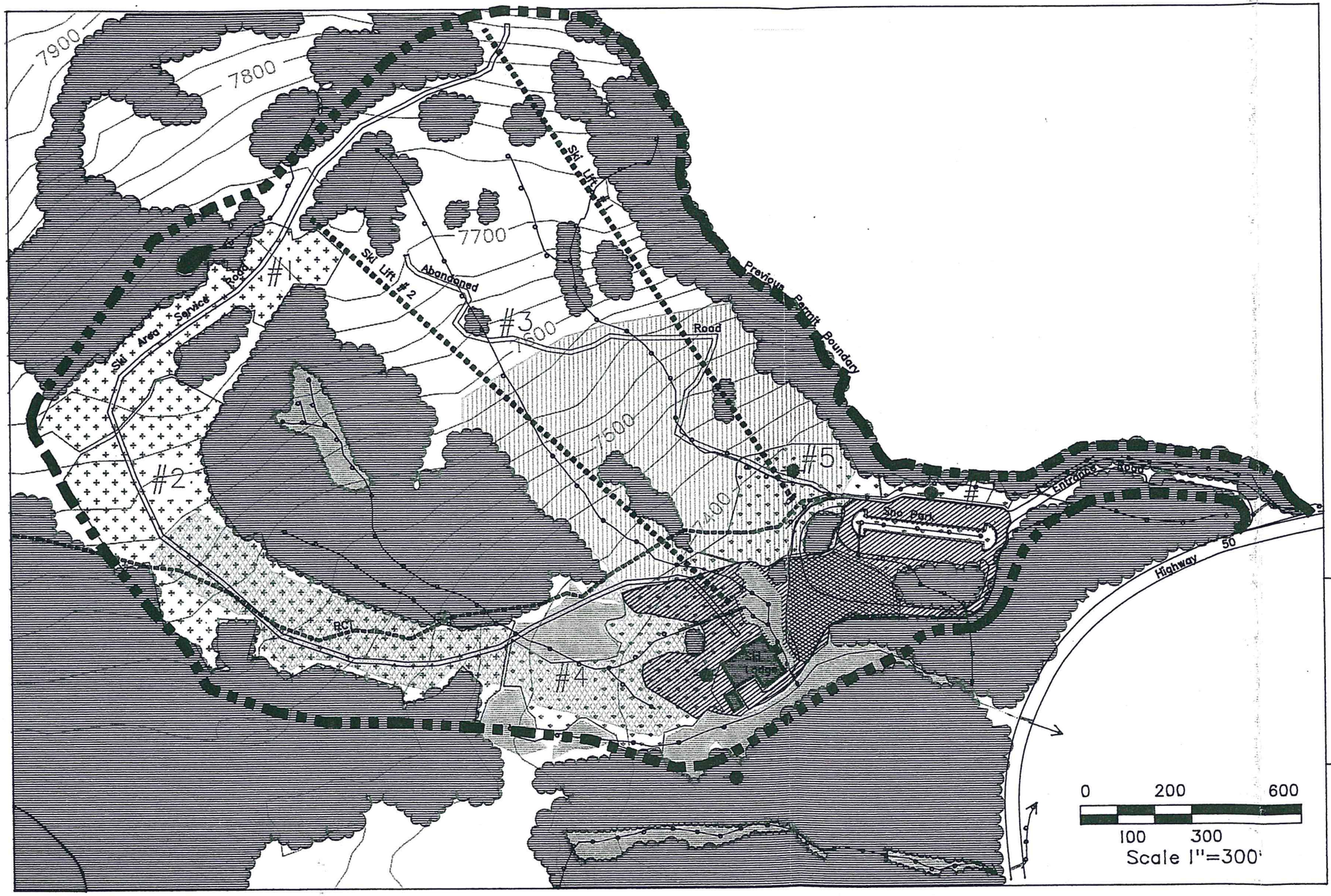
Echo Summit EIS

Alternative 5
Special Use Permit or M.O.U. with Potential for Expansion



Legend

- Streams – Ephemeral
- Streams– Perennial
- Ponds
- Roads
- Snowplay – Sliding
- Snowplay – Nordic Skiing
- Previous Permit Boundary
- Riparian Areas
- Coniferous Trees
- Culverts
- Trails – Pacific Crest Trail (PCT)
- Buildings
- Powerpoles
- Area Available for Parking
- Area with Potential for Expansion of facilities (Temp or Permanent)

Removal and Restoration Areas

- Existing Ski Lifts to be Removed
- Restore Vegetation (Dry)
- Restore Vegetation (Wet)

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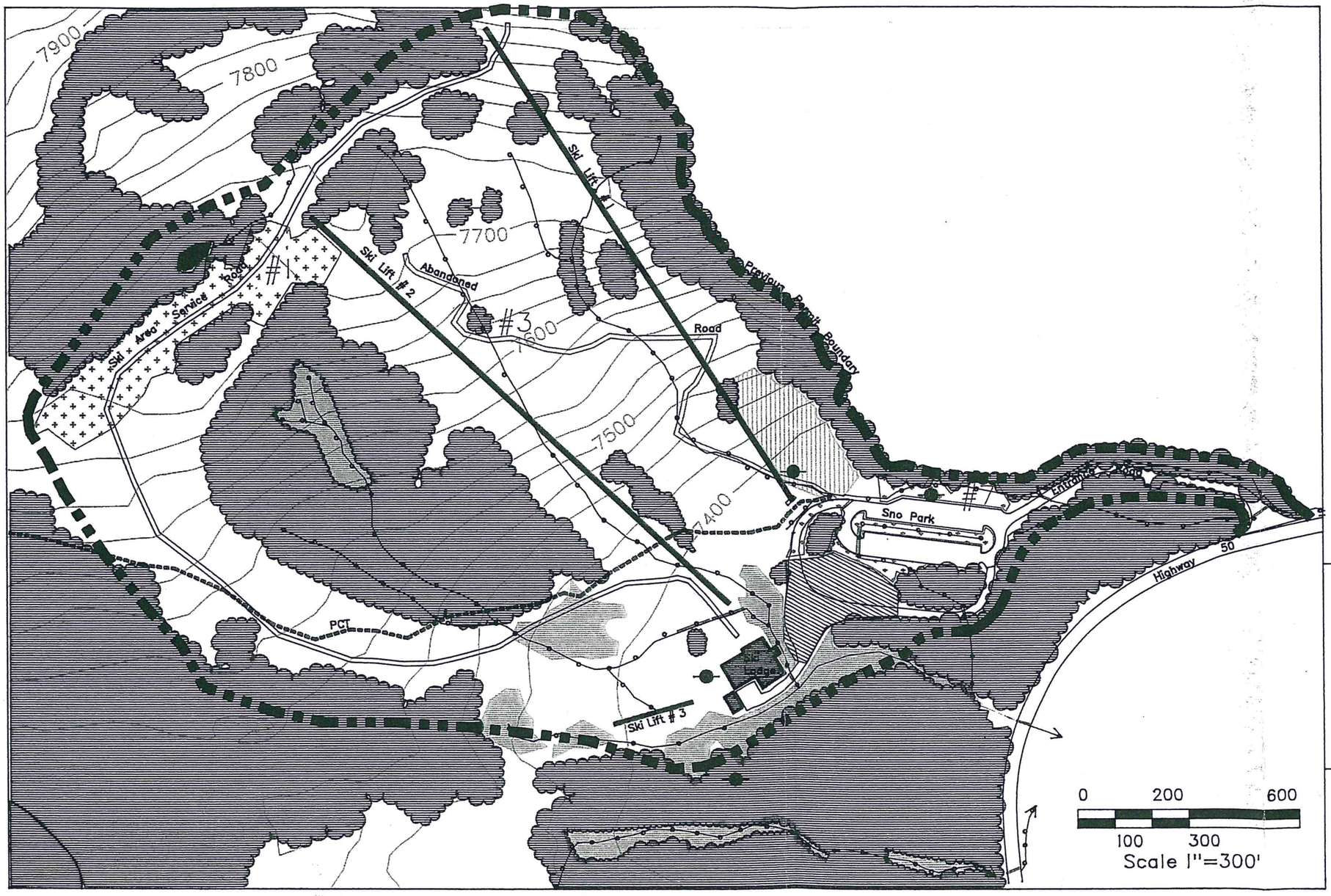

Alternatives 6a and 6b Alpine Ski Area

Legend

- Streams – Ephemeral
- Streams– Perennial
- Ponds
- Roads
- Snowplay – Sliding
- Ski Lifts
- Previous Permit Boundary
- Riparian Areas
- Coniferous Trees
- Culverts
- Trails – Pacific Crest Trail (PCT)
- Buildings
- Powerpoles
- Area Available for Parking

Removal and Restoration Areas

- Restore Vegetation (Dry)
- Restore Vegetation (Wet)

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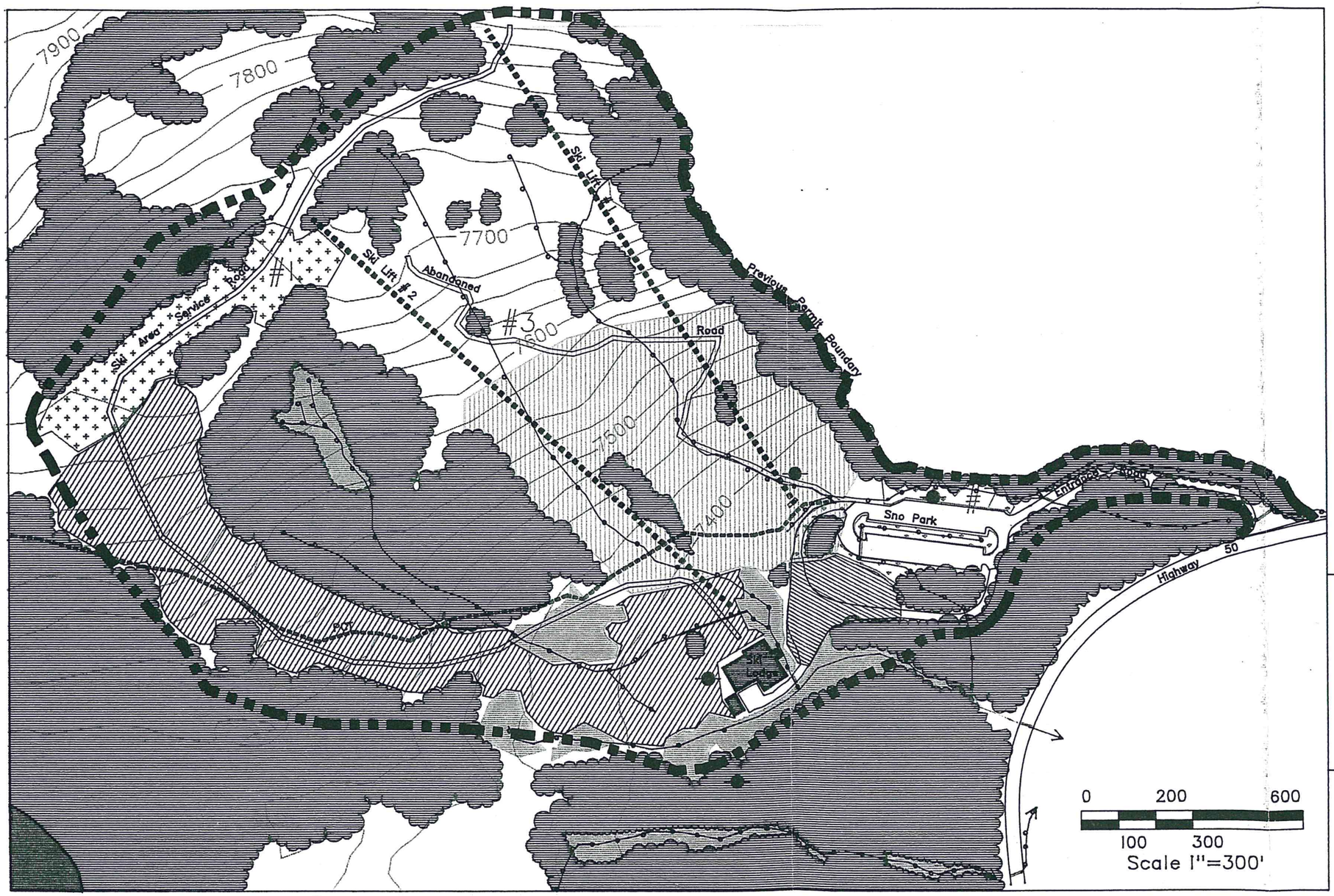
Echo Summit EIS

Alternative 6C Developed Nordic Ski Area and/or Snowboard Area



Legend

- Streams – Ephemeral
- Streams– Perennial
- Ponds
- Roads
- Snowplay – Sliding
- Previous Permit Boundary
- Riparian Areas
- Coniferous Trees
- Culverts
- Trails – Pacific Crest Trail (PCT)
- Buildings
- Powerpoles
- Area Available for Parking and/or Ice Skating Rink
- Area to be Included in Permit with Potential for Rope Tow and/or Halfpipe Installation.

Removal and Restoration Areas

- Existing Ski Lifts to be Removed
- Restore Vegetation (Dry)
- Restore Vegetation (Wet)

Date
May 28. 1992

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Affected Environment and Environmental Consequences

Facilities

Affected Environment

Buildings

There is one building, approximately 9,000 square feet in size, that served as the former ski lodge. The building contains a full commercial kitchen that served 500 to 600 people per day. The building also contains an indoor dining area (currently seats 150 to 200 persons), rest rooms, a retail shop, several rooms which were used as offices, and an upstairs loft area. A deck area around the south side of the building provides additional seating for approximately 100 people. The lodge has received no maintenance for the past 3 years except to secure windows and doors. Major repairs and replacement on the roof, windows, floor covering and doors will be necessary. Other items of repair would include but not be limited to the heating, electrical, water and septic systems.

There is also a butler building (previously used as a shop), approximately 20' x 30' just east of the main building.

Ski Lifts

Two chair lifts are on the site. Both would require some upgrading or maintenance to meet public transportation standards (Occupational Safety and Health Administration and American National Safety Institute). Lifts have been in non-operation since 1988. Access for the lifts is by a service road up the easternmost ski run. An old service road on the western portion of the site has been abandoned and partially graded for erosion control.

Parking

The site was previously determined to have a maximum capacity for approximately 300 cars. At the present time, the Forest Service has entered into a 20-year agreement with California Parks and Recreation for the use of up to 200 parking spaces each winter (November 1 - May 31) for the Sno-Park program, providing parking for snow play and nordic skiing. The entrance road and approximately 147 of the Sno-Park spaces will be paved in 1992. There is some additional area associated with the building that could accommodate up to approximately 100 cars. A portion of this area is currently paved.

Utilities

Water has been available in the past from a system on the site shared with the California Department of Transportation. It is a spring and tank system that feeds across U.S. Highway 50 to a CalTrans maintenance yard. Water is gravity fed down slopes behind the lodge. The system was jointly maintained with CalTrans. Because the spring is a surface water source, it cannot meet the new California water quality standards without extensive filtration and monitoring. Therefore it is anticipated that a new vertical well will be required for any alternatives requiring potable water in conjunction with use of the lodge building. A second water system serving the Echo Summit Permittee Association is also located on the site and needs to be protected.

This site is located in the headwaters of the American River. It has a high water table, especially during the spring melt period, so liquid waste disposal requires special consideration. The site was previously served by a dual septic system. Gray water (approximately 50 percent of the total) was gravity fed to septic vaults behind the lodge and pumped to a leach field (capacity 2,500 gallons). Black water (sewage and kitchen wastes) was pumped to a 25,000-gallon holding tank for hauling and disposal at a certified sewage treatment facility. The permittee will be required to meet El Dorado County standards for sewage disposal. Environmental impacts of the disposal system construction would need to be reviewed by Forest Service specialists.

Electricity is at the site and the lodge building is fully wired. The building was heated by propane.

Transportation

Access to the Echo Summit site intersects U.S. Highway 50 at Echo Summit. The proposed paving of the Sno-Park in 1992 will provide double lane access into the site.

In the eastbound lane, U.S. Highway 50 is double lane, narrowing down to a single lane a few hundred feet west of the Echo Summit site intersection.

The westbound lane is a single lane up to the intersection with the Echo Summit site intersection. At this point there is a left turn pocket of access into the site. This left turn pocket can accommodate three to four vehicles. West of the intersection the highway opens up to two lanes westbound.

The State of California Department of Transportation (CalTrans) performs traffic volume studies for this segment of U.S. Highway 50 at the intersection with Johnson Pass (Echo Summit) Road (approximately 1.5 miles west of the Echo Summit site).

A review of CalTrans data for the years 1980 to 1990 indicated a peak average daily traffic (ADT) of 11,000 vehicles per day in 1986. In 1988 the ADT on this portion of U.S. Highway 50 had declined to 9,400 vehicles per day.

In comparing U.S. Highway 50 traffic studies with Highway 88, it was found that Highway 88 had also experienced a similar decline between 1986 and 1988.

It is probable that the sudden decline in traffic volume on U.S. Highway 50 was due, in part, to the beginning of the present drought in northern California.

The old Echo Summit Ski Area had parking for 300 vehicles. From November 1984 to May 1985, one of the better seasons for the ski area prior to closure, the traffic associated with the operations of the ski area accounted for less than .5 percent of the traffic volume on U.S. Highway 50.

How facilities would be Affected

Alternatives 1 and 2

Since there is no increase in recreation use at the site, the present traffic pattern should not be affected by these alternatives.

Alternatives 3a, 4, 5, 6a, 6b and 6c

All of these alternatives are similar in that they all include summer and winter use, and they allow for 10 to 100 parking spaces in addition to the 147 parking spaces associated with the Sno-Park.

At the low end of the scale, 10 to 30 additional parking spaces, there would by very little, if any, affect on the traffic volumes and flow of U.S. Highway 50. The moderate to high end of the scale, 30-100 additional parking spaces could cause some impact on traffic volumes. This increase would be less than .6 percent of the total traffic. However, the impact to the peak hour could be noticeable.

Peak hour traffic is a value used in estimating the amount of congestion experienced and shows how close to capacity the highway is operating. U.S. Highway 50 is currently experiencing a peak hour traffic flow of 1650 vehicles per hour at Johnson Pass (Echo Summit) Road. This could cause considerable congestion and delays at the intersection with the Echo Summit site. However, this particular location on U.S. Highway 50 is considered self regulating. Westbound traffic, leaving the Tahoe Basin, is regulated by trucks and slower traffic climbing the grade to Echo Summit. This has the effect of causing gaps in the traffic flow allowing for motorists exiting the Echo Summit site to merge into the westbound lane. A worst case scenario in which 50 to 100 vehicles per hour are trying to exit the site would cause congestion at the intersection with U.S. Highway 50. This

could pose a safety concern with impatient motorists attempting to exit the area.

Alternative 3b, allowing up to four snowmobile events or races per season, could result in release of numerous vehicles onto U.S. Highway 50 in a short period of time. Many of these vehicles would be those of spectators, but many would be those of participants that would be towing trailers for transporting their snowmobiles. Numerous vehicles towing trailers could add to the congestion and delay in exiting the site, but these vehicle/trailer combinations would limit the total amount of parking spaces available during such an event. It is assumed that 50 vehicle/trailer combinations could take up as many as 80-100 parking spaces. This would result in less impact to the Average Daily Traffic and peak hour.

Recreation

Affected Environment

Current use of the Echo Summit Site

At the present time, the primary winter recreation use of the Echo Summit Site is for a variety of snow play activities and nordic (cross country) skiing activities associated with the State operated Sno-Park at the site. During the 1991-92 season, weekday Sno-Park use averaged 10 to 20 cars at one time, while on weekends approximately 60 to 100 cars at one time have been observed parked in the plowed Sno-Park lot. After paving and other improvements scheduled for 1992, the Echo Summit Sno-Park lot will accommodate 147 cars at one time. The majority of the Sno-Park use appears to be visitors who are using the former ski slopes for sliding on various types of saucers, tires, and sleds. A high percentage of the users appear to be families with children. The Sno-Park lot is also being used by nordic skiers. The Eldorado Nordic Ski Patrol and other volunteers have been working to mark a number of ungroomed nordic ski routes accessible from both the Echo Summit Sno-Park on the south side of U.S. Highway 50, and from the Echo Lake Sno-Park on the north side of the highway. Continued unrestricted access for nordic skiing in the area was indicated as a priority by many nordic skiers at the public scoping meetings for this environmental impact statement.

The Echo Summit site is used as a staging area for the annual Echo to Kirkwood nordic ski tour and race. Participants purchase State Sno-Park permits and park in the Sno-Park lot or use a bus transportation system provided by the event coordinators. Continued use of the site for staging of this event was also listed as a priority by many people at the public scoping meetings.

The entire Echo Summit site is located in a Forest Travel Zone that restricts Off Highway Vehicle and Over Snow Vehicle use (including snowmobiles) to designated routes. Since this is a former ski area, there are no designated Off Highway Vehicle or snowmobile routes in the vicinity.

Alpine Skiing Facilities

The site being studied was first developed as the "Nebelhorn Ski Area" in 1947. It is entirely on national forest land. Elevation of the base facilities is approximately 7,500 feet. At one time there were approximately 25 kilometers of cross country ski trail associated with the site. Destinations included Benwood Meadow, Echo Lake, and Lake Audrain. With the assistance of the State, the Forest Service acquired the facilities from the Small Business Administration in 1990.

The Lake Tahoe region is a popular Alpine skiing destination. Local ski areas compete for San Francisco Bay area traffic, as well as nationwide and worldwide visitation. Amenities at twelve popular Lake Tahoe Area ski resorts are summarized in Table 2. A number of ski resorts in the region are currently proposing expansion. These include Sierra Ski Ranch, the nearest ski resort along U.S. Highway 50; Heavenly Valley, and Sugarbowl. Other California ski resorts proposing expansion include Galena, Mount Shasta, and Mount Reba.

Due to limited land available for development and increased environmental concerns, it has become difficult to create new ski areas or expand existing ski areas.

Table 2 — Competitive Alpine Ski Resorts in the Lake Tahoe Region: Summary of Facilities and Amenities[1]

	Heavenly Ski Resort	*Squaw Valley*	*Alpine Meadows*	*Kirkwood*	*Northstar-at-Tahoe*	*Sierra Ski Ranch*
Downhill Skiing						
Acres	12,800	4,000	2,000	2,000	1,700	2,000
Number of Runs	65		100+	65	50	41
Vertical Drop (in feet)	3,600 ft	2,850		2,000 ft	2,200 ft	2,212 ft
Base elevation	6,500 ft	6,200 ft	6,835 ft	7,800 ft	6,400 ft	6,640 ft
Summit	10,000 ft	9,050 ft	8,637 ft	9,800 ft	8,600 ft	8,852 ft
Terrain						
Beginner	25%	25%	25%	15%	25%	20%
Intermediate	50	45	40	50	50	60%
Advanced	25	30	35	35	25	20%
Prices						
Adult	$38.00	$38.00		$ 35.00	$38.00	$31.00
Child	15.00	5.00		17.00	15.00	15.00
Senior	15.00	5.00		17.00	27.00	15.00
Adult Group Lesson[2]				18.00	26.00	19.00
Child Group Lesson[2]					21.00	
All Day Adult Group Lesson			N/A			
Adult Package[3]			50.00	0	36.00	44.00
Child Package[3]		47.00	38.00	45.00	45.00	42.00
Other Facilities						
Lodging	6 lodges	1,000 rooms	---	125 condo	230 rooms	
Food & Bar	yes	yes	yes	yes	yes	yes
Ski shop/rentals	yes	yes	yes	yes	yes	yes
Child Care		$47.00		yes	$35.00	
Shuttles	Free	Free	Free	yes	Free	Free
Ice Pavilion		yes				
Other		Tennis, Pool			Sleigh Rides	conf.room

[1]Data derived from *Ski the Californias*, 1991.
[2] One and one half hour lesson
[3] Includes trail pass, rentals and lesson

Table 2, continued

	Homewood	*Boreal*	*Sugar Bowl*	*Donner Ski Ranch*	*Iron Mountain*	*Tahoe Donner*
Downhill Skiing						
Acres	1,260	380	1,100	350	1,200	120
Number of Runs	55	41	47	40	32	11
Vertical Drop (in feet)	1,650 ft	600 ft	1,500 ft	720 ft	1,400 ft	600 ft
Base elevation	6,230 ft	7,200 ft	6,883 ft	7,031 ft	6,500 ft	6,750 ft
Summit	7,880 ft	7,800 ft	8,383 ft	7,751 ft	7,900 ft	7,350 ft
Terrain						
Beginner	15%	30%	20%	25%	20%	50%
Intermediate	50	55	30	50	55	50%
Advanced	35	15	50	25	25	0%
Prices						
Adult	$27.00	$29.00	$33.00	$ 20.00	$26.00	$20.00
Child	9.00	14.00	14.00	10.00	10.00	$10.00
Senior	5.00	14.00		10.00		
Adult Group Lesson[2]		19.00		15.00		
Child Group Lesson[2]						
All Day Adult Group Lesson						
Adult Package[3]		39.00	35.00 - 50.00	24.00 -35.00		
Child Package[3]		30.00	50.00			46.00
Other Facilities						
Lodging		36 rm B&B	yes		50 rooms	130 condo
Food & Bar		yes	yes	yes	yes	yes
Ski shop/rentals		yes	yes	yes	yes	yes
Child Care			yes			
Shuttles			Free	Free		
Ice Pavilion						
Other	Snowboard lessons			Snowboard telemark lessons		

[1]Data derived from *Ski the Californias*, 1991.
[2] One and one half hour lesson
[3] Includes trail pass, rentals and lesson

The continuing drought in many parts of the country combined with the recession has dramatically affected the downhill skiing market and ski area profitability. The North American Ski industry recorded an average 3.9 percent operating profit (profit before income tax and expense) as a return on gross fixed assets in 1990-91, down from the 7.4 percent in 1989-90 and the 8.4 percent in 1988-89. The average before tax profit was $27,000, down substantially from the average before-tax profit of $540,000 in 1989-90 and the $701,000 recorded in 1988-89. Only 61.5 percent of the 130 ski areas participating in the 1990-91 survey conducted by the University of Colorado showed operating profits for the year.

California was especially affected by the the lack of snow. The 1990-91 season represented the fifth consecutive year of drought. Skier visits in California dropped from a record 7.1 million in 1988-89 to a new low of 4.1 million for 1990-91.

Looking beyond the recent drought conditions, annual growth rates in the downhill ski industry have been relatively flat. The average annual growth for the California and Nevada region was 3.1 percent over the 5 year period 1986/87 - 1990/91. This is lower than the inflation rate of 4 percent for that period. It is difficult for beginner ski areas to survive on 3 percent growth. With costs increasing faster than demand, numerous small ski areas have gone out of business in recent years. Since the numbers of skiers have not gone up substantially, larger ski areas are retrofitting and adding amenities to increase their market share.

In the Echo Summit Ski Area Development Plan prepared in 1985 (Sno-Tek O'Connor), it was noted that use at the Echo Summit Ski Area had been low but climbing. The area lacked advanced skiing, and it was remarkable that use had climbed as high as it had with only beginner and intermediate experiences offered (Sno-Tek O'Connor). Other nearby ski areas drew 10 - 20 times the use and charged higher ticket prices. The 1985 development plan proposed expansion of the ski area to take in more advanced terrain to the south.

The Echo summit site offers only 500 feet of vertical drop. Average skier needs are 20,000 - 25,000 vertical feet of skiing in a day. At the Echo Summit site this would equate to 40 trips up the ski lift. As skiers become more experienced they move on to more challenging sites, making it difficult for Echo Summit to get repeat business. The relatively flat rate of growth in the downhill ski industry means fewer beginning skiers entering the market. Since skiing is often a family or group sport, beginning skiers are often accompanied by more advanced skiers who are looking for more challenge than is offered at the Echo Summit site.

Nordic Skiing Facilities

Some individuals have expressed a desire for a system of groomed cross country ski trails at the Echo Summit site. The groomed system proposed would have two parallel lanes groomed in the snow. Approximately 15 to 18 km of groomed trails would be desirable to make the system attractive to users. An additional feature for a developed nordic ski area would be provision of 5 to 18 km of ski skating lanes. These lanes would be 10 to 12 feet wide, separate from or together with the regular groomed nordic routes. Possible uses such a system would be training and schools.

Amenities at six competitive developed nordic ski areas in the Tahoe Region are displayed in Table 3. Although nordic skiing is popular in several areas accessible off of Highway 50, there are no groomed trails in the U.S. Highway 50 corridor. At this time, the closest nordic ski areas to Placerville and Sacramento areas with skating lanes are at Royal Gorge and Kirkwood Nordic Ski areas. The Draft Environmental Impact Statement for the Sierra Ski Ranch expansion, however, considers new groomed nordic trails at that site.

Table 3 — Competitive Cross Country Ski Resorts in the Lake Tahoe Region: Summary of Facilities and Amenities[1]

	Royal Gorge	*Kirkwood*	*Northstar*	*Squaw Creek*	*XCTahoe Donner*	*Hope Valley*[4]
Skiing						
Number of trails	77	21	34	11	32	80
Kilometers	317	80	65	30	65	
Longest Trail (km)	21	11	10	15	25	
Terrain						
Beginner	36%	20%	30%	75%	30%	
Intermediate	44	60	40	25	40	
Expert	20	20	30		30	
Prices						
Adult	$16.00	$12.00	$11.00	$10.00	$13.00	$12.00
Child	8.50	7.00	6.00	7.00	8.00	7.00
Senior	12.00	9.00	9.00	7.00	11.00	
Adult Group Lesson[2]	15.00	22.00		20.00		12.00
Child Group Lesson[2]		16.00				
All Day Adult Group Lesson	N/A		N/A		21.00	20.00
Adult Package[3]	31.50	28.00	35.00	28.00	29.00	20.00
Child Package[3]	22.50	20.00			20.00	15.00
Other Facilities						
Lodging	120 beds	150 rooms	230 rooms	---	---	yes
Food & Bar	yes	yes	yes	yes	yes	yes
Ski shop/rentals	yes	yes	yes	yes	yes	yes
Warming Huts	8	---	---	---	yes	
Child Care		$30.00	$35.00			
Shuttles	Free	Free	Free			

[1]Data derived from *Ski the Californias*, 1991.
[2] One and one half hour lesson
[3] Includes trail pass, rentals and lesson
[4] Data derived from Hope Valley Cross Country brochure

In contrast to developed (groomed) nordic skiing, backcountry skiing on marked or unmarked routes that have not been groomed is becoming increasingly popular. The Eldorado Nordic Ski Patrol in cooperation with the Forest Service has invested considerable work into development of a marked trail system for backcountry nordic skiing that would be accessed from the Echo Summit and Echo Lakes Sno-Parks. Due to limited terrain of appropriate gradient for nordic skiing at the Echo Summit site, it is anticipated that many of these currently ungroomed routes would be the same or close to the trails proposed for grooming under a developed nordic trail system. Strong opposition was expressed regarding conversion of backcountry nordic skiing opportunities to developed groomed systems. Continued free access to these areas for winter recreation was stated as a major concern and is noted in the issues section of this document.

Snowmobiling

Some individuals have expressed a desire for a system of snowmobile events at the Echo Summit site. Under the 1977 *Eldorado National Forest Travel Management Plan*, snowmobiles are restricted to designated routes in the Echo Summit area. At this time there are no designated snowmobile trails or closed courses on national forest land in the area. However, a number of snowmobile opportunities exist on non-forest land in the nearby vicinity of Lake Tahoe. Of four snowmobile closed courses contacted, Old Brockway Springs Golf Course and North Tahoe Regional Park are available for Sno-Cross events. Tahoe Paradise Golf Course did not know if events were allowed but have a 1/2-mile closed snowmobile loop. Tahoe City Golf Course was not available due to previous damage to the golf course during a Sno-Cross event that was held when a minimum amount of snow was on the course. In addition to the snowmobile courses, Sunset Ranch Stables has groomed snowmobile trails available, along with snowmobile rentals.

Demand for Snow Play Facilities

There is a historical need for safe areas for snow play along the U.S. Highway 50 corridor. Popular sites include 42 Mile, Strawberry and Sayles Flat (Camp Sacramento), as well as Echo Summit. The Echo Summit Sno-Park has proved to be very popular and has been well received by the California Highway Patrol and the Forest Service as a means to provide for snow play activities in an area removed from the hazards of highway traffic.

Demand for Snowboarding Facilities

Snowboarding is one of the fastest growing types of winter recreation. Of all annual ski lift tickets in the 1989-90 season, snowboarders purchased approximately 20 percent. According to American Sports Data Inc., snowboarding recreation use increased by 20 percent in 1989 and by 17 percent in 1990, with downhill skiing use decreasing by 8 percent and

by 2 percent in those same periods. Of the 1.2 million people that went snowboarding in the 1988-89 season, 46 percent had participated in the sport for 1 year or less (Trans World Snowboarding Magazine). According to a Simmons Research Bureau survey, most of today's snowboarders are new to the slopes, passionate about their sport, affluent (one out of five with a household income of over $100,000), and heavy consumers of sports-related products. The average age of a snowboarder is just over 17, with the 15 to 17 year-old age group comprising the largest sector of the market.

Bear Valley Ski Area created the Polar Park Snowboard Area in 1991. Bear Mountain Ski Area in southern California recently designated an area exclusively to snowboards.

Summer Recreation

Approximately 115 acres of national forest land were previously leased to the ski area. Some use of these lands may be considered in conjunction with a special use permit for the facilities. The Pacific Crest National Scenic Trail passes through the site near the lodge building. A possible relocation of a portion of the trail is being considered. Some of the parking allocated to the Sno-Park is available for Pacific Crest Trail access in the spring, summer, and fall months. There are a number of other hiking and nordic skiing destinations that can be reached from the trailhead and Sno-Park site. Eagle Mountain Resort on Highway 80 provides mountain bicycle rentals on the cross country ski trails for summer use. This would be possible at Echo Summit with the exception of the Pacific Crest Trail, on which mountain bicycle use is prohibited.

How Recreation Would be Affected

Alternatives 1 (No Action) and 2 (Removal/Restoration)

Under Alternatives 1 and 2, a portion of the site would continue to be used as Echo Summit Sno-Park. Both of the ski slopes would continue to be used for cross country ski practice, sliding, sledding, and other snow play activities. Continued use of the site for snow play provides a safer place for this activity, physically removed from highway traffic.

Nordic skiing in the area would continue on the existing marked but ungroomed ski trails system. The site would continue to be used for staging the Echo to Kirkwood nordic ski race. The area would not be reopened for downhill skiing or snowboarding. Snowmobiles would continue to be excluded.

Summer recreation activities, including access to the Pacific Crest Trail and other hiking trails in the area, would not be affected.

The existing buildings would remain unoccupied, presenting a maintenance and vandalism problem. Potential uses of the building to complement recreation activities (such as food and beverage service, equipment rentals, etc.) would be forgone.

Alternative 3a (Special Use Permit or MOU)

Under Alternative 3a, a portion of the site would continue to be used as Echo Summit Sno-Park. The westernmost ski slopes would continue to be used for snow play activities, providing a safer place for this activity, physically removed from highway traffic.

Nordic skiing in the area would continue on the existing marked but ungroomed ski trails system. The site would continue to be used for staging the Echo to Kirkwood nordic ski race. The area would not be reopened for downhill skiing or snowboarding. Snowmobiles would continue to be excluded.

There are some potential for conflicts between winter uses of the building and snow play recreation. There are also opportunities to plan the uses of the building to complement the snow play and nordic skiing activities (such as a warming area, food and beverage service, equipment rentals, etc.). Many of the proposed uses for the lodge building would expand the spectrum of recreation opportunities at the site. Examples include workshops, summer camps, overnight lodging, and recreational and cultural arts programs.

Existing summer recreation activities, including access to the Pacific Crest Trail and other hiking trails in the area, would continue. The Pacific Crest Trail would be enhanced by remarking of the route and installation of an interpretive display.

Alternative 3b (Permit or MOU Including Snowmobile Events)

Effects on recreation at the site would be similar to Alternative 3a, with the exception of the weekends in which snowmobile events would take place. While allowing these events at the Echo Summit site would fill a perceived need for this type of recreation, other uses at the site on those weekends would most likely be affected. Use of the parking areas allocated to the lodge building would be necessary. Since this parking area could fall short of needs, it could be difficult to prevent use of the Sno-Park lot by event participants and sightseers, potentially displacing the public who would otherwise use those spaces for snow play. The peaceful enjoyment of nordic skiing or snow play would be adversly affected by snowmobile use at the site.

Alternative 4 (Operation by Forest Service)

Effects on winter and summer recreation at the site would be similar to those in Alternative 3a; however, recreation opportunities could be enhanced by visitor information services provided at the lodge building.

The Lake Tahoe Basin Management Unit is currently planning a Meyers Visitor Center, which would also serve the needs of other agencies and individual businesses. They have given some thought to using the Echo Summit Lodge as a temporary location. This would not serve north-bound traffic on Highway 89 as Meyers would, and at the present time they do not feel the costs to bring the facilities up to required standards are justified for use as a temporary facility.

Alternative 5 Forest Service Preferred Alternative (Permit or MOU with Potential for Expansion)

Effects on summer and winter recreation would be similar to those in Alternative 3a; however, presence of additional buildings or facilities at the site could inhibit those visiting the site for hiking or dispersed recreation. Buildings or additional facilities will be located to minimize this potential impact.

Alternative 6a (Permit for Downhill Ski Area)

This alternative would provide developed downhill skiing opportunities at a somewhat lower cost than larger downhill ski resorts. Use of the site as a downhill ski area would be subject to the same limitations in terms of terrain as described in the Affected Environment section. These conditions have resulted in a marginal economic feasibility for a downhill ski area in the past. The site was previously popular with families and beginning skiers. Due to competing land uses and environmental concerns it is becoming increasingly difficult to establish new downhill ski areas or expand existing ones. Services such as food and beverage, equipment rentals, and warming areas would be provided at the lodge building for skiers. These services would also complement the snow play and nordic skiing activities at the site.

Under Alternative 6a, a portion of the site would remain dedicated to snow play in conjunction with the State operated Sno-Park. The area for snowplay would be significantly reduced, however, from approximately 12.4 acres to 1.4 acres. The Echo Summit Sno-Park has proven to be very popular. Reducing the area available for snow play to such a small area would result in crowding and probable user conflicts on the slopes. Additional conflicts could be expected regarding parking. With only 100 spaces available for operation of the ski area (previously 300 when ski area was open), parking is expected to be inadequate to accommodate ski area traffic. There would be pressure on the SnoPark as overflow ski area visitors tried to park in the SnoPark lot. Overflow parking could back up into areas not designated or approved for parking or out the entrance

road, potentially interfering with ingress and egress from U.S. Highway 50.

This alternative includes the development of up to 25 to 35 miles of groomed nordic ski trails. Due to the fact there is limited terrain of reasonable gradient for nordic skiing around the Echo Summit site, it is anticipated that the proposed groomed routes will coincide with and replace existing ungroomed nordic ski routes. A fee would be charged by the ski area permittee for use of the groomed routes to cover maintenance and operation. Snowmobiles would continue to be excluded from the area.

Many of the proposed off season uses for the lodge building would expand the spectrum of recreation opportunities at the site. Examples include workshops, summer camps, overnight lodging, and recreational and cultural arts programs.

Existing summer recreation activities including access to the Pacific Crest Trail and other hiking trails in the area would continue. The Pacific Crest Trail would be enhanced by remarking of the route and installation of an interpretive display.

Alternative 6b (Downhill Ski Area with Permittee operated Sno-Park)

This alternative is similar to Alternative 6a, except that the Sno-Park and snow play area would be managed by the permittee, who would charge a slightly higher fee for parking and use the funds to cover snow removal and maintenance. The Sno-Park parking would be combined with the ski area parking and made available on a first come first serve basis.

Operator management of the snow play area would help minimize hazards and user conflicts, although the reduced size of the snow play area (1.4 acres) would still result in crowding.

The concept of selling Sno-Park permits at a higher than normal cost would be in violation of State law. Further problems would arise for holders of annual Sno-Park permits who would not be purchasing permits at Echo Summit at all. Since parking is limited at the site, it is anticipated that the majority of the parking would be taken up by skiers. The net effect of this arrangement would be reduction of terrain available for snow play and reduction of parking spaces available for snow play in order to increase terrain and parking for the downhill ski area operation.

Alternative 6c (Permit for Nordic Skiing/Snowboard Area)

Snowboarding is a growing sport, particularly in the Lake Tahoe area. While some ski areas allow snowboarding on the ski slopes, only a few have set aside areas especially for this use. Development of the site as a snowboard park would provide a unique facility which, in spite of its small size, would not suffer from direct competition with Heavenly Valley, Kirkwood, and Sierra Ski Ranch, where the emphasis is on downhill skiing.

This alternative includes the development of up to 25 to 35 miles of groomed nordic ski trails. Due to the fact there is limited terrain of reasonable gradient for nordic skiing around the Echo Summit site, it is anticipated that the proposed groomed routes would coincide with and replace existing ungroomed nordic ski routes. A fee would be charged by the permittee for use of the groomed routes to cover maintenance and operation. Snowmobiles would continue to be excluded from the area.

Many of the proposed off season uses for the lodge building would expand the spectrum of recreation opportunities at the site. Examples include workshops, summer camps, overnight lodging, and recreational and cultural arts programs.

Existing summer recreation activities, including access to the Pacific Crest Trail and other hiking trails in the area, would continue. The Pacific Crest Trail would be enhanced by remarking of the route and installation of an interpretive display.

Approximately 12.4 acres would remain available for snow play under this alternative. This would result in a more equal balance of developed winter sports and snow play activities at the site. The limited area available for parking at the site could result in some conflicts with SnoPark use, although the problem is not likely to be a great as with a downhill ski area.

Socioeconomics

Affected Environment

Areas most likely to be affected economically by the project include the cities of Lake Tahoe and Placerville in El Dorado County, and the unincorporated communities east and west of the project along U.S. Highway 50. Located approximately 11 miles east of the project, the city of Lake Tahoe is the nearest incorporated area and the largest population center, with an estimated 21,953 people (1986). South Lake Tahoe's economy is oriented toward tourism. South Lake Tahoe experienced strong economic growth during the 1970's as tourist oriented commercial and residential development flourished. In the 1980's, economic growth stagnated, primarily due to restrictive developmental controls imposed throughout this period. The city of Placerville, located approximately 46 miles west of the project, serves as the county seat. Placerville's economic growth was strong during the 1970's, and remained healthy in the 1980's.

Economic Efficiency

Potential costs and revenues to the Forest Service vary widely among the alternatives being considered. In those alternatives that involve a special use permit, revenues to the Forest Service would be generated by permit fees. Costs to the Forest Service vary by alternative and may include facility removal and site restoration work, permit administration, and/or staffing. Some costs would be one time only, while others would

be incurred on an annual basis. In all cases, the costs incurred must be weighed against other qualitative environmental and social benefits of the alternatives.

Local Population and Employment

El Dorado County has experienced a rapid growth rate over the last 20 years. Total population nearly doubled between the 1970 and 1980 census years, then doubled again by the 1990 census. El Dorado County, at 46.8 percent, is ranked the seventh fastest growing county in California according to 1990 Federal Census data. Population growth of approximately 3.5 percent annually is projected into the 21st century. Median age for the county in 1985 was 33.22. The 1995 estimate is 37.0. The 1990 census data shows the population of El Dorado County is predominately white (89.7 percent), with the next highest percentage Hispanic (7.0 percent), and the balance represented by Afro-Americans, Native Americans, and other minorities (Economic Development Corporation of El Dorado County, 1992).

The labor force of El Dorado County has grown steadily since the 1970's. Between 1980 and 1990 the labor force grew at twice the rate of the population. This is attributed to the dramatic increase in working women and two-income families. Unemployment rates have declined over the same period (Economic Development Corporation, 1992).

Table 4 — El Dorado County Labor Force Participation[1]

Civilian Labor Force	1975	1980	1985	August 1991
Total	30,350	37,100	52,300	67,700
Employment	25,050	33,675	48,800	64,200
Unemployment	17.5%	9.2%	6.7%	5.15%

[1]California Employment Development Department, 1991

Per capita income for El Dorado County residents increased 85 percent from 7,980 dollars in 1980 to 14,764 dollars in 1990. This rate of growth far exceeds the rate of inflation during the same period, resulting in both increased earning and buying power within the county. Statewide comparison shows El Dorado County at 93 percent of the California per capita income level (Economic Development Corporation, 1992).

Revenues to State and Local Governments

Local purchasing generates sales tax revenues to the State of California. The current sales tax rate is 7.25 percent for sales of lift tickets, food

and beverages, equipment sales and rentals, books and maps, and other tangible goods.

Under the Weeks Law of 1911, the National Forests contribute 25 percent of their total receipts to the counties where the Forests are located. The 25 percent fund is used to improve county roads and schools. This contribution is particularly important in counties with a high percentage of Federally owned land that does not generate property tax revenues. In 1989 El Dorado County received 4,028,928 dollars as its 25 percent share of Forest Service receipts.

El Dorado County also collects possessory interest tax form permittees on the value of Special Use Permits issued by the Forest Service.

Social Environment

Those most likely to be affected by the alternatives include Forest visitors seeking a variety of recreation experiences, such as winter sports, hiking, etc. The existing Sno-Park at the site receives heavy use by families, particularly on weekends. Sno-Park visitors could be affected in differing degrees by the various alternatives being considered. Recreation opportunities and effects under various alternatives are discussed in more detail in the Recreation section of this document.

Several recreation residence tracts are located in close proximity to the site. One tract has a water system that is located within the site. Recreation residents could also be affected indirectly by increased activity or noise.

The community of Kyburz is located west of the site. Possible affects on nearby communities include increased traffic, increased local purchasing, and in some alternatives, potential for local employment.

The Eldorado National Forest is committed to the equal treatment of all individuals and social groups in providing services, opportunities, housing, access, and jobs. None of the alternatives considered are expected to have discriminatory effects.

Socioeconomic Effects of Alternatives

Alternative 1 (No Action)

Under this alternative there would be no revenues generated at the site. Some cost would be incurred by the Forest Service for minimal restoration work to minimize erosion and associated resource damage from the areas previously impacted by the ski area.

There would be no noticeable effect on local employment, purchasing, social environment, housing or population. Potential special use fees to the Forest Service would be foregone. Revenues would continue to be

collected by the State from sales of Sno-Park permits. There would be no noticeable increase in revenues or taxes collected by State or local governments.

Alternative 2 (Remove Building and Facilities/Restore Site)

Under the Removal and Restoration alternative there would be no revenues generated at the site. A substantial cost would be incurred by the Forest Service to remove and dispose of the buildings, lifts, and other facilities and to restore those areas of the site indicated on the Map for Alternative 2. Some of this cost might be offset by the salvage value of building materials for reuse at another site.

Some short term employment would be generated by the private sector contract for the removal of the lodge, ski lifts, and other facilities. Small contracts would be anticipated for equipment time and/or purchases of plant materials for restoration of the site by the Forest Service. Any effects on local employment, purchasing, or population would be of short duration.

Potential special use fees to the Forest Service would be foregone. Revenues would continue to be collected by the State from sales of Sno-Park permits. There would be no noticeable increase in revenues or taxes collected by State or local governments.

Alternatives 3a, 3b, and 5 (Special Use Permit or MOU)

Alternatives 3a, 3b, and 5 involve issuance of a permit or MOU for a wide variety of year-round uses. Actual revenue and employment figures would vary depending on the mix of uses included in the proposal selected. Most of the operations described would involve a small resident or intermittent staff and a larger number of intermittent or seasonal participants. There would be a minimal increase in local employment in most cases.

Some short term employment would be generated by the private sector contract for removal of the ski lifts. Small contracts would be anticipated for equipment time and/or purchases of plant materials for restoration of the site by the Forest Service. Any effects on local employment, purchasing, or population would be of short duration.

If a special use permit is issued, the Forest Service would collect fees according to the Granger-Thye Permit fee schedule based on revenues of the permittee. Revenues would continue to be collected by the State from sales of Sno-Park permits. There would be some increase in revenues, sales taxes, and possessory interest taxes to State and local governments. The amount of this increase would vary according to permitted use and Forest Service permit terms.

Alternative 4 (Forest Service Operation)

Alternative 4 involves operation of the facilities by the Forest Service for meeting space and a visitor information center. It is anticipated that a small staff of Forest Service employees would be needed to maintain and operate the site, resulting in several new jobs.

Some short term employment would be generated by the private sector contract for removal of the ski lifts and any unnecessary outbuildings. Small contracts would be anticipated for equipment time and/or purchases of plant materials for restoration of the site by the Forest Service. Any effects on local employment, purchasing, or population would be of short duration.

There would be no special use permit fees collected by the Forest Service under this alternative. In addition, an annual budget would need to be allocated for operation of the facilities. Revenues would continue to be collected by the State from sales of Sno-Park permits. There would be a minimal increase in sales taxes from sale of food & beverages and/or interpretive materials.

Alternatives 6a & 6b (Permit for Downhill Ski Area)

Alternatives 6a and 6b for a downhill ski area would result in an increase in local employment.

Any effects on local employment, purchasing, housing, or population resulting from restoration work would be of short duration.

If a special use permit is issued, the Forest Service would collect fees according to the Granger-Thye Permit fee schedule based on revenues of the permittee. Revenues would continue to be collected by the State from sales of Sno-Park permits. There would be an increase in revenues, sales taxes, and possessory interest taxes collected by State or local governments.

Alternative 6c (Permit for Nordic Skiing/Snowboard Area)

Alternative 6c for a developed Nordic Skiing/Snowboard Area would result in an increase in local employment.

Any effects on local employment, purchasing, housing, or population resulting from restoration work would be of short duration.

If a special use permit is issued, the Forest Service would collect fees according to the Granger-Thye Permit fee schedule based on revenues of the permittee. Revenues would continue to be collected by the State from sales of Sno-Park permits. There would be an increase in revenues, sales, and possessory interest taxes collected by State and local governments. The amount of this increase would vary by permitted use.

Table 5 — Estimated Costs, Revenues, and Employment by Alternative[1]

	Costs to Forest Service		Revenues to Federal Government		Increase in Employment[2]		Annual Revenues to State/Local Gvmt		
	One Time	*Annual*	*One Time*	*Annual*	*One Time*	*Annual*	*County 25% of Revenues*	*Sales Tax (7%)*	*Use Tax*
Alternative 1	$ 3,000[3]	$ 1,500[4]	none	none	0.2 yrs[3]	0.04 yrs[4]	N/A	N/A	N/A
Alternative 2	165,000[5]	2,000[6]	none	none	2-3 yrs[5]	0.07 yrs[6]	N/A	N/A	N/A
Alternative 3a	83,000[7]	2,500[8]	none	0 - $60,000[9]	4-6 yrs[7]	3-10 yrs[10]	$15,000[11]	700 - $60,000[12]	$5,000[13]
Alternative 3b	83,000[7]	3,500[14]	none	0 - 60,100[15]	4-6 yrs[7]	3-10 yrs[16]	15,025[11]	700 - 60,000[12]	5,000[13]
Alternative 4	186,000[17]	106,500[18]	none	1,000 - 20,000[19]	4-6 yrs[17]	3 yrs[18]	250 - 2,500[11]	700[20]	50[13]
Alternative 5	83,000[7]	2,500[8]	none	0 - 60,000[9]	4-7 yrs[7]	3-10 yrs[10]	15,000[11]	700 - 60,000[12]	5,000[13]
Alternative 6a	5,000[21]	2,500[8]	none	60,000[9]	4-6 yrs	12-18 yr[10]	15,000[11]	28,000 - 60,000[12]	5,000[13]
Alternative 6b	5,000[21]	2,500[8]	none	60,000[9]	4-6 yrs	12-18 yr[10]	15,000[11]	28,000 - 60,000[12]	5,000[13]
Alternative 6c	70,000[23]	2,500[8]	none	60,000[9]	4-6 yrs	5-12 yrs	15,000[11]	10,000 - 40,000[12]	5,000[13]

[1]For comparison, rough estimates for revenues, costs and employment have been assumed. Actual figures may vary depending on specific proposals received, site specific plans, real estate appraisals, and the economic climate.
[2]Employment is expressed in person years. A person year would be the equivalent time of one full time employee for one year. Where employment is seasonal, the actual number of jobs generated would be higher.
[3]Minimal erosion control work (Crew for one week).
[4]Recreation tech. for two weeks per year to secure building and facilities, inspect for safety hazards, and monitor snow play activity.
[5]Est. cost less salvage value: $80,000 to remove building; $60,000 to remove lifts; $25,000 for restoration of 21 acres. Assumes half of total cost is labor.
[6]Monitoring/maintenance on restoration work: $1,000 per year for 5 years; Recreation tech. for two weeks per year to monitor snow play activity at the site.
[7]Estimated cost less salvage value: $60,000 to remove lifts; $20,000 for site restoration. (106,000 est cost to repair and upgrade facilities borne by permittee.) Assumes half of total cost is for labor. Forest Service recreation staff for 4 to 6 weeks to negotiate and issue special use permit $3,000.
[8]Recreation staff for two weeks per year to administer permit. Recreation Tech for two weeks per year to monitor snow play activity at the site.
[9]Annual fees for special use permit estimated at 6% of $1,000,000 facility value. Revenues may be reduced for the first two years due to credits given for repair and upgrading of facilities by permittee (estimated cost 106,000).
[10]Assumed figure for employment generated by operator and/or subleasors (Actual employment will vary by type of use); Forest Service recreation staff for 2 weeks per year to administer permit, and recreation tech for two weeks per year to monitor snow play activity at the site.
[11]County Receipts based on 25% of Revenues to Federal Government.
[12]Sales tax of 7% applied to assumed gross sales at 5 times salary costs
[13]Estimated Possessory Interest tax to County.
[14]Costs to Forest Service similar to Alternative 3a with additional two weeks of Recreation staff time to prepare and administer snowmobile event permit.
[15]Revenues to Forest Service similar to Alternative 3a with additional special use permit fees (5% of gross receipts for snowmobile events).
[16]Similar to alternative 3a with slight indirect increase in employment generated by sales of goods and services which support snowmobile activities.
[17]Estimated cost less salvage value: $60,000 to remove lifts; $20,000 for site restoration; $106,000 for building repair Assumes half of total cost is for labor.
[18]Annual building maintenance and utilities $30,000; visitor center operation (3 person years) 75,000; Recreation tech. for two weeks per year to monitor snow play activity at the site.
[19]Potential revenues from rental of meeting space and/or food & beverage concession within Forest Service operated building.
[20]Sales tax on estimated $10,000 sales of food & beverages and/or books and interpretive materials.
[21]Restoration work around new Sno-Park parking lot.
[22]Est. cost 80,000 lift repair, 106,000 building repair including water & septic systems, $3,000 erosion control work. Assumes half of total cost is labor.
[23]Restoration of approximately 6 acres. Removal of lifts $60,000.

Vegetation

The vegetation of the Echo Summit area is a mosaic of montane coniferous forest, montane chaparral, and riparian vegetation. Severely disturbed sites such as ski runs are vegetated to varying degrees with non-native bunchgrasses and with pioneering shrubs and seedlings recruited from the adjoining native plant communities.

The montane coniferous forest can be subdivided into three ecological types (Potter 1990). These are: the red fir ecological type, the Jeffrey pine/mountain whitethorn ecological type, and the lodgepole pine ecological type. The red fir ecological type is the most abundant forest type at the Echo Summit area, and is found on the north and northeast facing slopes above the flats and between the ski runs. The forest here is composed of mostly mature red fir (*Abies magnifica*) trees that form a nearly closed overstory canopy. Western white pine (*Pinus monticola*) and lodgepole pine (*Pinus murrayana*) are also present, but combined only provide about 10 to 20 percent of the total canopy cover.

The Jeffrey pine/mountain whitethorn ecological type is found adjacent to the red fir ecological type, on the more exposed, rocky sites, especially along the eastern and southern margins of the Echo Summit area. Forest cover here is much reduced, mostly around 40 percent. The trees on these sites include Jeffrey pine (*Pinus jeffreyi*), red fir, and Western white pine. Two age classes are present; large, mature trees with diameters at breast height (dbh) averaging around 30 inches, and saplings with average dbh's of 1-3 inches. Shrub cover is high on these sites, but quite variable due to the scattered distribution of large boulders. Mountain whitethorn (*Ceanothus cordulatus*) is the most common shrub, with minor amounts of chinquapin (*Castonopsis sempervirens*) and gooseberry (*Ribes* sp.) also present.

The third coniferous forest plant community present in the Echo Summit area is currently dominated by lodgepole pine, and occurs on the almost flat terrain between the lodge and U.S. Highway 50. This community can be classified as a riparian community due to its location adjacent to other riparian community types, and the greater availability of subsurface moisture. However, the presence of numerous red fir saplings in the understory of this stand, and the lack of lodgepole seedlings and saplings, indicates that this community is seral to a red fir forest and is should be classified as the lodgepole pine ecological type (Potter 1990). This forest community is quite dense, with canopy cover over 75 percent. The trees here are in two size classes, with well over 200 trees per acre in the 10 - 20 inch dbh size class, and approximately 100 trees per acre in the 1-3 inch dbh size class. Shrubs are mostly absent, except on the margins of the forest where mountain alder (*Alnus incana* spp. *tenuifolia*) forms nearly continuous thickets in the understory.

The riparian plant communities are difficult to classify and have not been adequately described in the ecological literature. Holland (1986) has

lumped these communities in a "catch-all community" he termed montane riparian scrub. Willows (Salix sp.) are one of the indicators of this community and are found on the more open and less rocky sites just below the red fir forest. The alders are more widely scattered, and occur along drainages within the red fir forest and lodgepole pine stands, as well as at the base of the ski runs and along the ditches and atop the fill between the lodge and the steeper slopes. Much of the fill that was placed at the base of the ski hill is currently being invaded by alder, indicating that this area is still nominally functioning as a wetland. The flat areas at the base of the ski hill also support a wide variety of forbs and graminoids (grass-like plants). Many of these plants, such as huckleberry (*Vaccinium* sp.), swamp onion (*Allium validum*), marsh marigold (*Caltha howellii*), manna grass (*Glyceria* sp.), and monkshood (*Aconitum columbiana*) are considered obligate or facultative wetland species (Reed 1988).

Montane chaparral is also present in the Echo Summit area. This is an often recognized plant community and is termed mixed montane chaparral by Holland (1986). This community is also considered by many ecologists to be an early successional community that will be replaced over time by the conifers that form the climax vegetation type for the site. The montane chaparral vegetation located between and adjacent to the ski lifts is an artifact of the disturbances that have occurred on these sites and will eventually be replaced by a red fir forest. Evidence of this successional pattern is provided by the numerous red fir and lodgepole seedlings that are scattered on the lower slopes of the abandoned ski runs. Cessation of grooming operations by the former operator of the ski area has allowed both the montane chaparral shrubs and conifer seedlings to become established here.

The species composition of the montane chaparral is moderately diverse. Mountain whitethorn the most common shrub on the lower slopes, with lesser amounts of chinquapin and *Ribes* spp. also present. The upper slopes have a mix of huckleberry oak (*Quercus vaccinifolia*), pinemat manzanita (*Arctostaphylos nevadensis*), and snowberry (*Symphoricarpos mollis*). Elderberry (*Sambucus mexicana*, tobacco brush (*Ceanothus velutinus*), and green-leaf manzanita (*Arctostaphylos patula*) are widely scattered throughout the mid- and lower ski runs.

There are also many non-native and native grasses present on the ski runs. The non-native grasses such as orchard grass (*Dactylis glomerata*), fescue (*Festuca* sp.) and pubescent wheatgrass (*Agropyron trichophorum*) were introduced as a means of controlling erosion on the ski runs, and native grasses such as squirrel tail bottlebrush (*Sitanion hystrix*) have re-invaded these disturbed sites from adjoining areas. These bunchgrasses presently provide 30 to 85 percent ground cover on about two to three acres.

Montane chaparral is also present on the eastern and southern margins of the Echo Summit area. Here the chaparral is adjacent to and probably successional to the Jeffrey pine/mountain whitethorn ecological type.

Mountain whitethorn is common, but less so than on the ski runs, and shares these sites with green leaf manzanita and chinquapin.

Several of the plant communities described above are capable of providing habitat for the Region 5 sensitive plant species hidden-petal campion (*Silene invisa*). This perennial herb is most commonly found in the ecotone (areas where two communities meet/overlap) between mature red fir forests and riparian communities, or along ephemeral drainages in stands of red fir or lodgepole pine. Less frequently, hidden-petal campion is found growing in the ecotone between red fir forest forests and montane chaparral. This species is usually restricted to north-facing slopes at elevations between 6,800 feet and 8,800 feet, in areas with mid-day or afternoon shade. The Echo Summit area provides about 30 acres of suitable habitat for hidden-petal campion (cf. Biological Evaluation for Sensitive Plants, 1992).

A survey for hidden-petal campion was conducted in all of the areas that provide suitable habitat in 1992. Surveys were also conducted in the Echo Summit area in 1983, including the suitable habitats around the existing parking lot, the lodge, and the flat between the lodge and the ski lifts. In addition, four spot surveys have been conducted in the general vicinity. These spot surveys were located 1/2 mile to the west, 3/4 mile to the northwest, 1/2 mile to the north, and 1/4 mile to the southeast. All of these surveys were negative for hidden-petal campion (Taylor 1983; Eldorado National Forest 1992).

A second Region 5 sensitive plant species, Cup Lake draba (*Draba asterophora* var. *macrocarpa*), is known from the general vicinity of the Echo Summit area. This perennial herb is known to occur in only two locations, both located within 3 1/2 miles of the Echo Summit area. Habitat for this alpine cushion plant consists of relatively deep soil in the shade of granitic rocks in association with red mountain heather (*Phyllodoce breweri*), mountain pride (*Penstemon newberryi*), elderberry (*Sambucus caerulea*), and mountain hemlock (*Tsuga mertensiana*). This habitat type is absent from the Echo Summit area, and thus, Cup Lake draba is not expected to occur in the Echo Summit area (cf. Biological Evaluation for Sensitive Plants, 1992).

How Vegetation Would be Affected

Affects Common to all Alternatives:

Maintenance of the open slope with associated flat area for snow play would function to delay the recovery of the vegetation to the climax vegetation type. The vegetation here would continue to be composed of small shrubs, grasses, and forbs. Conifer seedlings would continually become established only to be removed as they became hazards to users of the snow play area.

There will be no affects to Cup Lake draba as the result of the implementation of any of the proposed alternatives due to the lack of suitable habitat or known populations for this plant.

Alternative 1 (No Action)

Establishment of a marked but ungroomed nordic ski trail would have no discernible effect on the vegetation.

Maintenance of water bars to prevent further erosion and deterioration of water quality would result in the continued establishment of vegetation on the old service access roads and bare slope areas. The species composition of these sites will be dependent on the species composition of the adjoining areas and will consist primarily of mountain whitethorn, chinquapin, red fir, and Jeffrey pine.

Alternative 2 (Remove Building and Facilities/Restore Site)

Removal of the ski lodge, chair lifts, and facilities other than those being utilized for the Sno-Park and Pacific Crest Trail and the re-establishment of native plants on these sites would result in a net increase of approximately 21 acres of native vegetation. The restoration of the flat area now occupied by the lodge and associated fill would allow for the re-establishment of a fully functioning wetland composed of willows, alders, and numerous obligate wetland herbs. This would partially compensate for the loss of wetlands that has resulted from road construction and road side developments in the headwaters of the South Fork of the American River. This restoration work may also result, depending on the resulting soil moisture regime, in the creation of suitable habitat for hidden-petal campion.

Planting of conifers, if needed due to poor natural regeneration, would occur on the ski slopes outside of the snow play area to accelerate the recovery of the red fir forest. This would provide a habitat suitable to the herbs and shrubs associated with this ecological type. This restoration work may also result, depending on the resulting forest structure, in the creation of suitable habitat for hidden-petal campion.

Establishment of a marked but ungroomed nordic ski trail would have no discernible effect on the vegetation.

Alternatives 3a, 3b, and 4 (Issue Special Use Permit or MOU without expansion or Forest Service Operation)

Re-establishment of native plant communities will occur on approximately 19 acres of disturbed land, including several acres of wetland. Operation of the lodge building will preclude the restoration of wetlands on approximately 1 acre, and the use of the building will probably limit the amount

of wetlands that can be fully recovered in the area surrounding the lodge. The use of native trees, shrubs, and herbs for revegetation will accelerate the recovery of the native plant communities and limit the opportunities for non-native plants to become established, reducing the likelihood that these non-native plants will be able to persist over time. This restoration work may also result, depending on the resulting soil moisture regime and species composition and structure, in the creation of suitable habitat for hidden-petal campion.

Public use of the site will result in trampling of vegetation and soil compaction. The magnitude of these impacts on existing vegetation will depend on the type of use developed for this site. It is likely that non-native weedy species will have an opportunity to become established, or to maintain existing populations on existing disturbed sites adjacent to the lodge, deterring the native vegetation from complete recovery.

Other impacts to existing vegetation will be limited to areas disturbed by well drilling, septic tank re-construction, and ski lift removal and will be fully mitigated by revegetation of these sites with native trees, shrubs, and herbs.

The meadow at the base of the ski slopes is formed by water flowing through joints in the granitic rocks and becoming entrapped in this small glacial basin. Airphoto observation indicates that the meadow is fed by several sources of water. The development of the existing spring source on the southern edge of the meadow should have no direct impacts on the meadow itself. Riparian vegetation growing in close proximity to the spring may experience stress or even mortality if it depends entirely on this spring as its water source. If a vertical well is drilled instead, no impacts are anticipated. A vertical well would be quite deep and riparian vegetation associated with the meadow only taps a very shallow aquifer.

The use of the Echo Summit area for closed course snowmobile events, as proposed in Alternative 3b, will have no discernible effect on the vegetation.

The development of guided trails with plants and trees marked for interpretation, as proposed under Alternative 4, would have a minimal effect on vegetation as a result of trail construction and use. This effect would be mitigated by the enhanced awareness of the public for native plant resources.

Alternative 5 Forest Service Preferred Alternative (Issue Permit or MOU with Potential for Expansion)

The effects on vegetation under this alternative would be similar to those described for Alternatives 3a, 3b, and 4, with the exception that those areas that would be developed for additional buildings, tent cabins, and/or parking, would not be restored by re-vegetation with native plants.

In addition, the proposed use of the Echo Summit area for outdoor events such as concerts would result in the trampling of existing vegetation. This would result in reduced plant vigor and may reduce the rate at which existing disturbed areas will recover to near natural conditions.

Alternative 6a & 6b (Permit for Downhill Ski Area)

Opportunities to restore wetland and forest vegetation on existing disturbed sites would be reduced under this alternative. The majority of existing disturbed sites would continue to be disturbed. Use of the existing facilities in the summer would further impact existing disturbed sites, reducing the density, cover, and vigor of the existing vegetation and providing opportunities for weedy, non-native species to become established or more numerous. If slope grooming is proposed, this would function to suspend the recovery of the vegetation in these areas to the climax vegetation type.

The development of 25 to 35 miles of groomed ski trails would impact up to approximately 50 acres of native vegetation through the removal of trees and shrubs. Depending on the routes selected for development, the hidden-petal campion and Cup Lake draba may be affected by trail construction. A site-specific biological evaluation would be completed prior to any decisions regarding the location of these trails in order to assess the significance of any impacts to these Region 5 sensitive plant species.

Erosion control work would result in the accelerated recovery of vegetation on approximately 10 acres of disturbed land, primarily along the existing service road.

Alternative 6c (Permit for Nordic Skiing/Snowboard Area)

The affects of this alternative are similar to those for Alternative 6a & 6b.

Soils

Affected Environment

The soils in the area of the Echo Summit site have been mapped at the Order 3 level of intensity. The Order 3 Soil Survey of the Eldorado National Forest indicates three different soil map units in the area of the project.

The flat to gently sloping portion of the area where the roads, parking area, and building are situated is mapped as Tallac-Cryumbrepts, wet association, 15 to 30 percent slopes (Soil Map Unit 203). These soils are derived from glacial till and outwash comprised primarily of granitic (diorite) rock. The Tallac soils are deep, moderately well drained sandy soils with a high percentage of cobbles and stones. These soils have an erosion hazard rating of moderate to high, depending on slope. The Cryumbrepts, wet soils are moderately deep to very deep, coarse-textured, poorly drained soils

generally occurring in the swales and flattest portions of this map unit. These soils are usually wet throughout most or all of the year and have surface horizons that are rich in organic matter. The areas of Cyrumbrepts, wet soils are likely to be considered as wetlands and are important for wildlife and water quality.

The area where the ski lifts are placed is mapped as Rock outcrop-Tinker association, 15 to 75 percent slopes (Soil Map Unit 200). The rock outcrop is granitic and generally comprises more than 50 percent of the map unit. The associated soil is the Tinker series, a moderately deep and well to moderately well drained sandy soil with a high percentage of cobbles and stones. These soils have an erosion hazard rating of high to very high. Because of the steep slopes, coarse textured soils, and the prevalence of impermeable surfaces (rock outcrop and boulders) in the area, the potential for significant runoff and erosion is high.

How Soils Would be Affected

Alternative 1 (No Action)

Current eroding conditions on the old service access roads and on the bare slope areas would be reduced somewhat due to the minimal restoration work that would be performed under this alternative. No wetlands restoration would occur.

Alternative 2 (Remove Building and Facilities/Restore Site)

Erosion of old service access roads and ski slopes would be reduced due to obliteration and rehabilitation of the roads. Obliteration would reverse compacted and barren conditions that currently contribute to concentration of runoff. Repair and construction of drainage control features (water bars, rolling dips, culverts, ditches, etc.) will help to divert concentrated flows frequently onto stable areas, thus further reducing the volume of concentrated flows.

Revegetation of road surfaces and slope areas will also reduce erosion and improve soil productivity by allowing the soil to recover a nutrient rich surface horizon and protective litter cover.

Restoration of riparian areas and removal of the lodge and associated fill areas in restoring the original wetlands will return the area to a functioning wetland. This will serve to filter runoff from slopes above, trapping and storing sediment. Also, reestablishment of original wetland vegetation and drainage characteristics will replenish soil nutrient status, since wetland drainage conditions combined with the cool soil temperatures at this elevation result in slow decomposition of plant litter and other organic matter. This results in a build up of organic matter. The long-term result is a thick, nutrient-rich surface horizon, rich in organic matter and biological activity. This restored surface horizon will help in filtering runoff

water and breaking down pollutants and contaminants in the soil and water.

About 21 acres total would benefit from restoration under this alternative.

Alternatives 3a, 3b, and 4 (Issue Permit or MOU without expansion or Forest Service Operation)

Erosion of old service access roads and ski slopes would be reduced due to obliteration and rehabilitation of the roads. Obliteration would reverse compacted and barren conditions that currently contribute to concentration of runoff. Repair and construction of drainage control features (water bars, rolling dips, culverts, ditches, etc.) will help to divert concentrated flows frequently onto stable areas, thus further reducing the volume of concentrated flows.

Revegetation of road surfaces and slope areas will also reduce erosion and improve soil productivity by allowing the soil to recover a nutrient rich surface horizon and protective litter cover.

About 19 acres total would benefit from restoration under these alternatives.

Alternative 5 Forest Service Preferred Alternative (Issue Permit or MOU with Potential for Expansion)

Erosion of old service access roads and ski slopes would be reduced due to obliteration and rehabilitation of the roads. Obliteration would reverse compacted and barren conditions that currently contribute to concentration of runoff. Repair and construction of drainage control features (water bars, rolling dips, culverts, ditches, etc.) will help to divert concentrated flows frequently onto stable areas, thus further reducing the volume of concentrated flows.

Revegetation of road surfaces and slope areas will also reduce erosion and improve soil productivity by allowing the soil to recover a nutrient rich surface horizon and protective litter cover.

About 19 acres total would benefit from restoration under this alternative.

Alternative 6a, 6b & 6c (Alpine Ski Area; Nordic Ski Area/Snowboard Park)

Current erosion problems on the old service access roads will be reduced by repairing, installing, and maintaining drainage control (rolling dips, water bars, ditches, culverts, etc.). Seeding of bare or poorly vegetated soil areas on the slopes around the roads will help minimize surface erosion and improve nutrient status of soils. The eastern access road will be kept open, however, so obliteration and revegetation of this road will not be done. Some erosion and concentration of runoff from barren and compacted road

surfaces will continue. Reestablishment of a tree cover would be prevented in the area of ski slopes, but these areas would be seeded with grass and/or forb species as necessary for erosion control.

About 3 acres total would benefit from restoration under this alternative.

Geology

Affected Environment

Echo Summit Ski Area is located upon granodioritic rocks, which comprise the Sierra Nevada batholith. Capping the granodiorite in the eastern section of the site are glacial deposits (outwash and till).

The northern Sierran province has undergone uplift and westward tilting within the past 3 million years. The eastern slope of the Sierra Nevada and nearby Lake Tahoe Basin are fault-bounded features associated with Basin and Range block faulting. The Tahoe Fault is the principal fault in the Echo Summit area and forms a steep escarpment along U.S. Highway 50, just north of Echo Summit. Physiographic evidence indicates that between 5000 to 6000 feet of displacement has taken place along this fault (American River Canyon Area Plan, 1982).

Quaternary aged faults (less than 2 million years ago) have occurred along the eastern escarpment (Tahoe fault). Earthquake epicenter data collected at the University of California Seismographic Station at Berkeley, California indicates that 136 significant earthquakes have originated within the general vicinity of the Lake Tahoe Basin during the period from 1855 to 1971 (Cooper-Clark and Associates, 1974). Cooper-Clark also postulates that, based on historical information and assuming that similar patterns of seismic activity will occur in the future, it is estimated that an earthquake of magnitude 7.0 or greater will occur on the average of every 110 years within 25 miles of the center of Lake Tahoe (1974).

There are no known active landslides within the Echo Summit Ski Area.

How Geology Will be Affected

Common to all Alternatives:

Because of the close proximity of the Echo Summit Ski Area to the Tahoe Fault, seismic hazards are considered significant. However, the risk of health and human safety to this seismic hazard will vary according to the number and condition of structures and facilities in the area, as well as the time of year such an event would occur. Using an estimate of 7.0 magnitude, there is a potential to snap and uproot large trees, dislodge boulders, initiate avalanches on ski slope areas (winter season), shear or collapse buildings and ski lifts, damage pipeline and powerlines, damage roads, and cause changes in groundwater levels (Sierra Ski Ranch Expansion Draft EIS, 1989).

Whereas the potential for an earthquake to occur cannot be mitigated, the degree of damage to structures and injury to persons can be mitigated by requiring all existing and/or potential buildings to be structurally sound and earthquake resistant. All buildings should conform to County, State of California and Uniform Building Code seismic standards.

Loss of human life and injury may be lessened if an evacuation and emergency action plan is developed.

There are minimal volcanic hazards for the area and they will not influence the project.

Landslide hazards are also considered minimal within the area, although earthquake activity has the potential to initiate shallow slides within the glacial materials.

Alternative 1 (No Action)

Lack of improvements to buildings and structures over time would make them more susceptible to damage in the event of an earthquake.

Alternative 2 (Remove Building and Facilities/Restore Site)

Removal of structures and ski facilities would reduce earthquake hazards to health and human safety.

Alternatives 3a, 3b, & 4 (Issue Special Use Permit or MOU without Expansion; Forest Service Operation)

There would be no increased risks to health and human safety above current conditions; however, more people would probably be attracted to the area, resulting in a potentially higher number of people exposed to the hazards associated with seismic activity (snow avalanches, collapsed buildings, etc.)

Alternative 5 Forest Service Preferred Alternative (Issue Permit or MOU with Potential for Expansion)

Addition of tent cabins and more structures would potentially increase the health hazard associated with earthquake activity. Presumably more people would be accommodated at the site for a longer period of time, thus increasing their chances of being present if such an event were to occur. However, this increase in risk is only slight and is not considered significant.

Alternatives 6a, 6b & 6c (Permit for Downhill Ski Area; Permit for Nordic Skiing/Sno Board Area)

These alternatives would have same effects as Alternative 3a, with the addition of increased health and safety hazards resulting from seismic activity because of the addition/use of ski lifts, which have the potential to collapse in the event of a high magnitude earthquake nearby.

Hydrology

Affected Environment

Echo Summit Ski Area lies within the headwaters of the South Fork of the American River. Echo Summit receives approximately 50-55 inches of precipitation during a normal year; this falls predominately as snow at the elevations ranging from 7300-8700 feet. A deep snow pack ranging from 5-8 feet is generally present at these elevations from December to May. The average annual water yield ranges from 3.5 to 4 acre-ft. The lower areas and flats contain wet meadow type areas that have the potential to be classified as jurisdictional wetlands. Portions of these areas tend to stay quite wet year round. Potential jurisdictional wetlands have been determined through analysis of aerial photographs. Those areas being considered for restoration that are within potential jurisdictional wetlands are depicted on the maps for each alternative.

State designated beneficial uses of the water from the South Fork American River and its tributaries include: municipal and domestic supply, agricultural supply including irrigation and stock watering, hydroelectric power generation, water contact recreation, nonwater-contact recreation, cold freshwater habitat, cold water fish spawning, and wildlife habitat. A spring within the area supplies water to the lodge. This water supply, if continued use is for domestic purposes, will need to be upgraded to meet the necessary drinking water standards set by the Federal Safe Drinking Water Act of 1976. Nonwater-contact recreation and wildlife habitat are also provided by waters on the site.

The stream channels within the site vary from very small, steep ephemeral draws in the headwater areas to small (5 to 15 feet wide), low gradient perennial streams meandering through a meadow network. The natural drainage patterns that historically existed in the area have been modified with the construction of U.S. Highway 50, Echo Summit Ski area, and additional structures. Drainages in many places have been diverted into adjacent drainages resulting in dewatering of the areas adjacent to buildings. Adjacent to the lodge, another channel has been created to aesthetically enhance the entry to the lodge.

The old ski runs in the area have begun to revegetate, yet some areas are in need of erosion control work. Many waterbars have failed, and rilling is occurring in many places. In one area midslope gullying is occurring on a flat bench where a drainage has been re-routed. To reduce non-point source pollution these areas should be rehabilitated to a more natural state. See Map C for locations of disturbed, denuded areas where rehabilitation efforts will be focused.

How Hydrology Would be Affected

Alternative 1 (No Action)

Selection of this alternative would not have direct impacts on water quality, quantity, channel morphology, or watershed condition. There would be no change in management as it has been for the past few years. The area will slowly continue to recover and adjust from the disturbances of the past.

Alternative 2 (Remove Building and Facilities/Restore Site)

Water Quality, Channel Morphology & Watershed Condition

Implementation of this alternative would be expected to improve watershed health through the planned restoration. Deposits of sediment and materials that were pushed into the small drainages would be removed to encourage natural channel morphological processes. As disturbed areas and drainages are reshaped, soils would be reclaimed. Simultaneous processes that would occur as this happens are: 1. Infiltration rates would increase, making it easier to re-establish vegetation. 2. Overland flow would decrease and associated erosion rates would decrease. 3. Non-point source pollution coming from hillslope erosion would decrease, improving on-site water quality. 4. There could be a short term influx of sediment into the system during the first storm following any ground disturbing activities (i.e., land reshaping activities). Best Management Practices (BMP's) will be implemented with this rehabilitation as with all alternatives to protect against non-point source pollution, protect resources, and to meet soil and water *Eldorado National Forest Land and Resource Management Plan* Standards and Guidelines. (See Appendix B for specific BMPs that will be implemented with each alternative.) There would be no long term adverse effects to water quality. Water quality standards would be met and/or exceeded. (See Appendix C for specific water quality standards applicable to this project.)

Water Yield

The selection of this alternative would result in a slow decrease in water yield as evapotranspiration from revegetated areas slowly increases. More water will be held up in the soil and vegetation as the site recovers. This decrease would range from 2.5-9.2 acre-ft per year (*Eldorado National Forest Land and Resource Management Plan*, computed from tables on p.3-26).

Cumulative Watershed Effects

Cumulative Watershed Effects (CWE) information used for this project's analysis did not include the determination of a Natural Sensitivity Index (NSI) nor was the data compiled to determine the Land Disturbance History (LDH) for the whole watershed. The rationale behind this was the

project did not include any "new" development and since much of the focus was on site rehabilitation, there is no potential for initiating adverse CWE's with implementation of this project.

With the selection of this alternative the entire site would be restored over time. Disturbed acres (measured as equivalent roaded acres in CWE analysis) will decrease over time as the watershed recovers. Alternative 2 would be the most preferable alternative in terms of cumulative watershed effects since it restores the site the most.

Alternatives 3a & 3b (Special Use Permit or MOU)

The effects of selection of either of these alternatives would be similar to those described in Alternative 2 in terms of water quality, channel morphology, watershed condition, and water yield.

Cumulative Watershed Effects

In terms of CWE's the rationale described for this analysis is the same as in Alternative 2. For the developed areas (parking lots, roads, and buildings), the disturbed acres would remain constant over time. This could reduce the potential for future management activities within the headwaters of the South Fork of the American River watershed at some point in time. This alternative, however, still incorporates a substantial amount of rehabilitation. With the rehabilitation, the condition of the watershed within these areas would improve over time, reducing disturbed acres outside the developed areas. Selection of this alternative would be beneficial in terms of reducing the risk for future potential adverse cumulative watershed effects since more acres of land will be restored than will be left in a disturbed state.

Water Use

With the implementation of this alternative it will be necessary to improve/upgrade current domestic water supply and waste disposal systems to meet objectives of the Public Health Department as well as to comply with the Federal Safe Drinking Water Act of 1976.

Water use will be expected to increase, as the site could be used for over night use year-long. The amount is undeterminable at this point in time, as the actual use of the site has not been determined. This water use is not expected to have an influential effect on adjacent beneficial users (i.e., recreation residences, riparian vegetation and/or aquatic resources).

Alternative 4 (Forest Service Operation)

The effects of selection of this alternative would be similar to those described in Alternative 2 in terms of water quality, channel morphology, watershed condition, and water yield and similar to Alternative 3 in terms of CWE's.

Water Use

With the implementation of this alternative it will be necessary to improve/upgrade current domestic water supply and waste disposal systems to meet objectives of the Public Health Department as well as to comply with the Federal Safe Drinking Water Act of 1976.

Water use will be expected to remain constant with what the site was initially designed to produce; there should be no effect on beneficial users.

Alternative 5 Forest Service Preferred Alternative (Issue Permit or MOU with Potential for Expansion)

The effects of selection of this alternative would be similar to those described in Alternative 2 in terms of water quality, channel morphology, watershed condition, and water yield and similar to Alternative 3 in terms of water use. There would be a slight increase in runoff associated with the development of new facilities from an increase in impervious areas. The planned restoration would slowly decrease the water yield over time as vegetation recovers. The net effect would be little change in the total amount of water yield to the South Fork American River. Much of the proposed development area is already disturbed, including portions already used as a road. Since there is no "new" disturbance this would result in no change to the present equivalent roaded acre measure used in CWE analysis.

Alternatives 6a, 6b & 6c (Permit for Downhill Ski Area; Permit for Nordic Skiing/Snowboard Area)

Water Quality, Channel Morphology & Watershed Condition

Implementation of either of these alternatives would involve reopening the site as a downhill ski area and/or snowboard area. There would be no significant changes to the area as it currently exists. Channel morphology and watershed condition would basically stay the same as it is now. Site maintenance in terms of erosion control work, including implementation of the BMP's would become the responsibility of the permittee as set forth by an erosion control plan. Maintenance work may be postponed until a permittee is selected and the appropriate permits and erosion control plan are complete and accepted.

Water Use

Effects on water use for this alternative would be similar to the effects described under Alternative 4.

Cumulative Watershed Effects

Since there is no "new" disturbance this would result in no change to the present equivalent roaded acre measure used in CWE analysis. The disturbed areas within the ski area would remain disturbed as long as the slopes are groomed and the area is maintained as a ski area. The equivalent roaded acres would remain constant over time. This could reduce the potential for future management activities within the headwaters of the South Fork of the American River watershed at some point in time.

See Alternative 2 rationale for this project's CWE evaluation.

Visual Resources

Affected Environment

The entire existing Echo Summit Ski Area site is within the U.S. Highway 50 viewshed. This viewshed has been inventoried and evaluated under the Forest Visual Management System (VMS). The *Eldorado National Forest Land and Resource Management Plan* requires maintenance of a Visual Quality Objective (VQO) of foreground retention. Changes in the landscape should not be visually evident to the average person unless pointed out. Any changes should repeat the form, line, color and texture of the landscape characteristic of the site. At present, the foreground views from U.S. Highway 50 to the existing developed site do not pose any visual problems due to the existing foreground vegetative screening, and the area presently meets the retention VQO. It is important to maintain this vegetative screening in all future management actions.

The on site Existing Visual Condition (EVC) of the base area and ski slopes presently meets a VQO of modification because of the noticeable changes to the natural landscape character as viewed on the site. The on site retention objective will be difficult to achieve due to the existing openings and facilities. However, the potential of attaining a retention VQO over time does exist depending on the future management of the site.

How Visual Resources Would be Affected

Alternative 1 (No Action)

The EVC for views from U.S. Highway 50 and the on site views would remain unchanged in this alternative.

Alternative 2 (Remove Building and Facilities/Restore Site)

Removal of all facilities except for the Sno-Park and site restoration would improve the on site visual quality over time to a VQO of partial retention to retention for views from the Sno-Park.

Alternatives 3a, 3b, & 4 (Special Use Permit or MOU without Expansion; Forest Service Operation)

Views from U.S. Highway 50 would remain as they are. On site visual quality would also remain as is with some improvement to the visual quality from slope restoration and ski lift facilities removal.

Alternative 5 Forest Service Preferred Alternative (Issue Permit or MOU with Potential for Expansion)

Views from U.S. Highway 50 would remain as is with some improvement from slope restoration.

Alternative 6a, 6b & 6c (Permit for Alpine Ski Area; Permit for Nordic Ski Area/Snowboard Park)

EVC would not change with this alternative.

Wildlife and Fisheries

Affected Environment

Habitats Occurring Within the Site

Red Fir: The red fir habitat in the analysis area is not exclusively red fir but contains a considerable amount of jeffrey pine as well as some of the subalpine conifer components. There are approximately 21 acres of red fir/ jeffrey pine habitat on the site (aerial photo interpretation of 1986 photos 1992)(see Map H). A breakdown of acres by size class and canopy closure is shown in Table 6. Sensitive species and Management Indicator Species (MIS) potentially utilizing this habitat or the edge between this habitat type and another include: black bear, mule deer, northern goshawk, spotted owl, cavity nesters, pine marten, fisher, and red fox.

Lodgepole Pine: Lodgepole pine occurs on the site in the flat areas along riparian and wet meadow habitats. There are only about 3 acres of lodgepole pine habitat within the site, but there is a considerable amount of this habitat type within the area of analysis, especially north of U.S. Highway 50 (see Maps H and I). A breakdown of acres by size class and canopy closure is shown in Table 6. Species potentially utilizing this habitat or the edge between this habitat type and another include: black bear, mule deer, northern goshawk, spotted owl, cavity nesters, marten, fisher, and red fox.

Montane Riparian: Montane riparian habitat occurs along streams within the site. This habitat includes, for example: alder; willow; with some lodgepole pine; red fir; and jeffrey pine. There are approximately 3 acres of montane riparian habitat within the site (aerial photo interpretation of 1986 photos, 1992). Species potentially utilizing this habitat or the edge between this habitat type and another include: willow flycatcher, black bear, mule deer, cavity nesters, mountain quail, marten, fisher, red fox, spotted owl, and northern goshawk (see Map H).

Wet Meadow: Wet meadow habitat occurs in flat areas and depressions on the site. Representative plants include willow, alder, lodgepole pine, and various native and introduced grasses, sedges, and forbes. There is only about 1 acre of wet meadow habitat within the existing permittee boundaries, but it is important to note that most of the non-native grassland in the flat area to the south and east of the lodge was originally wet meadow that is now degraded to varying degrees (aerial photo interpretation of 1986 photos, 1992) (see Map H). Of the many wet meadow areas within the analysis area, the three closest to, or within, the site are: the area surrounding Lake Audrian, the area surrounding Echo Summit Lodge, and Benwood Meadow. The acreages for these areas are 21, 1, and 37 acres, respectively (aerial photo interpretation of 1986 photos, 1992) (see Map I). Species potentially utilizing this habitat or the edge between this habitat type and another include: willow flycatcher, black bear, marten, red fox, great gray owl, mule deer, and mountain quail.

Montane Chaparral: Montane Chaparral habitat occurs on many of the steep rocky slopes within the analysis area as well as in the man-made ski run and road areas. Predominant plant species include manzanita and mountain whitethorn. There are approximately 20 acres of montane chaparral habitat within the site (aerial photo interpretation of 1986 photos, 1992) (see Map 2). Species potentially utilizing this habitat or the edge between this habitat type and another include: mountain quail, black bear, and mule deer.

Non-native Grassland: Non-native grassland occurs in areas altered by human activity within the site. There is a total of about 20 acres of this habitat type within the site. The largest areas of non-native grassland habitat are the area adjacent to the parking area and the maintenance road that runs from the lodge up the east side of the ski hill (aerial photo interpretation of 1986 photos, 1992). The predominantly montane chaparral ski runs also include sections of non-native grassland, as do the other small degraded areas adjacent to the lodge and parking areas (see Map H). Species potentially utilizing this habitat or the edge between this habitat type and another include: black bear, red fox, mule deer, and mountain quail.

Fisheries: There are no identified fisheries within the site. Water flow generated on the site forms the headwaters of the South Fork of the American River. Brook, rainbow, and brown trout fisheries have been identified in the river downstream from Echo Summit. The documented upstream limit of the fishery in this drainage are the brook trout that are known to inhabit Audrian Creek and are probably present in the South Fork of the American River in the vicinity of the confluence of Audrian Creek, approximately 1.5 miles downstream from the project site.

Water quality concerns associated with the existing and proposed developments within the site will be addressed in the watershed narrative.

Species Occurring within the Site

Threatened, Endangered and Sensitive Species:

A species list identifying threatened or endangered species potentially found within the site was requested of the Fish and Wildlife Service. The list, provided on December 3, 1992, identified the bald eagle, peregrine falcon, Lahontan cutthroat trout and valley elderberry longhorn beetle as endangered and threatened species potentially found on the forest. None of these species, or their associated habitats, are found within the site.

Based upon surveys conducted in 1980 and subsequent habitat analysis, no suitable peregrine falcon cliff nesting sites occur within the site. There have been no sightings of this species within the area. Bald Eagles have been sighted along the American River, as close as 2 miles west of the site, but no identified wintering or nesting habitat is found in the vicinity of the site. The valley elderberry longhorn beetle is found within valley oak woodland habitat below 2500 feet in elevation. Its habitat does not occur within the vicinity of the site. No known naturally occurring or introduced populations of Lahontan cutthroat trout exist within the analysis area.

Great Gray Owl: At this time no great gray owls are known to exist within the site and no surveys have been conducted. The forest has mapped potential great gray owl habitat and the nearest such habitat is approximately 2 miles to the southwest in Bryan Meadow. Although no habitat has been officially identified here, there are some wet meadow areas within the analysis area that are large enough to be potentially utilized by great gray owl. These include the area surrounding Lake Audrian, Benwood Meadow, and possibly the degraded meadow at the existing ski lodge (see Maps H and I). Benwood Meadow is the most likely candidate for great gray owl use because it has more of the characteristics associated with suitable owl habitat than the other meadow areas. It is the largest meadow, with forested areas on all sides, and is the farthest removed from human activity (Winter 1980, Winter 1982).

Northern Goshawk: Surveys have not been conducted for goshawk within the site; however, goshawks have been sighted within the site and analysis area (Echo Summit Ski Area Development Plan, 1985). In 1992, a new goshawk territory was identified and added to the forest network when an active nest was located approximately 1.5 miles southwest of the site.

Northern goshawks nest primarily in stands with a canopy closure of >60 percent, but they have been known to nest in mature lodgepole pine stands with as little as 30 percent canopy closure. Goshawks in northern California tend to nest in stands where the average dbh is 18in (U.S.D.A. Forest Service 1988). There is not much continuous red fir/jeffrey pine with >60 percent canopy closure on the site (about 10 acres), but there is a good deal more in adjacent areas (see Table 6 and Map H). There is only about 1 acre of lodgepole pine with canopy closure of 50 percent within the site (see Table 6). It is important to note that these acres are

adjacent to large contiguous stands both north and south of U.S. Highway 50. Goshawks seem to prefer areas of 0-30 percent slope in nest placement, and most lodgepole stands within the analysis area occur in this situation (U.S.D.A. Forest Service 1988). The meadow and riparian areas adjacent to the forested goshawk habitat are very important in supplying much of the prey base on which the species relies (U.S.D.A. Forest Service 1988). Because goshawks have home ranges as large as 4500 acres it is feasible that the known pair to the southwest utilizes the site

California Spotted Owl: Surveys for spotted owl have not been conducted on the site. No spotted owls have been sighted in the project area but, in 1989, young spotted owls were observed and adult vocalization were heard approximately one mile to the northwest of the site within the area of analysis. Additional spotted owl vocalizations were heard outside the analysis area about 3.5 miles southwest of the site during surveys for the species in 1987 and 1991 (unpublished U.S.D.A. Forest Service maps and documents, 1992).

There is potential foraging habitat within the site, with larger less fragmented stands of red fir/ jeffrey pine habitat on adjacent land. There are only 10 acres of suitable foraging habitat (>50 percent canopy closure) within the site (see Map H). In some cases these stands are continuous with larger forested areas on adjacent land within the analysis area. Because of the potential foraging habitat occurring on site it is possible that one or more of the owls detected utilize this site.

Marten: No marten sightings have been reported within the site. No surveys have been conducted for this species within the site; however, surveys have been conducted in the area directly adjacent to the west. During the summer of 1987, approximately 3500 acres were surveyed using 20 furbearer tracking plate stations. Nine of these 20 stations were visited by marten, including two stations within a mile of the Echo Summit Ski Area's western boundary. At that time the data indicated that at least two and possibly four or more martens were utilizing all or part of the surveyed area (Sierra Ski Ranch Expansion proposed project, EIS 1989).

Marten prefer areas with >40 percent canopy closure for denning and foraging. These stands should contain >30 percent mature trees and be within 1/2 mile of wet meadow areas for the greatest utilization (Freel 1991). These conditions are met in about 13 acres of forested land within the site (see Table 6 and Map H). These conditions are also met in the areas adjacent to the other wet meadows within the analysis area (aerial photo interpretation 1986 photos). Because of the site's proximity to this Sierra Ski Ranch survey area, the relatively large marten home range size (2000 acres), and the existence of suitable habitat, it can be assumed that marten occur within the site.

Fisher: Fisher have not been sighted within the site. No surveys have been conducted for this species within the existing Echo Summit Ski Area; however, surveys have been conducted in the area directly adjacent to the

west. During the summer of 1987, approximately 3500 acres were surveyed using 20 furbearer tracking plate stations. No fisher were detected (Sierra Ski Ranch Expansion proposed project, EIS 1989). In 1967 there was a fisher sighting reported in the Benwood Meadow area, just east of the site boundary (unpublished U.S.D.A. Forest Service wildlife sighting map).

Although this site is slightly higher in elevation than typical fisher habitat (4000-7000 ft), fisher may utilize the site. This is due to about 10 acres of potentially suitable foraging habitat of >50 percent canopy closure existing there and more occuring in the area directly to the west of the site. (see Map H). This habitat could contribute to a fisher home range (6000 - 11,300 acres). It is unlikely that fisher den in the area because current information suggests that they prefer to den in areas with >70 percent canopy closure and large mature stands of trees.

Sierra Nevada Red Fox: Sierra Nevada red fox have not been sighted within the site. A Sierra Nevada red fox sighting was reported in 1990 approximately 3 miles to the west of the site (unpublished U.S.D.A. Forest Service wildlife sighting map, 1990). No surveys have been conducted for this species within the existing Echo Summit Ski Area; however, surveys have been conducted in the area directly adjacent to the west. During the summer of 1987, approximately 3500 acres were surveyed using 20 furbearer tracking plate stations. No red fox were detected (Sierra Ski Ranch Expansion proposed project, EIS 1989).

Red fox may utilize the site because about 20 acres of non-native grassland, 1 acre of wet meadow, and 23 acres of forested habitat occur here (see Map H). Red fox prefer forested areas interspersed with open areas such as meadows or open alpine fell fields. These open areas are used for hunting (Grinnell 1937 in Schempf & White 1977). This type of habitat exists in and around the meadow and other grassy areas occurring on the site. Very little is known about Sierra Nevada red fox, except that it is thought to occur in vegetation types in a manner similar to marten (Schempf & White 1977). For these reasons, combined with the local observation, we will assume that Sierra Nevada red fox could be utilizing this site.

Willow Flycatcher: No surveys have been conducted for this species. Potential habitat of marginal quality exists for the species in the riparian and wet meadow portions of the site. Wet meadow and riparian habitats make up about 3 acres of the site. There are more large meadows and riparian areas within the analysis area, such as, Benwood Meadow and the area surrounding Lake Audrian (see Table 6 and Maps H and I).

Most willow flycatchers are found in open meadow or riparian areas that are greater than 20 acres in size, but breeding willow flycatchers have been found in meadows as small as .62 acres. This species requires standing or running water or saturated soil at least during the breeding season. Dense patches of willow or alder species between 1-2 meters in height are required to support willow flycatchers; however, this species seems to prefer areas where there are open patches between willow and alder clumps (Fowler

et al 1991). Approximately 2.5 acres is typically needed for a family of willow flycatchers. This includes an average territory size of 0.84 acres plus a 66 foot wide foraging zone around the territory (CDF&G 1989). Because a suitable amount of potential habitat exists there, it is possible that the site could support a breeding pair of willow flycatchers, especially if habitat restoration were to occur.

Additional Management Indicator Species:

The *Eldorado National Forest Land and Resource Management Plan* identifies the following additional species as Management Indicator Species (MIS) for the Forest.

Mule Deer: The site provides summer range for the Grizzly Flat Deer Herd. This herd occupies a range of 520 square miles loosely bounded by U.S. Highway 50 on the north, the Sierra Crest on the east, Highway 88 and the South Fork Cosumnes River on the south, and the 3,000 ft contour line on the west. Two other deer herds occupy summer range adjacent to the site; the Pacific Deer Herd to the north of U.S. Highway 50 and the Carson River Deer Herd to the east and north of the site. Critical summer range for the Grizzly Flat Deer Herd occurs about 1/2 mile to the south of the southern end of the previous permittee boundary (unpublished CDFG deer herd range maps dated 1983). No critical fawning areas have been identified on the site, but fawning likely occurs in and adjacent to the 3 acres of wet meadow and riparian habitat (see Map H).

Black Bear: No surveys have been done on the site, but bear and indications of bear use have been sighted on the site and surrounding areas. Bear habitat exists in the wet meadow, riparian, and surrounding wooded areas (see Map H). Black bear use all considered habitat types to some degree, for foraging, denning, shelter, and travel. In fact, for black bear to successfully inhabit an area, it must include a chain of seasonal habitats that provide an adequate amount of food and nearby cover to support the animals during the entire non-dormant portion of its yearly cycle (Kelleyhouse 1975). Denning sites for hibernation and reproduction usually occur on moderate to steep north-facing slopes and are dug under the base of a large tree, stump, downed log, boulder, or in a cave or mine shaft in well forested areas (Goodrich 1990). Approximately 11 acres of potential denning habitat occur within the site. Denning sites are predominantly chosen in areas of minimal human disturbance (Novick et al 1981; habitat capability model date, author unknown).

Mountain Quail and Blue Grouse: Mountain quail and blue grouse are known to inhabit the site. Suitable habitat in the form of riparian, montane chaparral, and meadow areas associated with forest edge is relatively abundant on the site (see Map H). The quail forage in grassy areas with cover in the form of edge vegetation or small trees or brush. This often forms a travel corridor into the grassy open areas. Nesting occurs in the edge vegetation of the forested areas. Blue grouse require a mixture of

mature conifer habitat, brushy conifer stands, and open grass areas/forb areas near water.

How Wildlife Habitat and Species would be affected

Effects common to all alternatives

The following effects would be common to all alternatives discussed:

Use of the existing ski run and ungroomed cross country ski trails associated with the Sno-Park should have no effect on habitats or the species that utilize them. Cross country skiing is relatively non-intrusive in terms of noise and concentration of people and is not expected to result in disturbance to wildlife. If activities were to occur adjacent to bear den locations, there is some potential for causing temporary abandonment of den sites by bear (Goodrich, 1990).

Removal of stumps and small trees from the snow play area would be inconsequential in this already altered area and would therefore have no substantial impact on habitat or species.

Continued use of, rerouting, or resigning of the Pacific Crest Trail should have no impact on habitats or species.

Effects associated with individual alternatives

Alternative 1 (No Action)

This alternative would result in no immediate change in the present condition of habitats; however, over time the ski run areas will begin to return to their natural condition as lodgepole pine, red fir, jeffrey pine, etc. encroach on these open areas. This occurrence would increase the continuity of these habitats and would improve habitat conditions for species utilizing interior forest habitat. Habitat conditions would likely be improved over time for the following sensitive wildlife species: Northern goshawk, spotted owl, marten, fisher, and Sierra Nevada red fox. Improving the continuity of mature forested habitat would also benefit black bear. This alternative would probably have little effect on other Forest MIS. The reduction in brush and grassland areas may reduce available foraging areas for mountain quail and mule deer but would not have any substantial effect on the species.

Alternative 2 (Remove Building and Facilities/Restore Site)

The removal of structures and restoration of 11.4 acres of forested habitat delineated for Alternative 2 should positively affect these habitat types and the species that utilize them, by increasing the size and continuity of forested stands (see Map C). This restoration would occur more quickly than under Alternative 1 and would increase the size and continuity of

habitat for the following species: goshawk, spotted owl, marten, fisher, and Sierra Nevada red fox.

This alternative would also restore 9.5 acres of meadow and riparian habitat by improving drainage, eliminating erosion problems, and aiding in revegetation (see Table 7). This would improve habitat conditions for the following riparian dependent sensitive and Forest MIS that might utilize the area: great gray owl, willow flycatcher, Sierra Nevada red fox, mule deer, and black bear.

This alternative would result in a reduction in brush and grassland areas as these sites are returned to more natural conditions. This could reduce some foraging habitat for mountain quail and mule deer but would not have any substantial effect on these species.

Alternative 3a (Special Use Permit or MOU)

Use of the lodge building should have no effect on wildlife habitat unless it is associated with substantial outdoor activities in the surrounding area. These activities could result in some trampling and compaction of vegetation and soil, if activities occur during months when there is no snow on the ground. Concentrated and regular use of riparian areas adjacent to the lodge could result in disturbance to this habitat. If habitat is occupied by great gray owls or willow flycatchers, this use could reduce the suitability of habitat for these species. Since the lodge area is small and of marginal quality in terms of habitat, it is unlikely that the viability of these species within the Eldorado National Forest would be adversely affected.

This alternative would probably result in an overall benefit to wildlife habitat. The removal of structures and restoration of 11.4 acres of forested habitat and 7.2 acres of wet meadow/riparian habitat will increase the size and continuity of stands and increase the quality and quantity of wet meadow and riparian habitat. This would benefit species utilizing these habitats as described in Alternative 2 above (see Maps D and E). (See Table 7 for acres restored for Alternatives 3b - 6c).

Increased human use could result in disturbance/harassment levels that adversely affect utilization of the area by a number of wildlife species. Since public use would be confined to relatively few acres, the overall disturbance effect on wildlife species is expected to be localized and therefore the activity is not likely to affect the viability of these species within the area of analysis. In the immediate project vicinity, the following effects are possible with increased public use of the area: loss of successful nesting by goshawks, great gray owls, and willow flycatcher (if these species are nesting in the vicinity), disturbance to denning black bear during the winter months causing abandonment of den sites (it is unlikely, however, that bear would be denning this close to the already existing disturbances of the Sno-Park and parking area because distance from human activity is an important parameter in den site selection (California Department of

Fish and Game 1981), and disturbance and loss of fawning habitat utilized by mule deer. The level and likelihood of these effects is entirely dependent upon the type and amount of public use that would occur in the area.

Additional areas plowed for parking should not affect habitat because parking is proposed for the currently degraded areas adjacent to the lodge and parking lot.

Alternative 3b (Permit or MOU Including Snowmobile Events)

The same considerations and effects as discussed in alternative 3a apply here with the addition of those associated with closed course snowmobile events. Closed course snowmobile events should have little or no effect on wildlife habitat assuming that the course is made only of packed snow with no alteration of the vegetation, soil, or drainage patterns. Trees directly adjacent to the course may need to be limbed to 10 feet. Minimum snow depth requirements will be set.

Snowmobile noise is a form of harassment that needs to be studied further to understand its full impact on wildlife. Noise from snowmobile events is unlikely to affect nesting spotted owls because of the lack of suitable nesting habitat within the site. However, if potential habitat is occupied by goshawks or by great gray owls, noise from snowmobile activities could prevent successful nesting by these species in the immediate area. Because the size of the site is small in comparison to the home range of these species and because other suitable nesting habitat exists in the area of analysis, risk to the viability of these species within the analysis area is low.

There are potential adverse impacts from noise harassment, during the denning season for fisher and marten: February - June (California Department of Fish and Game 1991). Excessive noise could cause these species to abandon the den and/or the site; however, the risk of viability being adversely affected is low, since the site is small in comparison to the home range size of these species, and suitable habitat exists elsewhere in the analysis area. These factors should not affect Sierra Nevada red fox since they are thought to migrate down slope during the winter months (Grinnell 1937). It is unlikely that black bear would be denning close to the already existing disturbances of the Sno-Park and parking area because distance from human activity is an important parameter in den site selection; therefore, noise harassment should not adversely affect black bear viability within the area of analysis (Goodrich 1990) (California Department of Fish and Game 1981)

Alternative 4 (Operation by Forest Service)

The same considerations and effects as discussed in Alternative 3a apply here with the addition of those associated with an interpretive trail. An interpretive trail is likely to have little or no adverse impact because it

will keep visitors in areas deemed suitable and will therefore result in little trampling of vegetation, compaction of soil, and harassment of wildlife.

Alternative 5 Forest Service Preferred Alternative (Permit or MOU with Potential for Expansion)

The same considerations and effects as discussed in Alternative 3a apply here with the addition of those associated with expansion and concerts/theatre productions.

Expansion plans for dormitories, parking, and staging will not impact habitat, since areas proposed for building/expansion are situated in the currently degraded areas adjacent to the parking lot and lodge. Large outdoor concert or theatre events may affect these habitats by increasing the trampling, compaction, and wildlife harassment discussed in Alternative 3a. This would occur primarily in the area proposed for the outdoor amphitheatre.

Excessive concert noise would have potential impacts to wildlife similar to those associated with snowmobile noise discussed in Alternative 3b. If Alternative 5 is selected, and the permittee proposes concert events, additional analysis and a site specific biological evaluation on effects will be conducted by the Forest Service prior to issuance of a special use permit, as indicated in Coordinating Requirement #2.

Alternatives 6a, 6b & 6c (Permit for Downhill Ski Area; Permit for Nordic Skiing/Snowboard Area)

The same considerations and effects as discussed in Alternative 3a apply here with the addition of those associated with a ski/snowboard resort. Winter use of the ski runs and associated areas as an alpine ski resort/snowboard area should have no effect on existing habitat.

Winter use of the site as a nordic ski area should have little effect on habitat. However, since the exact location of the proposed groomed cross country ski trails has not yet been determined, the extent of tree removal is not fully known. There is expected to be no removal of trees under this alternative. If subsequent analysis indicates tree removal is necessary, additional analysis of effects will be required.

Expansion of the parking area should have no impact on habitat since new parking areas are proposed for the currently degraded areas adjacent to the parking lot and lodge.

Summer RV use of the parking and surrounding areas could impact this habitat by increased daily use (as described above) during the months it is used as such. Associated effects such as the potential increase in domestic dogs and cats associated with RV use, could increase harassment of wildlife, especially deer. Black bears could become a nuisance in the area if garbage is not well managed.

Cumulative Effects

The site was used intermittently as an alpine ski area from 1949 through 1988. At this time a portion of the area is being used as a state run Snow Play Area (Sno-Park). Minimal maintenance or management has occurred on any other part of the site since it was acquired by the Forest Service in 1990.

The land to the west of the site has been managed as the Sierra Ski Ranch alpine ski area. The boundaries lie within 1 mile of the site in some places. At this time the county of Eldorado is preparing an expansion proposal for this ski area that could cause it to eventually expand to within .5 miles of the boundaries of the Echo Summit site. If full expansion of Sierra Ski Ranch occurs, decrease in habitat quality and quantity, via ground clearing, fragmentation and increased human use, combined with the increase in use from the Echo Summit Ski Area Site may effect the wildlife species considered in this document. The risk of the Echo Summit proposal alone affecting the viability of these species within the Eldorado National Forest is relatively low, considering the size and nature of proposed activities n the alternatives for the Echo Summit Ski Area Site.

The area to the north of the Echo Summit Ski Area Site and south of Echo Lake has accommodated a number of residential and commercial buildings. It is unlikely that this area will see much growth, as most of the surrounding area is owned by the U.S.D.A Forest Service.

No activities or expansion have occurred in the past or are planned for the future in the relatively rough terrain to the south and east of the site.

Current timber activities are limited to the Hot Shot Insect Salvage Sale. Unit E of this sale abuts the site to the west. The increase in disturbance from reinstating expanded public use of the Echo Summit Ski Area site, combined with removal of dead and dying trees that provide potential denning/nesting sites for spotted owls and sensitive furbearers, as well as their prey species, could result in a decrease in habitat quality for these species. Although these activities may affect the quality of spotted owl and furbearer habitat, the risk to viability is low due to the small size of the site and because salvage guidelines described in the sale decision notice (1991) require the retention of two hard snags with diameter at breast height (dbh) >30 inches, and one hard snag with a dbh of >24 inches per acre in suitable furbearer habitat (Eldorado National Forest 1991).

Table 6 — Echo Summit Ski Area Site: Acres by Habitat Type (1992)[1]

habitat type[2]	current acreage[3]
forested	
red fir-total[4]	21
5S	9
5M	9
5D	3
lodgepole pine-total	
pine total[5]	2
4S	1
4M	1
montane chaparral	20
montane riparian	2
wet meadow	1
non-native grassland	20

Habitat Stages for Tree Dominant Habitats

5S = trees with diameter breast height (dbh) >24" and canopy closure (cc) of 10-24%

5M = trees with dbh >24" and cc of 40-59%

5D = trees with dbh >24% and cc of 60-100%

4S = trees with dbh of 11-24" and cc of 10-24%

4M = trees with dbh of 11-24" and cc of 40-59%

[1] Acreage figures for habitat types are based on previous ski area boundary, as depicted on Map II.

[2] Habitat descriptions (except non-native grassland) and habitat stage information taken from *A Guide to Wildlife Habitats of California*, 1988; California Department of Forestry and Fire Protection.

[3] Data table was obtained by aerial photo interpretation of 1986 aerial photos.

[4] "Total" refers to the total acreage of this habitat combining all size and growth stages.

[5] "Total" refers to the total acreage of this habitat combining all size and growth stages.

Table 7 — Echo Summit Ski Area Site – Acres Restored by Habitat Type[1]

Alternative	Acres to be restored to each growth type	
	Forested	*Meadow/Riparian*
1	0	0
2	11.4	9.5
3a	11.4	7.2
3b	11.4	7.2
4	11.4	7.2
5	11.4	7.0
6a	0	1.1
6b	0	1.1
6c	3.2	1.1

[1]Data for table derived from computer generated maps designed by Terry Tenley, 1992.

HABITAT TYPES OCCURRING WITHIN THE

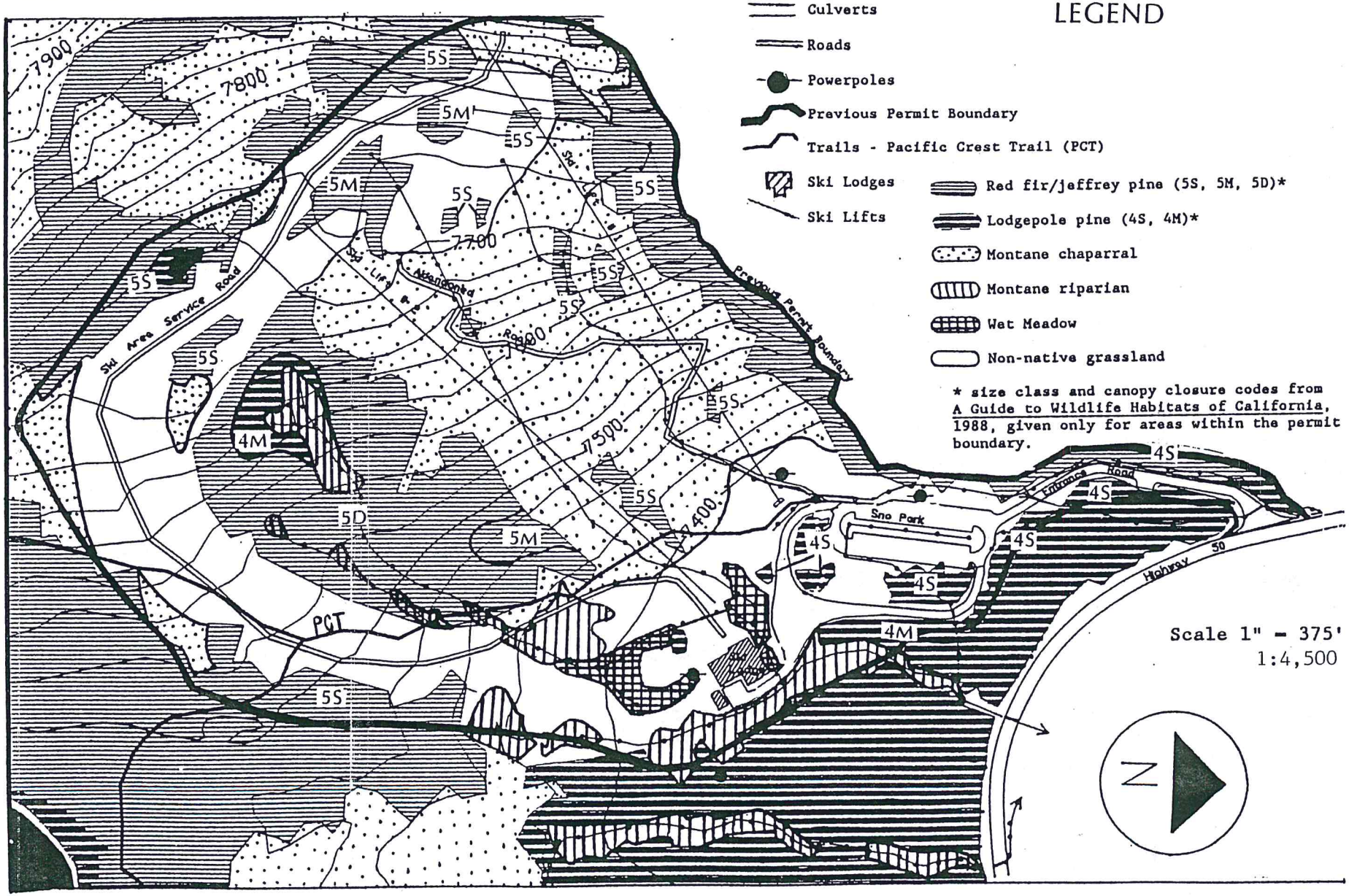
ECHO SUMMIT SKI AREA SITE

MAP **H**

LEGEND

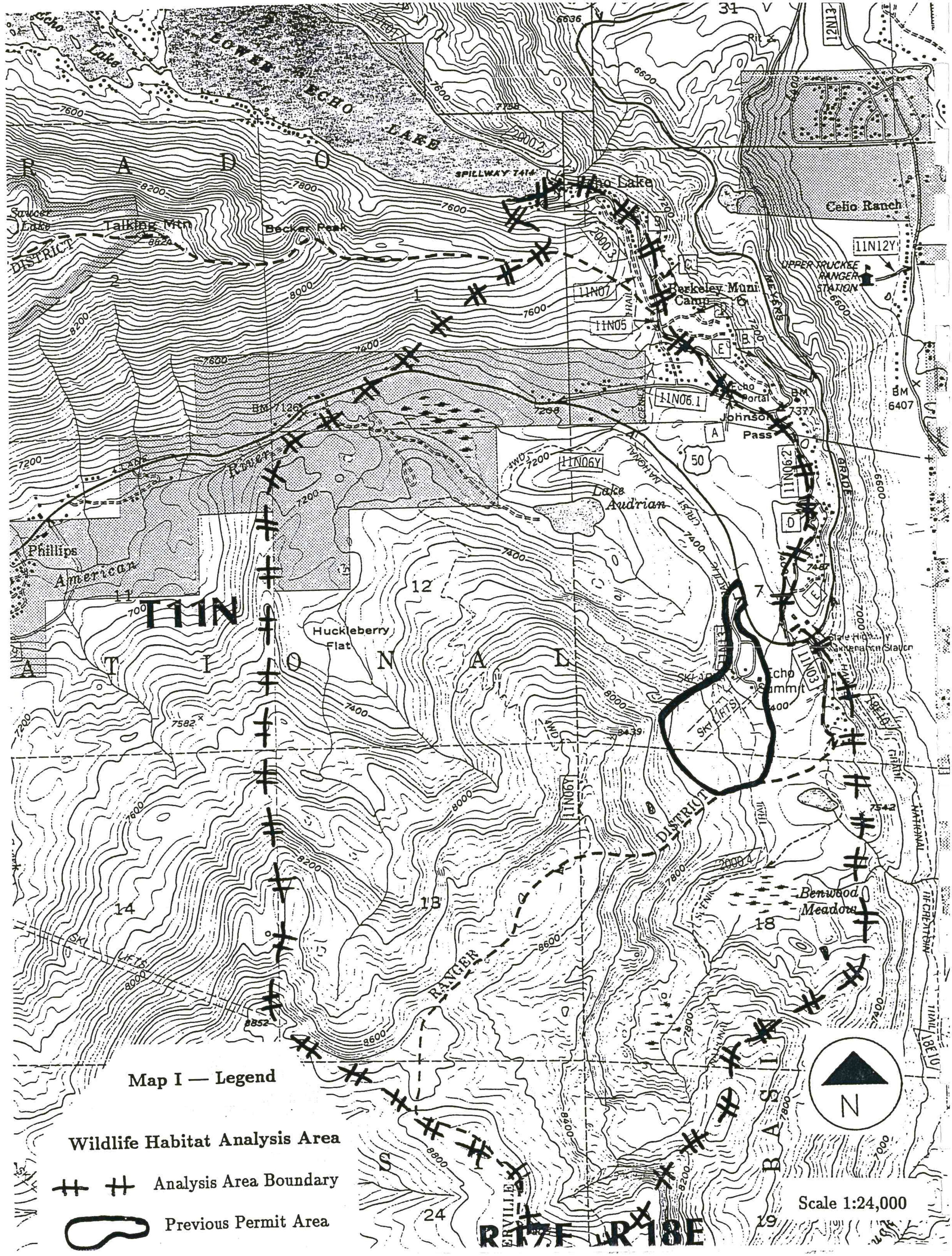
- Streams - Ephemeral
- Streams - Perennial
- Lakes
- Culverts
- Roads
- Powerpoles
- Previous Permit Boundary
- Trails - Pacific Crest Trail (PCT)
- Ski Lodges
- Ski Lifts
- Red fir/jeffrey pine (5S, 5M, 5D)*
- Lodgepole pine (4S, 4M)*
- Montane chaparral
- Montane riparian
- Wet Meadow
- Non-native grassland

* size class and canopy closure codes from A Guide to Wildlife Habitats of California, 1988, given only for areas within the permit boundary.



Scale 1" = 375'
1:4,500

T. Tenley & H. Bombay 3/92



Lower Echo Lake
Echo Lake
Spillway 7414
Talking Mtn
Becker Peak
Saucer Lake
Celio Ranch
Upper Truckee Ranger Station
Berkeley Muni Camp
Echo Portal
Johnson Pass
Lake Audrian
Phillips
American River
T11N
Huckleberry Flat
Echo Summit
Ski Lifts
Benwood Meadow
District
Ranger
R17E
R18E
Map I — Legend
Wildlife Habitat Analysis Area
Analysis Area Boundary
Previous Permit Area
N
Scale 1:24,000

Cultural Resources

Affected Environment

An archaeological survey was conducted within the Echo Summit Ski Area in 1976. No cultural resources were noted or recorded. The Forest Service notified the State Historic Preservation Officer (SHPO) pursuant to Advisory Council on Historic Preservation Regulations for the Protection of Historic Properties, 36 CFR 800.4(d). There is no record of response from the SHPO.

Since the prior inventory was done many years ago, and cultural resource survey standards have changed, adequacy of the survey was verified through supplemental field checks in 1992. No cultural resources were noted or recorded.

How Cultural Resources Would Be Affected

There will be no effects to cultural resources under any of the alternatives.

Air Quality

Affected Environment

The former Echo Summit Ski Area lies in the El Dorado Air Pollution Control District, which is part of the Mountain County Air Basin. Monitoring stations are located in Placerville (particulate sampling) and Shingle Springs (ozone and carbon monoxide). Table 8 presents the California and Federal Ambient Air Quality Standards that apply in the Mountain County Air Basin.

While generally air quality is good in the Mountain County Air Basin, occasional exceedances of air quality standards have put the area in noncompliance for the following air quality standards:

* Particulate Matter less than 10 microns (PM10) for:

  1) California 24-hour standard of 50 ug/m^3;

  2) California annual geometric mean (AGM) of 30 ug/m^3.

* Ozone (O3) for:

  1) California Ambient Air Quality Standard of 0.09 ppm;

  2) National Ambient Air Quality Standard of 0.12 ppm.

* Carbon Monoxide (CO) for:

  1) California Ambient Air Quality Standard of 9.0 ppm (8hr) or 20.0 ppm (1hr)

  2) National Ambient Air Quality Standard of 9.0 ppm (8hr) or 35.0 ppm (1hr)

The nearest boundary of Desolation Wilderness, a Class I air area, lies about 3 miles northwest of the former Echo Summit Ski Area. The Clean Air Act of 1977, established air quality standards for areas like Desolation Wilderness that are more strict than those for Class II areas, of which most of the Mountain County Air Basin is classified. Currently visibility is being monitored for Desolation Wilderness using an automatic camera located on a ridgetop at Kirkwood, California. The camera is programmed to photograph the wilderness once a day during the late fall through early spring months and three times a day during the rest of the year.

Visibility in Desolation has been monitored since the fall of 1988. The Standard Visual Range (SVR) for 50 percent of the time has been between 146 and 186 km. Between June 1, 1991, and August 31, 1991, the SVR for 90 percent of the time has been 283 km or less. The 1991 Summer Summary of visibility data for Desolation Wilderness shows a minimum SVR of 47 km and a maximum value of 391 km.

The former Echo Summit Ski Area lies along the western side of a ridge line that separates the Lake Tahoe and American River watersheds. Predominant winds are westerly that characteristically follow the American River drainage upwards and into the Lake Tahoe Basin. Cold, stagnant air conditions are possible in this area but are not likely to remain for long periods of time given the wind and meteorological conditions conducive to ridge areas.

The concerns in this EIS related to air quality include compliance with air quality standards, especially in terms of the parking lot and use of any wood burning device that may be employed in any associated development. Parking spaces available for the Sno-Park and any of the proposed options mentioned in the alternatives are expected not to exceed the 300 spaces allocated to Echo Summit Ski Area when it was in operation (See Coordinating Requirement 16).

How Air Quality would be Affected

Parking for up to 200 vehicles has already been approved for the Sno-Park immediately adjacent to the site under discussion in this EIS. Use of this Sno-Park is expected to continue whether or not the former Echo Summit Ski Area is used for one of the several options mentioned in the alternatives of this EIS. Each action alternative in this EIS specifies that no more than 100 vehicles spaces will be available in addition to those already established for the Sno-Park.

The consequences are presented in discussion form, as many of the options in each alternative discussed in this EIS are similar and present a wide range of air quality results. Overall, air quality standards are not expected to be exceeded during any phase or option of the alternatives presented in the EIS. In addition, since available parking spaces are not expected to increase above the 300 allotted to Echo Summit Ski Area while in operation, no additional air quality effects are anticipated beyond what existed during this time.

The air quality parameters of concern in this document are PM10 and O3. Generally, no additional effects to air quality are expected to occur over those experienced during the operation of Echo Summit Ski Area. The assumptions behind this include:

* No additional parking spaces will be available beyond what existed during the ski area's operation.

* Simultaneous cold starts in cold weather and still air likely occurred during the ski area's operation and, since no more cars are expected to be started in the same conditions under any other proposed use of the area, the effects are assumed to be the same or less.

Short-term effects to air quality may occur during restoration work where soil is disturbed or buildings removed or remodeled, creating localized fugitive dust during the activity. Long-term effects to air quality under the no action and restoration alternatives are expected to be negligible.

Several options for use of the facilities are provided in the alternatives and range between limited use to maximum use of the parking area available. Worst case scenarios in terms of air quality include simultaneous cold engine startups following an event during a cold winter night with a full parking lot (300 parked vehicles) and peak use of parking lot with equal numbers of cars leaving and entering a nearly full (300 spaces) parking lot combined with slow moving traffic along U.S. Highway 50 along Echo Summit. Options that would create the potential for a full parking lot with either simultaneous cold engine start-ups (cultural or recreational events, private parties, conventions, meetings) or continuous in and out traffic (visitor center, art exhibit) will generally have a greater impact on air quality than those options requiring less traffic and/or parking (lodging, work center).

Another vehicle related effect to air quality could occur during snowmobile enduro events proposed in Alternative 3b. With up to 100 snowmobile engines running, the staging area is expected to be higher in engine emissions for the time the snowmobiles are concentrated there. This is expected to dissipate rapidly following dispersion of the snowmobiles.

If a wood burning device is used on the site, consideration should be given to the frequency it is in operation as well as the type of device used. Since the project is adjacent to the Tahoe Basin, where only EPA approved wood burning devices are permitted in new purchases, use of such a device on the project site is encouraged.

If snowmaking is considered along with the ski area alternative, diesel emissions are a concern. An estimate of the extent and amount of time snowmaking would be in operaation must be made as part of the EIS.

Table 8 — California and National Ambient Air Quality Standards

	California		*National*	
Pollutant	*Averaging Time*	*Concentration*	*Primary*	*Secondary*
Ozone	1 hour	0.09 ppm	0.12 ppm (235 ug/m3)	Same as Primary
Carbon Monoxide	8 hour	9 ppm (10 ug/m3)	9 ppm (10 ug/m3)	Same as Primary
	1 hour	20 ppm (23 ug/m3)	35 ppm (40 ug/m3)	Same as Primary
Nitrogen Dioxide	Annual Average	-	100 ug/m3 (0.05 ppm)	Same as Primary
	1 hour	0.25 ppm (470 ug/m3)	-	-
Sulfur Dioxide	Annual Average	-	80 ug/m3 (0.03 ppm)	-
	24 hour	0.05 ppm (131 ug/m3)	365 ug/m3 (0.14 ppm)	-
	3 hour	-	-	1,300 ug/m3 (0.5 ppm)
	1 hour	0.25 ppm (655 ug/m3)	-	-
Suspended Particulate Matter (PM10) (see note below)	Annual Geometric Mean	30 ug/m3	50 ug/m3	-
	24 hour	50 ug/m3	150 ug/m3	-
Sulfates	24 hour	25 ug/m3	-	-
Lead	30 day Average	1.5 ug/m3	-	-
	Calendar Quarter	-	1.5 ug/m3	Same as Primary
Hydrogen Sulfide	1 hour	0.03 ppm (42 ug/m3)	-	-
Vinyl Chloride	24 hour	0.01 ppm (26 ug/m3)	-	-
Visibility Reducing Particles	1 observation	In sufficient amount to reduce the prevailing visibility to less than 10 miles when the relative humidity is less than 70%.		-

Note: California Ambient Air Quality Standards for PM10 became effective August, 1983. The 24 hour and annual National Ambient Air Quality Standards for PM10 became effective in July, 1987. The primary and secondary Total Suspended Particulate (TSP) National Ambient Air Quality Standards were rescinded in July, 1987. ■

List of Preparers

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Michael Skinner	Region 5, Economist
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Erik Holst	Computer Graphics & Typesetting
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Public and Other Agency Participation

In addition to National Forest representatives the following people attended one or more of the three public scoping meetings held for this project in Placerville and South Lake Tahoe:

Ken Cater
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Robert Ward
Mia James
Lois Bonser
Dave Cox
Susan Kirkpatrick
Jorge Olon
Robert Cormia
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Arlene Carlson
Ron Carlson
John Bell
Travis Greenlee
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Gordon Stangland
Vern Sprock
Howard Dunlop
Dwayne Holman
Carol Spain

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Mountain Democrat
Scollay Parker
Back Country Traveler
Adrienne Hicks, Echo Summit Permittee Assn.
James Pike, High Country Clothing
Bill Dart, Western Snowmobile Racing, Inc.
Julie Hendricks
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Marcus Libkind, Loma Prieta Chapter Sierra Club
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Ken Carter, El Dorado County Probation Department
Jim Allison, Tahoe Regional Planning Agency
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Elizabeth Case
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Distribution List

Copies of the study report/DEIS have been sent to, and comments have been requested from, the following:

Federal Agencies and Officials

Eldorado National Forest, Information Center
Environmental Protection Agency, Washington D.C. *(5 copies)*
Environmental Protection Agency, San Francisco Regional Office *(3 copies)*
USDA Forest Service, Washington D.C. *(3 copies)*
USDA Forest Service, LTBMU
USDA - National Agricultural Library *(3 copies)*
US Department of the Interior, Washington D.C. *(18 copies)*
US Fish & Wildlife Service

State and Local Agencies and Officials

California Department of Fish and Game, Bob Maples
California Department of Fish and Game, Daniel Hinz
California Department of Transportation, Jorge Olon (Marysville)
California Department of Transportation, John Cotteir (South Lake Tahoe)
California Department of Transportation, Robert Watkins (Marysville)
California Conservation Corps, Dan Friedman
California Conservation Corps, Clark Emch
California Department of Recreation, Dave Cox, Sno-Park Manager
California Highway Patrol, South Lake Tahoe
Regional Water Quality Control Board
California, State Clearinghouse
City of Placerville, Community Development Dept, Conrad Montgomery
City of South Lake Tahoe, Parks and Recreation Dept, Keith Gottschalk
El Dorado County Economic Development Corporation
El Dorado County Probation Department, Joe Warshol
El Dorado County Board of Supervisors, Susan Kirkpatrick
El Dorado County Board of Supervisors, Judi Harkins
El Dorado County Chamber of Commerce
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El Dorado County Planning Department, Elizabeth Eddins
El Dorado County Probation Department, Ken Cater
El Dorado County Sheriff's Dept, Bob Johnston
South Tahoe Public Utility District; Mary Lou Mosbacher, Director
Tahoe Regional Planning Agency, Lynn Barnett

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Custom Ski Rentals, Greg Kuzniak and Beth Andreozzi
Back Country Traveler, Carol Bonser
Kirkwood Associates, Inc, Debbie Waldear
Kyburz Lodge
Little Norway Lodge
Old MacDonalds Ent. Inc.
Pipe Dreams Action Wear, James Pike
Recreational Equipment, Inc.
Silver Fork Store
Sierra Ski Ranch, Vern Sprock
Strawberry Lodge, Rich Mitchell
Twin Bridges Resort

Organizations

American River Land Trust, Alan Ehrgott
American Motorcycle Association, District 36, Bill Dart
Berkeley Camp
California Alpine Club
California Tahoe Conservancy, Dennis Machida
California Wilderness Coalition, Lucy Rosenau and Jim Eaton
Echo Summit Mutual Water Association
Echo Summit Permittee Association
Economic Development Corporation of El Dorado County
Eldorado National Forest Interpretive Association
Friends Aware of Wildlife Needs (FAWN), Karen Shambach
Highway 50 Association
Nordic Voice, Don Trask
Sierra Club, Loma Prieta Chapter Ski Touring, Marcus Libkind
Sierra Club, Mother Lode Chapter, David Burton
Sierra Club, Robert Johnson
Sierra Club, Mother Lode Chapter Winter Sports, Dave Vandershaf
Sierra Ski Touring, Gardnerville NV
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Western Snowmobile Racing, Inc., Bill Dart
Tahoe Conservancy, Dennis Machida
Tahoe Tallac Assoc., Carol Spain

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El Dorado County Office of Education, Wally Newberry
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Peter J. Shields Library, University of California, Davis
Sly Park Environmental Learning Center, Glen Davis

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Larry Mosbacher, Lake Tahoe Snowmobile Assn.
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Scollay Parker
Mike Peart
Ron and Roberta Rawlings
Bob Roseblade
Gary Sheerin
Gordon Stangland
Herb Steierman
Walt Thompson
Julie Ussery
Bill Young
Robert Ward
Marcus Wells
Shirley West
Harrry Wilson

List of Respondents to Draft EIS

Written Comments on the DEIS have been recieved by the following. Numbers following the names are used for cross referencing in Response to Public Comments (Appendix D).

Federal Government

Environmental Protection Agency	033
Department of the Interior - Environmental Affairs	034

State Government

Department of Transportation	035

Local Government

Tahoe Regional Planning Agency (Jim Allison)	003

Buisnesses

Back Country Traveler (Carol Bonser)	030
Echo Summit Permittee Ass. (Adrienne Hicks)	027
Pipe Dreams Snowboard Apparel (James Pike)	032

Organizations

Sierra Club, Bay Chapter (Edward N. Roberts)	028
Sierra Club, Loma Prieta Chapter (Marcus Libkind)	002

Individuals

Sandra Attardi	013
Henry Brigett	025
Patrick A. Cecil	012
Thomas Delahunty	017
David Erskine	026
John Hill	011
Paul Hsieh	021
Mia James	004
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Roy Lambertson	023

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Tom Mahach	031
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INDEX

Appendices

OPPORTUNITY	KEY COMPONENTS	ADDITIONAL CONCERNS/ THINGS TO CONSIDER
Environmental Center (Year round)	For use by public schools (through County Office of Education); environmental organizations; F.S. personnel; community colleges; County recreation departments #14; Foundations, private camp groups #31; scout troops	Great idea! #54. No exclusive use by single organization #33 & #11. But you can do it if everyone will remain open & not try to grab off such a good thing #11 Identify -- Notify #31
Education/entertainment for youth groups in summer	Same target groups as above plus chruch groups and communtiy groups #14; Expand to become a multi cultural use center for all ages -- Concerts (indoors and outdoors), exhibition areas, ethnically directed events, educational activities. #59	Events could range in size from smaller events (2.5 people per car x 250 spaces), to larger events where transit (buses) would be utilized. #59
Summer camp (like Sugarloaf) for use by county & schools (year round?)		My experience with Sugarloaf is that it provides a great opportunity to foster art/cultural training , is usually filled, and Echo could be a wonderful opportunity to expand the program. #58.
Organization Camp (year round)	Such as CCC camp.	To save the buildings, I could live with use by the CCC if public access is not restricted, however I strongly oppose the dept of corrections moving in. #13. On site group such as CCC is a practical idea -- some housing would be necessary #59.
Juvenile Facility - Year Round Use #6	Treatment facility for juveniles for El Dorado Co. and possible sub-contract out to other counties. Use of building only - not site. Prob. 20-30 juveniles (No more than 100). "Boys Ranch" - stays of 4 months to one year. Could do trail maintenance.#6 Governmental entity; need exists; budget strength - AFDC Funding; public accessibility could be maintained; quality control guarenteed (Juvenile work force) #31.	Budget instability #31. Do not like "Exclusivity" of use - we need safe, general play/use areas.

OPPORTUNITY	KEY COMPONENTS	ADDITIONAL CONCERNS/ THINGS TO CONSIDER
Use of building for conference meeting space on reservation basis.	Rental for private events (such as weddings and parties) and for non-profit events and meetings, fundraisers & recreational activities #59. For last 8 years there has been a need for a meeting place that would be easier to find that would bring people from west slope & south Tahoe together. West slope people don't mind driving 40 miles, but east slope people won't drive more than 15 miles! #11.	The facility is enjoyed by the public, and income from rentals will offset costs. #59.
Use part of lodge for public rental for overnight stays (like Loon Lake Ski Hut)	Short of a Bunk & Breakfast, this is a great alternative #13. I like the idea as long as it allows everything else to continue to exist #11. For large groups (church groups, schools) -- low cost (sleeping bags on floor). Run by Forest ENF Center or concession. Use volunteer groups (CC, private) & donations to bring facilities up to shape and small maintenance fee.	
"Bunk & Breakfast" #13	Year round use to include shower and kitchen facilities (Similar to Donner Spitz Inn). For downhill/x-country skiers and hikers. Might add to existing x-country and hiking trail system. #13. Unique #31.	Strongly support low cost alternative lodging as a trailhead for backcountry day trips & entended tours #15. Could provide low cost alternative for a variety of activities year round (eg hiking, backpacking, snow-play, backcountry skiing, & more) #16. Undetermined customer base #31. Not in best interest of area. Yes, as long as does not limit general use availability (non-lodging).
Controlled Mountain Bike Area #53	Create Trails, Training & use area, lessons	
Staging area for horse traffic on PCT	Parking to accomodate trailers; build a corral.	

OPPORTUNITY	KEY COMPONENTS	ADDITIONAL CONCERNS/ THINGS TO CONSIDER
Identify, mark/reroute and maintain Pacific Crest Trail through site, and keep free summer parking and access.	Need better signs through property #11. Empahsize permanent free access to Benwood Meadow, top of ridge, Kirkwood. #9. More Trails than PCT.	
Continue staging area/start for the "Echo to Kirkwood" nordic ski race, and maintain open access to the route (ungroomed state).	Free Access #9. ie passes (free) for Nordic Ski Patrolers who patrol these backcountry ski trails #5. This is very important to me #13. We share this concern for guaranteed access. #15, #16, #5, #11. One time event #31.	
Provide on site: Public telephone with important phone numbers like Cal Trans); on site Sno-park ticket sales (at lodge? Vending machine? manned station at entrance?); and other information (hiking & ski routes, etc.)	Interpretive service very much needed #31. Needed by a lot of users. #11. These things should be available no matter what the primary use is. Prov. info on history of area, impact of misuse & new "values"/ proper use & outdoor rec. habits.	On site Sno park ticket sales are essential now. Sno-park needs more night security.
Rest Stop area for Hwy 50 with picnic tables & toilets	...and phones #5. ... and interpretive services. ... and "gateway" to Tahoe/education-appreciation about how to treat area; history/consequences of past ignorance; "values" of current residents/users as community with common use of area #78.	Something for family who cannot afford to outfit the whole family in ski gear: sliding, sledding, snowmen, etc. #11.
Opportunity for removal of some facilities together with restoration of those portions of the site.	Site is located in headwaters of the American River.	What a waste it would be to remove the buildings. The lifts on the other hand should go. #13. Really hate to se the lodge removed. It has too many great qualities. Lets try to save it. #11. This facility is perfect for public use and enjoyment. Removal would be a poor choice for an alternative. #59. The CCC would be willing to revegetate slopes & provide erosion control as nec. If the ski lifts are not used, CCC would also remove them #10. Don't waste this asset. It cannot be replaced.

OPPORTUNITY	KEY COMPONENTS	ADDITIONAL CONCERNS/ THINGS TO CONSIDER
Keep a portion of the site open for snow play activities (safer than other areas adjacent to Highway 50) (Maintain snow play hill w/ tree removal? possible equipment/refreshments). refreshments)	Plan & mark SEPARATE ZONES for: Sliders; Sledders; Toboggans; Snowmen; Downhill ski; Nordic/cross country ski (to Lake Audraine, Little Norway, Echo, back up north side to Echo Summit); Telemark training; Information; Child care; place to warm up; telephone; sno-park ticket sales; and food. #11. Maintain free access. Snowplay = optimum public use #31	This is part of the answer to a tremendous need for free snowplay opportunities for the general public #58. Concerned about highway access and possible traffic accidents as people park on other side of Highway 50. Especially as area becomes a multi-use area #53. Snowplay area needs monitoring to treat accident victims (cuts, breaks, etc). Would multi-use require the operator of area to accept liability for snowplay accidents> #53. Would USFS maintain or allow snowplay access? Should be free #31. Snow activities are essential #59. Yes! Safe general use - snowplay and beginner skier.
Use of site for closed course competitive snowmobile events.	May be better to have this on north side of Hwy 50 -- Echo to Little Norway.	Impact on LTMBU roadless area? #54. Concerned with noise levels conflicting with possible backcountry experience #13, #5, #11, and noise impacts on wildlife - exclusivety not acceptable #54. Concerned that snowmobiles would conflict with both snowplay (becouse of serious safety issue) and woth the backcountry ski experience #15, #16, #5. Conflict with sno-park use (free snowplay, free marked x-country ski trails, free access to trails). No parking for general public (Sno-park). Would need a separate park (maybe on north side of Hwy 50) #17. Area needs realistic assessment for suitability as trailhead for x-country snowmobile travel #58.

OPPORTUNITY	KEY COMPONENTS	ADDITIONAL CONCERNS/ THINGS TO CONSIDER
Cross Country Ski Center (Equipment rentals, lessons, groomed ond/or ungroomed trail system, refreshments)	Other than my concern at right, I feel this is a viable use #13. Would prefer to limit groomed area to lesson area only -- no groomed trails. Marked trails are ok . #15, #16. Agree with #13. #53. Small area to be available for snowplay separate from x-country skiing #14. Coordinate operations with Kirkwood xc #14.	Concerned about groomed center excluding backcountry access #13. Ditto #11. Track Record neds review #31. Great idea #59.
Use area for downhill ski area again	What is needed to make this work? Several good snow seasons.	Using downhill ski facility might block access to historically used activities such as backcountry skiing. Many trails begin in this vicinity, and they MUST be preserved #16. Keep x-country ski trails open to Benwood Meadow, Bryan, Sayles Canyon, Lake Audraine, Little Norway. Keep open access to PCT all year round #11. Buddy Weiner used the area extensively and has suffered hardship in using distant areas such as Kirkwood, Homewood. We need a close beginner, less experience area for our local kids #58. Consider past record of ski area #31. Yes, appropriate for beginners -- is this compatible with snowboards? Perhaps as a learning/beignning area for both, to keep levels equal (ie skier experience not "frightening").
Snowboard Area #52	Freestyle and downhill areas . Compatible with current use (sno-park, x-country ski trails) and would keep the mountain in use instead of letting it go to waste.	Attracts a large and growing market.

OTHER CONCERNS IDENTIFIED AT THE NOVEMBER SCOPING MEETINGS:

Cost Benefit Analysis	Availability of recreation opportunities for a diverse public #32	Keep uses diverse..
Dollars generated by each use considered		
Is use paid for by taxpayer or user?	#4	
Time to analyze - redefines already qualified uses: snowplay, camp, overnight facility	#31	

Appendix B - Best Management Practices (BMP's)

Hydrology standards and objectives are met through implementation of EPA approved Best Management Practices (BMP's) and the *Eldorado National Forest Land and Resource Management Plan* Standards and Guidelines. Forest Service Handbook (FSH) 2509.22, Soil and Water Conservation Handbook, contains the BMP's that were referenced in the *Eldorado National Forest Land and Resource Management Plan*. The BMP's that are pertinent to this project have been incorporated in the development of the alternatives. The methods of implementation for each pertinent BMP are discussed below (BMP reference numbers refer to FSH 2509.22, Chapter 10).

BMP 1.15-Revegetation of Areas Disturbed (By Recreation Activities)—

To establish a vegetative cover on disturbed sites to prevent erosion and sedimentation, areas in need of revegetation efforts have been identified by the interdiciplinary team. A site-specific restoration plan will be drawn up for the alternative that is selected. Responsibility for implementation of this BMP will depend on the alternative selected. In Alternatives 1, 2, and 4 this BMP would be the responsibility of the District Ranger. In Alternatives 3a and b, 5, and 6a,b and c the responsibility may fall to a proponent of a special use permit or M.O.U., and if not, the District Ranger would be the responsible official. This BMP will be implemented for all Alternatives.

BMP 1.20 Erosion Control Structure Maintenance—

To insure that constructed erosion control structures are stabilized and working, the interdiciplinary team has identified areas that will require maintenance. Responsibility for implementation of this BMP will depend on the alternative selected. In Alternatives 1, 2, and 4 this BMP would be the responsibility of the District Ranger. In Alternatives 3a and b, 5, and 6a, b and c the responsibility may fall to a proponent of a special use permit or M.O.U., and if not, the District Ranger would be the responsible official. This BMP will be implemented for all Alternatives.

BMP 2.7 Control of Road Drainage-(Treating ski runs as similar to roads for restoration)—

To minimize the effects of water concentrated by man made drainage features, the interdiciplinary team has designated areas which are requiring additional work. See areas 1, 2, and 3 identified as rehabilitation areas on Map C. Restoration work will be the responsibility of the District Ranger. In Alternatives 3a and b, 5, and 6a, b and c the responsibility may fall to a proponent of a special use permit or M.O.U., and if not, the District

Ranger would be the responsible official. This BMP will be implemented for all Alternatives.

BMP 4.3 Provide Safe Drinking Water Supplies—

The location design, sampling, and sanitary surveys for a new ground water well will be conducted by qualified individuals who are familiar with drinking water supply systems and guidelines. State approved labs must be used for analysis of water samples. This BMP will be implemented for Alternatives 3a and b, 4, 5, and 6a, b and c.

BMP 4.5 Control of Sanitation Facilities—

Sanitation Facilities will be planned, located, designed, constructed, operated, inspected, and maintained to minimize the possibility of water contamination. This will be performed or controlled by qualified personnel who are trained and familiar with the sanitation system and operational guidelines. This BMP will be implemented for Alternatives 3 a and b, 4, 5, and 6a, b and c.

BMP 4.7 Assuring that Organizational Camps Have Proper Sanitation and Water Supply Facilities—

Constraints and controls protecting water quality through installation and maintenance of proper sanitation and water supply facilities must be incorporated into a special use permit or M.O.U. for an organizational camp. Permittees are required to inspect their facilities and to test their drinking water to ensure a safe water supply and proper sanitation. Reports of these results must be provided periodically to the Forest Service. This BMP will be implemented for Alternatives 3a and b, and 5.

BMP 7.1 Watershed Restoration—

A Watershed Improvements Needs (WIN) Inventory identification of projects has been developed by the interdiciplinary team. The restoration plans as well as related environmental assessments are included in this document. Funding is currently being sought. The actual work will be done through force account or through contract. Through the restoration plans this BMP will be implemented for Alternatives 2, 3a and b, 4, 5, and 6a, b and c.

BMP 7.3 Protection of Wetlands—

Wetland values have been considered and documented as an integral part of this planning process. The alternatives in this project have been designed to improve/restore some of the hydrologic/biologic functions of the damaged wetland areas. All potential wetlands have been identified using photos and limited field analysis. Army Core of Engineers (ACOE) permits will be acquired before any soil disturbance occurs within these areas. This BMP will be implemented for Alternatives 2, 3a and b, 4, 5, and 6a, b and c.

BMP 7.5 Control of Activities under Special Use Permit—

The special use permit or M.O.U. under which these agencies, groups, or individuals operate shall detail the conditions they must meet to continue operating, including measures necessary to protect water quality. The permittee shall confirm to all applicable State and Local regulations governing water quality and sanitation. Failure to meet conditions of the special use permit may result in the permit being revoked. This BMP will be implemented for Alternatives 3a and b, 5, and 6a, b and c.

BMP 7.7 Management by Closure to Use (Seasonal, Temporary, and Permanent)—

Closure shall be made when the Forest Officer delegated responsibility for resource protection, determines that a particular resource or improvement needs protection from use. An interdiciplinary team or resource specialist normally will recommend this closure. This BMP will be implemented for Alternatives 2, 3a and b, 4, 5, and 6a, b and c.

Appendix C - Water Quality Standards and Objectives

Water quality standards and objectives for this area have been set by the Central Valley Regional Water Quality Control Board (The Water Quality Control Plan for the Central Valley Regional Water Quality Control Board, as amended). The narrative objectives applicable to this project are:

Sediment: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner to cause nuisance or adversely affect beneficial uses.

Turbidity: Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed a 20 percent increase where natural turbidity is between 0 to 50 Nephelometric Turbidity Units (NTUs).

Tastes and Odors: Waters shall not contain taste- or odor- producing substances in concentrations that impart undesirable tastes or odors to domestic supplies, or that cause nuisance or otherwise adversely affect beneficial uses.

Bacteria: In ground waters used for domestic supply the most probable number of coliform organisms over any seven day period shall be less than 2.2/100 ml.

Appendix D - Response to Public Comment

Introduction

The public comment period on the Draft Environmental Impact Statement on Future Use of the Echo Summit Ski Area Site began on November 18, 1992, and closed on January 25, 1993. Agencies, officials, and members of the public were invited to comment on the Draft Enviromental Impact Statement.

There were a total of thirty four letters received. Of those, two were from a federal government agency, one was from a state government agency, one was from a local government agency, three were from businesses, two were from organizations, and twenty six were from individuals.

Of those respondents expressing an alternative preference among those presented in the Draft Environmental Impact Statement, twenty one favored Alternative 2, two favored Alternative 3a, and two favored Alternative 5.

The Council on Environmental Quality regulations for implementing the procedural provision of the National Environmental Policy Act (40 CFR Parts 1500-1508) state, "Comments on an environmental impact statement or on a proposed action shall be as specific as possible and may address either the adequacy of the statement or the merits of the alternatives discussed or both." (40 CFR 1503.3) Comments and Forest Service responses in this section are based on those types of specific comments, "which proposed to: (1) modify alternatives including the proposed action, (2) develop and evaluate alternatives not previously given serious consideration, (3) supplement, improve, or modify its analysis, and (4) make factual corrections," (40 CFR 1503.4).

A list of these comments with their corresponding responses follows. The numbers following each comment in parenthesis are keyed to the letters from which the comments were derived. The complete letters are included in Appendix E.

Comments and Responses

1. **Comment:** Need to explain how the Small Business Administration acquired the facilities. (001)

   Response: The explanation on page 1 and S-1 has been expanded.

2. **Comment:** Wouldn't it make sense to reserve the 100-car parking for expansion of the Sno-Park? (001) (pg 33)

   Response: Provisions for future expansion of the snowpark have been incorporated in the 200 car figure per the Forest Service agreement with California Parks and Recreation. Capacity of the slopes to accomodate snow play was consideration in establishing the 200 car figure.

3. **Comment:** Need to include Sayles Flat (Camp Sacramento) in the Demand for Snow Play Facilities. (001)

   Response: Reference to Sayles Flat has been added on Page 45.

4. **Comment:** In regards to Alternative 4 (Forest Service Operation). Providing "meeting space", if it is to be of a conference room nature, it would be in competition with the private sector at South Lake Tahoe where there is already a surplus. (001)

   Response: Since Alternative 4 describes use of Federal Government owned facilities by the Federal Government, competition with the private sector is not an issue.

5. **Comment:** I question the need to plant conifers. The abandoned ski runs at Edelweiss (Sayles Flat) and the old Sierra Ski Ranch runs have, over the years, filled in nicely with conifers and they are "natural". (001)

   Response: The planting of conifers would only occur in those areas where regeneration of conifers appears to be slow or absent. In other areas natural revegetation would be allowed to continue. Changes in the document have been made to reflect this. (pg 59)

6. **Comment:** In the early 1980's, I observed brook trout at the culvert next to highway 50 where the summer home road goes north from the maintenance station. Trout have been seen in water courses near the existing lodge site. With normal precipitation, trout will move back into these areas. (001)

   Response: Discussion in the Fisheries section (page 73) has been expanded.

7. **Comment:** In regards to Cumulative Effects (page 78), Shouldn't 1949 be 1947 (first paragraph)? (001)

   Response: A correction has been made to this date.

8. **Comment:** "Runs constructed along Huckleberry Ridge would be through old growth true fir. They would be seeded to grass and herbs resulting in an overall improvement in diversified wildlife habitat." (This comment is referring to the statement regarding fragmentation effects of the Sierra Ski Ranch proposal.) (001)

   Response: Creation of more manmade meadow-like habitat via land clearing for ski runs would not increase diversity. There is already a moderate amount of naturally occurring and manmade "meadow" habitat occurring in the vicinity of the Echo Summit/Sierra Ski Ranch areas. On the other hand, intact "old growth" red fir stands are more of a rarity. Fragmentation of these stands would decrease its suitability for old growth (interior) dependant species. In reality creation of additional openings within red fir stands would be causing a DECREASE in habitat diversity.

9. **Comment:** Page 34 (middle paragraph) raises the possibility that sewage disposal at the site may not be economically or technologically feasible. (001)

   Response: Different uses under the various alternatives would have different levels of sewage disposal needs, some greater than others. Upon Further investigation with El Dorado County Health Department and South Lake Tahoe, it appears that they have accepted the existing sewage disposal system as meeting county standards. It would be the responsibility of the permittee, if one is selected, to coordinate with El Dorado County to insure Health and Safety requirements are met. The discussion on Sewage Disposal (page 36) has been updated to reflect this new information.

10. **Comment:** Alternative 1 (No Action) does not resolve the issue of the existing facilities and may create safety hazards and discrepancy with the Eldorado National Forest Land and Resource Management Plan (LRMP). (002)

    Response: The Forest Service is required to consider No Action as an alternative under NEPA. The issues stated are addressed on page 26 under Comparison of Alternatives.

11. **Comment:** Alternatives 6a and 6b (Permit for Downhill Ski Area) continues the historical use of the area which has been shown not to be economically feasible. (002,028,030)

Response: Limitations of the Echo Summit site as a downhill ski area are discussed under Affected Environment (page 42). An additional reference to economic feasibility has been added to How Recreation Would be Affected, Alt 6a (pg 48).

12. **Comment:** A ski area is incompatible with the SnoPark use. The use of the Site as a ski area would require the significant reduction in size of the snowplay area. (002)

    Response: Potential conflicts are addressed under Comparison of Alternatives, Alternative 6a (pg 27).

13. **Comment:** Alternative 6c (Snowboard Park and/or Nordic Ski Area) must be considered as two distinct alternatives due to the question of the need and economic viability of a Snowboard Park independent of ski facilities. (002)

    Response: The Snowboard Park and Nordic options are included in one alternative in order to provide for the greatest flexibility and likelihood of economic viability. The potential permittee would submit a plan for combination of uses they felt to be most viable. This plan would be reviewed by the Forest Service prior to issuance of a permit.

14. **Comment:** We oppose the use of the Site as a Nordic facility with a groomed, fee trail system. Such a facility will create conflicts between backcountry and track skiers. The limited terrain does not permit two independent trail systems in which the grooming of trails will not conflict with the wilderness environment sought by backcountry skiers. (002)

    Response: The discussion under Comparison of Alternatives, Alternative 6c, has been expanded to address potential conflicts. Impacts are also displayed in Table 1, Comparison of Alternatives and under How Recreation Would be Affected, Alternative 6c.

15. **Comment:** The Nordic facility that existed at Echo Summit had several drawbacks which a new facility would not overcome. Twenty five kilometers of trail are insufficient to attract the number of users which are required to make such a facility economically viable. (002)

    Response: See comment and response #14

16. **Comment:** Alternative 3b (Special Use Permit or M.O.U. with Snowmobile Events) should not be considered because the snowmobile events may limit use of the lodge as described in 3a and 5. This alternative should not be considered without additional analysis of the impact of staging up to four snowmobile events a year will have on the site, with associated increase in noise, air pollution, and crowds as a result. (002)

Response: NEPA requires a full range of alternatives to be considered. Discussion under Comparison of Alternatives 3b has been expanded to address these concerns. Potential impacts are also addressed under Table 1 Comparison of Alternatives and in the section on How Recreation Would be Affected.

17. **Comment:** Alternative 5 (Special Use Permit or M.O.U. with Potential for Expansion), while similar to 3a, permits unnecessary expansion of the existing facilities. The goal should be to find a suitable use for the existing facilities, not the expansion of the existing facilities to meet the needs of a potential permittee. (002)

    Response: NEPA requires a full range of alternatives to be considered. Some potential uses of facilities may require some expansion to be viable.

18. **Comment:** The public should have the opportunity to comment on acceptable uses listed in Alternative 3a. (002)

    Response: The public has been given the opportunity to respond by inclusion of potential uses in the DEIS.

19. **Comment:** We recommend that the range of uses for the facilities under Alternatives 3 and 5 be restricted to: 1. Facility uses that would benefit the users of the adjacent wilderness land. 2. Facility uses that would serve a broad sector of the general public. (002)

    Response: Emphasis in the selection process would be on uses with an environmental emphasis or providing services and/or recreation opportunities to the general public. The description under Alternative 3a has been clarified to reflect this.

20. **Comment:** We ask that the impacts of new vehicle trips and VMT (vehicle miles travelled) resulting from each alternative be addressed in the EIS. (003)

    Response: It is difficult to calculate VMT's. It is estimated that seventy percent of the traffic will come from the west side and will return to the west side. Peak use (heaviest used vehicle days) would be less that .3% or 247 vehicles. 147 vehicles associated with the Sno-Park and 100 vehicle associated with the lodge.

21. **Comment:** Please note that the Highway 50 corridor (within the Lake Tahoe Region) does not meet TRPA and Federal Clean Air Standards for carbon monoxide (CO). (003)

    Response: An addition to the document has been made, under Air Quality - Affected Environment, to include Carbon Monoxide.

22. **Comment:** What authority will the Forest Service reserve to limit the number and placement of additional buildings and facilities? (004)

    Response: Description under Alternative 5 (pg 15), Expansion of Facilities, has been expanded to indicate the requirement for Forest Service approval of site specific expansion proposal.

23. **Comment:** If the area is used for outdoor concerts and events, what controls will be placed on attendees or participants? What if the managers decide to allow "overflow parking" on previously uncompacted areas? (004)

    Response: Frequency of events, parking requirements and proposed controls on attendees or participants at events would be included in permittees operating plan, to be approved by the Forest Service.

24. **Comment:** The report is almost silent on the effect of the watershed and water use, although the future expansion is not limited because the number of structures is not limited, the effect is presumed to be "a very slight increase in runoff associated with the development of new facilities" (page 67). How can this statement be supported? (004)

    Response: There would be a slight increase in runoff associated with the development of new facilities from an increase in impervious areas. The planned restoration would slowly decrease the water yield over time as vegetation recovers. The net effect would be little change in the total amount of water yield to the South Fork American River. This has been clarified in the document on page 70, Hydrology - Alternative 5.

25. **Comment:** The report mentions in passing that "the frequency, timing and duration of such events as outdoor concerts would need to be studied in more detail to determine the magnitude of effects on species in the area" (page 78). Who will carry out this study and when will it be done? (004)

    Response: If Alternative 5 is selected, and the permittee proposes concert events, additional analysis and a site specific biological evaluation of effects will be conducted by the Forest Service prior to issuance of a Special Use permit. Changes in the document have been made on page 81 and in Coordinating Requirements #2 (page 23) to clarify this response.

26. **Comment:** Continued use and access for back-country Nordic skiing is of prime importance. It is unclear if the Use Permit for the building will conflict with Nordic ski use. (005...026)

    Response: Ungroomed Nordic Skiing would be continued in all alternatives except 6a, 6b and, 6c. Impacts on ungroomed backcountry

ski routes due to conversion to groomed-track, cross country skiing are displayed in Table 1, Comparison of Alternatives.

27. **Comment:** It is important that the Sno-Park facility adjacent to this site be maintained. (005..026)

    Response: The Sno-Park facility will be maintained under all alternatives according to the Forest Service agreement with the State of California, as indicated in Purpose and Need section of the EIS.

28. **Comment:** With many of the DEIS alternatives, it is possible that the use of the area could be a business providing groomed-track, cross-country skiing. I oppose this use since it would likely limit back-country ski access. (005...026)

    Response: Ungroomed Nordic skiing would be continued in all alternatives except 6a, 6b and, 6c. Impacts on ungroomed backcountry ski routes due to conversion to groomed-track, cross-country skiing are displayed in Table 1 - Comparison of Alternatives.

29. **Comment:** We urge the Forest Service and CalTrans to also address issues concerning the possible expansion of the Sno-Park areas, safe exit and entrance to the Highway, and establishing a well defined pedestrian crossing. (028)

    Response: The existing Sno-Park was designed to accommodate an expansion up to 200 cars. The highway intersection was designed according to State standards with this expansion in mind. A pedestrian crossing of Highway 50 was not a part of any of the proposals submitted for consideration under this EIS. If a need is brought to the attention of the Forest Service to establish a pedestrian crossing, that proposal will be analyzed under a separate document.

30. **Comment:** I have a concern that the building itself is in such bad condition on the inside that finding a permittee who can afford the repairs may be a problem. (030)

    Response: Financial capability of permittee will be assessed during review of Forest Service proposals, if an alternative for a special use permit is selected.

31. **Comment:** The area is heavily used by the public during the winter, and snowmobile use is not compatible with the existing use that has taken place in the past few years. (030)

    Response: Effects of portion of the site to snowmobile use events on other recreation uses are addressed in the section on How Recreation Would be Affected Alternative 3b, and in Table 1, Comparison of Alternatives.

32. **Comment:** Depending upon the use, I see the need for allowing some expansion to take place. Although tent platforms for sleeping, or some other type of dormitory facilities seem to fit the proposed usage, I would question the use of trailers to fill this need. (030)

Response: We share a concern about the visual appearance of trailers. A site plan showing type and location of additional facilities will be required to be submitted by permittee and approved by the Forest Service. Visual quality will be a criteria in its review.

33. **Comment:** A year round use for the area may provide a more attractive enterprise for any potential public or private operator. Now that the Pony Express and California Emigrant Trails are included in the National Trails System Act, it appears that the Echo Summit Site would be an excellent location for a Trails Information Center or California Pony Express Museum. (031)

Response: A trails information center concept is incorporated in Alternatives 3a, 4 and, 5.

34. **Comment:** Concerning Alternative 6c, a rope tow wouldn't be sufficient to get to the top of the run. It is suggested that the existing chairlift be used instead. (032)

Response: Additions have been made to the Description of Alternative 6c to reflect this comment.

35. **Comment:** Because of the high water table at the project site, adequate sewage treatment may be difficult. The FEIS should provide an outline of the minimum sewage treatment specifications and requirements which must be met. (033)

Response: Sewage disposal requirements at the site will be established once a specific use and disposal need are established through selection of an alternative and permittee if applicable. The permittee will be responsible for coordination with El Dorado County Department of Environmental Health to ensure that all County requirements are met. This issue has been clarified in the document under Facilities, Affected Environment, Utilities section.

36. **Comment:** The FEIS should expand the evaluation of effects of increased water use. Provide data to support the assumption that an increase use of the existing spring or a new well would not dewater or affect existing wetlands. The location of the spring and potential well sites should be described in the FEIS. (033)

Response: Effects of spring or well development on existing wetland vegetation are now discussed under How Vegetation Would be Affected (Alternatives 3a, 3b and 4).

37. **Comment:** We recommend the Forest Service address protection measures for existing sensitive habitats and restoration sites in the FEIS. For example, fencing vulnerable areas, implementing an aggressive education program, and restricting human activity during vulnerable seasons to areas without sensitive habitats may help minimize potential impacts of increased use. We encourage the Forest Service to select a special use permit operation proposal which includes an interpretive/education service component. (033)

    Response: Protection measures for sensitive areas will be incorporated in the site specific restoration plan, developed once use of the site has been determined through a decision notice and selection of a permittee, if any.

38. **Comment:** The FEIS should evaluate possible mitigation measures for potential impacts to traffic (e.g., congestion, overflow parking across Highway 50). For example discuss the feasibility of requiring carpooling or public transportation for special events. (033)

    Response: Coordinating Requirement #13 (pg 24) has been expanded to indicate that carpooling or public transportation options would be included in Special Use Permit where applicable and feasible.

39. **Comment:** Any use increasing on-site parking by roughly 100 spaces should provide an east bound turn lane on US 50 as a mitigation measure; and expansion of the parking along with downhill ski operations could also cause capacity and safety concerns at the intersection of US 50 and the entrance to the site due to the typically sharp departure rates that could be expected form the site area. (035)

    Response: Following further consultation with Cal Trans, Coordinating Requirement # 20 was added (pg 25) to address these concerns.

Appendix E - Letters

DEC - 3 1992

1684 Union Ridge Rd.
Placerville, CA 95667
Decemberd 2, 1992

Diana Erickson
Echo Summit EIS Coordinator
Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Dear Ms. Erickson:

I have reviewed the Draft Environmental Impact Statement on the future use of Echo Summit, and am offering my comments.

Page S-1, under Purpose and Need:

Need to explain how the Small Business Administration acquired the facilities. This reflects on the validity of Echo as a profit-making ski area.

Page 33, Parking:

Agreement with Cal-Trans is for 200 parking spaces. The EIS indicates there are 100 more available.

For years there has been a great need for a formal Sno-Park area on highway 50 for safety and for public enjoyment. Past use from Echo Summit to 42 mile has resulted in traffic congestion and the potential for injury to snow play participants. Now, with the Echo Summit site, there is a satisfactory place such people can be directed. On many holidays and weekends snow players already approach 200 cars and may in fact exceed it. Population projections indicate this type of user will increase. Wouldn't it make sense to reserve the 100-car parking for expansion of the Sno-Park? This would be a real service to the public should such a need arise.

Page 2
Diana Erickson, 12/2/92
Echo Summit EIS Coord.

Page 43, Demand for Snow Play Facilities.

Need to include Sayles Flat (Camp Sacramento). Even though parking has been restricted, it is still being used.

Page 51, Alternative 4 (Forest Service Operation).

Providing "meeting space", if it is to be of a conference room nature, it would be in competition with the private sector at South Tahoe where there is already a surplus.

Page 57, Alternative 2 (second paragraph).

I question the need to plant conifers. The abandoned ski runs at Edelweiss (Sayles Flat) and the old Sierra Ski Ranch runs have, over the years, filled in nicely with conifers and they are "natural".

Page 70, Fisheries.

In the early 1980's, I observed brook trout at the culvert next to highway 50 where the summer home road goes north from the maintenance station. Robert Dennis, (916) 644-1637, has told me he has seen them in water courses near the existing lodge site. The ski slope was graded off and the water courses were filled. Last summer (1992) I looked for trout at the culvert location but due to lack of water there weren't any. With normal precipitation, trout will move back to their original homes.

Page 78, Cumulative Effectcs.

Shouldn't 1949 be 1947? (first paragraph)..

Sierra Ski Ranch's expansion would not be any closer that 2100 feet and generally at least a half-mile. Runs constructed along Huckleberry Ridge would be through old growth true fir. They would be seeded to grass and herbs resulting in an overall improvement in diversified wildlife habitat.

In closing, I wish to say the document appears to be professionally done for the most part. But page 34 (middle paragraph) raises the possibility that sewage disposal at the site may not be economically or technologically feasible. Before embarking on a full blown EIS wouldn't it have made more sense to determine this? Should this be the fact, then there are only two alternatives to be considered, #1 and #2. For this perhaps a short EA would have sufficed. The money saved could have been better spent on keeping public recreation areas open.

I personally support alternative #2. This reserves expansion area for Sno-Park and returns some of the area to its former wet land status..

Sincerely,

Scollay C. Parker

Scollay C. Parker

Ski Touring Section
Loma Prieta Chapter, Sierra Club
1391 Moselle Court
Livermore, California 94550

(510) 455-5816

December 19, 1992

Diana Erickson, Echo Summit EIS Coordinator
Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Dear Ms. Erickson:

The following are our organization's comments regarding the Draft Environmental Impact Statement (DEIS) on Future Use of the Echo Summit Ski Area Site (the Site).

The broad range of alternatives, nine including variations, well covers the possible future uses of the Site. We favor a use of the facilities in a way that promotes self-propelled, non-commercial, low or no cost recreation such as hiking and backcountry Nordic skiing.

Alternative 1 (No Action) does not resolve the issue of the existing facilities and may create safety hazards and discrepancy with the Eldorado National Forest Land and Resource Management Plan (LRMP). Thus we do not consider Alternative 1 as a reasonable alternative.

Alternative 2 (Removal and Restoration) would result in the greatest improvement to the environmental quality of the Site. We would have no negative comment should this alternative be chosen. However, discussions to date have revolved around use of the existing facilities in one manner or another. Therefore, we will continue our comments based on the assumption that the facilities will not be removed in their entirety.

Alternatives 6a and 6b (Permit for Downhill Ski Area) continues the historical use of the area which has been shown not to be economically feasible. The limited size of the Site and the small vertical drop of the existing ski runs make the Site a poor location for a ski area. Targeting the area for "family oriented skiing" is no different than that which has been done in the past. Skiers quickly become more experienced and move onto more challenging sites. Families and groups that contain beginners often include more advanced skiers that require that they patronize more challenging sites. Therefore, there is no reason to believe that another ski area located at the Site will fare any better than in the past.

A ski area is incompatible with the SnoPark use. The use of the Site as a ski area would require the significant reduction in size of the snowplay area that has proven to be very popular. The existing SnoPark use, which has been shown to be successful, should not be affected by future use. Thus a ski area should not be considered as a reasonable alternative.

Alternative 6c (Snowboard Park and/or Nordic Ski Area) must be considered as two distinct alternatives.

We question the need and economic viability of a Snowboard Park independent of ski facilities. The cost of equipment, maintenance, insurance, and sundry other items brings doubts to the economic

viability. Sucn a use could hardly justify the upkeep of the existing 9000 square foot lodge even in conjunction with a Nordic facility. The DEIS states that the average age of snowboarders is 17 years and it can be inferred that most travel to the mountains with adults many of whom ski. Therefore, it is likely they will choose to patronize combination ski-snowboard areas which will serve both age groups.

We oppose the use of the Site as a Nordic facility with a groomed, for pay trail system. Such a facility will create conflicts between backcountry and track skiers. The limited terrain does not permit two independent trail systems in which the grooming of trails will not conflict with the wilderness environment sought by backcountry skiers. The SnoPark at the Site was developed for use by backcountry Nordic skiers (and snow players) and has led to an increase of backcountry Nordic skiing in the area. The existing use of the area by backcountry Nordic skiers and the intent of the SnoPark should not be compromised by the alternative chosen. Therefore, a Nordic facility is not an appropriate use of the Site.

The Nordic facility that existed at Echo Summit Ski Area had several drawbacks which a new facility would not overcome. First, 25 kilometers of trail are insufficient to attract the number of users which are required to make such a facility economically viable. Second, the trail system did not create an intertwined system of trails, but rather trails leading off in different directions which included the necessity to cross Highway 50. A similar use could hardly justify the upkeep of the existing 9000 square foot lodge even in conjunction with a Snowboard Park.

The use of the Site as either a Snowboard Park or a Nordic ski facility conflicts with our goal to use the facilities in a manner that promotes self-propelled, non-commercial, low or no cost recreation.

Alternative 3a (Special Use Permit or M.O.U.) is the alternative that our organization views as the best use of the existing facilities. The 9000 square foot lodge building could be used for a broad range of purposes as outlined in the DEIS, however, we encourage the use in a manner that provides facilities that go hand-in-hand with the wilderness uses that can be expected on the adjacent lands. In particular we favor low-key lodging, showers, food service, and outdoor skills education.

Alternative 3b (Special Use Permit or M.O.U. with Snowmobile Events) should not be considered because the snowmobile events may limit use of the lodge as described in 3a and 5. In particular, the proximity of the snowmobile course to the lodge, and the sounds and vehicles associated with 100 to 200 participants and 100 to 200 spectators, would detract from the aesthetics that a permittee might consider a valuable asset. For example, an Alpine Skills/Donner Spitz Haute type facility would be incompatible with the snowmobile events proposed. Furthermore, the 200 to 400 people attracted to these events would require use of parking otherwise allocated to lodge or SnoPark users.

This area is restricted to OSV use on designated routes only and at this time there are no designated snowmobile trails or courses. Alternative 3b changes this, detracting from the pleasure of other users, while suitable closed course snowmobile opportunities exist elsewhere as described in the DEIS.

Also, the environmental impact of Alternative 3b has not been adequately addressed by the DEIS. This alternative should not be considered without additional analysis of the impact of staging up to four snowmobile events a year will have on the site, with associated increase in noise, air pollution, and crowds as a result.

Alternative 5 (Special Use Permit or M.O.U. with Potential for Expansion), the Forest Service Preferred Alternative, while similar to

3a permits unnecessary expansion of the existing facilities. The goal should be to find a suitable use for the existing facilities, not the expansion of the existing facilities to meet the needs of a potential permittee. The 9000 square foot lodge is adequate to supply bunk type lodging, food services, and other services for 100 people. This should be sufficient to make the facilities economically viable.

Alternative 4 (Forest Service Operation), although not supplying services that would specifically benefit the Nordic ski community that we represent, is a very good alternative in that it creates a facility that goes hand-in-hand with use of the adjacent wilderness lands. We would have no objection to this alternative.

The suggested uses of the facilities listed in Alternative 3a (and applicable to 3b and 5) cover a very broad range. While these uses were suggested by the public, they may not all be appropriate for the facilities and the location. Under these alternatives a prospectus for operation of the facilities might or might not stipulate a range of acceptable uses. The public should have the ability to comment on this critical matter either in the DEIS or prior to the prospectus. The resolution of this matter should be clearly stated in the EIS.

We recommend that the range of uses for the facilities under Alternatives 3 and 5 be restricted to:

1. Facility uses that would benefit the users of the adjacent wilderness land. This tie between uses and the environment is very important. Uses such as "Santa's Workshop, exhibits, musical events, and workshops not related to the environment can be satisfied by other facilities.

2. Facility uses that would serve a broad sector of the general public, e.g. lodging and food services, as opposed to specific group-type uses, e.g. camps and church facilities. This would not preclude groups such as camps and churches from renting facility use from the permittee in the same manner as the general public.

A great deal of time and effort has gone into the planning for the future of the Echo Summit Ski Area. The possibility exists, due to the technical difficulty and expense of constructing a waste disposal system, that a permittee will not be found. We urge the Forest Service to stipulate that Alternative 2, the removal of facilities, will become the preferred alternative should a permittee not be found in a reasonable time period.

In summary, we urge the Forest Service to choose Alternative 3a as the preferred alternative in the final decision regarding the future use of the Echo Summit Ski Area.

Thank you for your time and service in this matter. We look forward to hearing from you in the future regarding this matter.

Very truly yours,

Marcus Libkind

Marcus Libkind
Issues Coordinator

TAHOE REGIONAL PLANNING AGENCY

P.O. Box 1038
195 U.S. Highway 50 Zephyr Cove, Nevada 89448-1038 (702) 588-4547
Round Hill, Zephyr Cove, NV Fax (702) 588-4527

December 21, 1992

Diana Erickson
Echo Summit EIS Coordinator
El Dorado National Forest
100 Forni Road
Placerville, California 95667

Subject: Echo Summit Ski Area Draft Environmental Impact Statement (DEIS)

Dear Ms. Erickson:

Thank you for providing the Tahoe Regional Planning Agency (TRPA) with a copy of the Draft Environmental Impact Statement (EIS) for the Echo Summit Ski Area. After review of the document, we have determined that the project site location is outside of the Lake Tahoe watershed and therefore out of TRPA jurisdiction. We do, however, have the following comments.

TRPA is concerned about new vehicle trips and vehicle miles travelled (VMT) resulting from the alternatives. Therefore, we ask that the impacts of new vehicle trips and VMT resulting from each alternative be addressed in the EIS. As you may be aware, TRPA has set a goal to reduce VMT in the Tahoe Region by ten percent. At present, this goal has not been achieved. Also, please note that the Highway 50 corridor (within the Lake Tahoe Region) does not meet TRPA and Federal Clean Air Standards for carbon monoxide (CO).

It appears that none of the alternatives will affect scenic quality of the mountain ridge as seen from Lake Tahoe, Highway 50, Lake Valley State Recreation Area, and other scenic view points. This site does, however, have the potential to impact scenic quality in the Region if future projects involve tree thinning, new ski runs, and other similar disturbances.

Thank you for this opportunity for TRPA to express our concerns. We feel that future projects at the Echo Summit Ski area site can offer long term solutions to some of our air and scenic quality problems currently existing in the Lake Tahoe Region. Please keep us up to date on the progress of the EIS. If you have any questions, please feel free to contact me or Lyn Barnett.

Sincerely,

Jim Allison
Associate Planner
Project Review Division

/JA

cc: Lyn Barnett, TRPA
Dave Ziegler, TRPA

December 28, 1992

Diana Erickson
Echo Summit EIS Coordinator
Eldorado National Forest
100 Forni Road
Placerville California 95667

Dear Ms. Erickson:

I want to thank you for the opportunity to participate in the process of planning for the future of this part of the Eldorado National Forest. I attended the public discussion and I felt that the work that was put into the presentation and the effort that was made to gather and record public comment was admirable. I support the Preferred Alternative with some reservations, which are detailed in this letter.

I am concerned that appears to be a very vague limit on the possible future expansion as described in Alternative Five.

I am very concerned about the possibility of an unsightly and overcrowded trailer-park atmosphere developing at the site if the area of expansion is limited but not the number and density of new structures. The draft report states only that "buildings or additional facilities should be located to minimize the potential impact" (page 46). What authority will the Forest Service reserve to limit the number and placement of additional buildings and facilities? The report mentions that "the proposed use of Echo Summit area for outdoor concerts would result in the trampling of existing vegetation" (page 58). If the area is used for outdoor concerts and events, what controls will be placed on attendees or participants? What if the managers decide to allow "overflow parking" on previously uncompacted areas? The report is almost silent on the effect of the watershed and water use, although the future expansion is not limited because the number of structures is not limited, the effect is presumed to be "a very slight increase in runoff associated with the development of new facilities" (page 67). How can this statment be supported? The report mentions in passing that "the frequency, timing and duration of such events as outdoor concerts would need to be studied in more detail to determine the magnitude of effects on species in the area"(page 78). Who will carry out this study and when will it be done?

I foresee the potential for many problems in this plan. I propose that the number of structures or the number of persons who may be accommodated overnight at the site be strictly limited in the use permit. I propose that the number of vehicles that can be accommodated at any one time be clearly spelled out in the use permit. I doubt that the size of the existing parking area is large enough to make outdoor concerts or amphitheater productions a commercially viable alternative. I question the value of bringing a large number of people into a forest area for such events when Lake Tahoe is right over the hill.

In sum, I find that there are a lot of loopholes in Alternative Number 5.

I think that a much more limited use of the area needs to to considered.

Very truly yours,

Mia James
2731 River Plaza Drive # 156
Sacramento Calfiornia 95833

January 4, 1993

Diana Erickson
Echo Summit EIS Coordinator
Eldorado National Forest
100 Forni Road
Placerville, CA. 95667

Dear Ms. Erickson:

As an avid Nordic, cross-country ski enthusiast, I am concerned about the future use of the Echo Summit ski area. Over the years, this area has provided good back-country ski tours, and has the benefit of easy access. These features make it a desirable Nordic ski destination. I urge you to maintain this traditional use of the Echo Summit ski area when considering the alternatives outlined in the Draft Environmental Impact Statement.

Although your preferred DESI alternative (number 5) will likely retain access and use for Nordic skiing, it is unclear if the Use Permit for the building will conflict with Nordic ski use. My preferred proposal is alternative 2 where the existing building and facilities are removed and the site is restored. However, if something other than my preferred alternative is selected, continued use and access for back-country Nordic skiing is of prime importance.

With many of the DEIS alternatives, it is possible that the use of the area could be a business providing groomed-track, cross-country skiing. I appose this use since it would likely limit back-country ski access.

I believe it is important that the Sno-Park facility adjacent to this site be maintained. Not only does it provide Nordic ski access, but is also provides access for snow-play.

I am not in favor of any use of this area by snowmobiles. DEIS alternative 3b allows for periodic snowmobile events. The peaceful enjoyment of either Nordic skiing or snow-play would not be possible with snowmobiles. Additionally, I feel there would be a safety issue if snowmobiles were to also use this relatively small area. Furthermore, there already exists many places in the South Lake Tahoe area where snowmobiles can operate and run special events.

Please keep me informed of the status of the Echo Summit Ski area.

Yours truly,

22 letters received reference #s 005 - 026

President
MRS. ADRIENNE HICKS
62 36TH WY
SACRAMENTO, CA. 95819

Echo Summit Permittee Association

January 8, 1993

Diana Erickson
Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Dear Ms. Erickson,

I have received and read the EIS on Echo Summit Ski Area Site which you were kind enough to send to me. We have no further comment to make at this time.

However, we wish to thank you for acknowledging our concerns about our water system, and are pleased to see that it is taken into account in the Coordinating Requirements, as well as elsewhere in the document. It is reassuring to know that the Placerville Ranger District is responsive to its constituency.

As mentioned in our 1991 letter regarding the EIS, we stand ready to assist your future Special Use Permittee. We will locate the water system for them at their request, or yours. We hope this will prevent added repair expense for them, and inconvenience for us.

We continue to be interested in the future of Echo Summit Ski Area, and plan to attend any scoping meetings you hold. Please keep us informed as to meeting dates, and, of course, we would appreciate remaining on your mailing list for the final EIS.

Sincerely,

Adrienne Hicks

Adrienne Hicks
President

ASH

SKI TOURING SECTION - CONSERVATION COMMITTEE
BAY CHAPTER, SIERRA CLUB

1059 Keith Ave.
Berkeley, Ca. 94708
January 15, 1993

Diana Erickson, Echo summit EIS Coordinator
Eldorado National Forest
100 Forni Road
Placerville, Ca. 95667

Dear Ms. Erickson:

We have reviewed the Draft Environmental Impact Statement on the Future Use of the Echo Summit Ski Area Site and would like to comment on the alternative uses discussed in the document. The Area is extremely sensitive to any kind of development. However, an abandoned lodge structure does exist and, since Echo Summit is one of the most readily accessible winter use areas in the High Sierra, its continued use may prove beneficial. We support the removal of the abandoned ski lifts and outbuildings. With its limited terrain and parking, the area has not proved to be a popular or economically viable downhill ski or snowboarding resort. We strongly oppose Alternative 3b, which would introduce snowmobile events and crowds to an area where non-motorized recreation has been most suitable.

Our organization supports Alternative 3a as the most effective option for the potential use of the existing lodge. A renovated facility serving the needs of winter recreationists and summer hikers with food, basic lodging,and rental equipment would be an appropriate use and the least costly alternative for the Forest Service. The adjacent former downhill ski area should not become part of a groomed commercial ski track system. It should continue to remain open for public use as an expanded snowplay area and trailhead for ungroomed nordic ski routes to the south and west. Separate parking for lodge patrons should in no way jeopardize the current and future capacity of the Sno-Park area. If a permitee cannot be found, then the building should be removed and the area fully restored to its natural state as proposed in Alternative 2.

Heavy traffic on Highway 50 bisects the Echo Summit and Echo Lake cross-country ski trails. We urge the Forest Service and Cal Trans to also address issues concerning the possible expansion of the Sno-Park areas, safe exit and entrance to the Highway, and establishing a well defined pedestrian crossing.

In summary, we urge the Forest Service to choose Alternative 3a as the preferred alternative in the final decision regarding the future use of the Echo Summit Ski Area.

Thank you for this opportunity to comment on the draft EIS. We trust that the Forest Service will keep us informed of decisions effecting an area that is particularly vulnerable to excessive human impact.

Yours truly,

Edward N. Roberts
Conservation Committee Member

3326 Kipling Street
Palo Alto, CA 94306
17 January 1993

Diana Erickson
Echo Summit EIS Coordinator
El Dorado National Forest
100 Forni Road
Placerville
CA 95667

Dear Ms. Erickson:

I have not had a chance to look at the Echo Summit EIS, but I understand the Preferred Alternative is the alternative which would allow for California Conservation Corps use of the former Echo Summit lodge building while maintaining the area principally for winter cross-country ski and snow play activities.

Since the middle 1980's I have served on the Advisory Committee for the California Department of Parks and Recreation Department's SnoPark Program. It is my *personal* opinion, based on the information we have received through SnoPark, that the Preferred Alternative could lead to one of the finest examples of multi-agency cooperation in California in recent years.

I have done backcountry skiing in the Echo Summit area occasionally over the past 15-20 years, from participation in one of the early Echo-Kirkwood races to a solo day exploration out of the current SnoPark site on a blustery Saturday last winter. The area has considerable, but as yet hardly tapped, potential for non-motorized backcountry winter recreation. Any of the alternatives given final consideration should acknowledge this potential.

The Echo Summit site itself is already popular for snow play. Adoption of the Preferred Alternative would upgrade that status so that Echo Summit becomes one of the few spots in California where snow play is both encouraged and given rudimentary supervision by the State. The benefits, in terms of moving citizens from the far more dangerous snow play areas (such as those near Camp Sacramento), will be considerable.

The Preferred Alternative represents a practical use of existing facilities which can benefit both the government agencies involved and the public in unique ways. I look forward to its adoption, to successful operation of the lodge under CCC management, and to continued availability of backcountry and near-site areas for cross-country skiing and snow play, respectively.

Yours truly,

Richard A. Simpson

January 25, 1993

Diana Erickson
Echo Summit EIS Coordinator
Eldorado National Forest
100 Forni Road
Placerville, CA 95667

Dear Diana,

After reviewing the Draft EIS on the future of the Echo Summit Ski Area I agree with the Forest Service decision of Alternative 5.

USE OF THE BUILDING: It would be good to see the building put back into use in the ways that were suggested in Alternative 5. I do have a concern that the building itself is in such bad condition on the inside that finding a permittee who can afford the repairs may be a problem. If no suitable permittee is found within a set time period, I feel the structure should be removed.

EXPANSION OF FACILITIES: Depending upon the use I do see the need for allowing some expansion to take place. Tent platforms for sleeping, or some other type of dormitory facilities some to fit the proposed usage, I would question the use of trailers to fill this need.

USE OF THE SITE: Continued open access of the area throughout the year is important and recognized in Alternative 5. The continued usage of the site for snow play and free cross country ski access is important. It is good that the Forest Service recognizes that for this use to continue that some hazard reduction must be done. Removal of the lifts and associated towers will be helpful, but the western most slope in particular should be maintained with winter snow play and safety in mind. Thank you also, for your concern of the future of the Echo to Kirkwood Race and including a staging area in Alternative 5.

**I am against the proposed use of the area for snowmobile usage of any kind even on a limited event basis. The area is too heavily used by the public during the winter and this type of usage is not compatible with the existing use that has taken place in the past few years. (I am pleased that snowmobile usage is not a part of Alternative 5, but I felt the need to comment on it anyway! If the snowmobilers really need space for a particular event I would be willing to help find an alternative location some where else on the forest.)

Back Country Traveler • 6110 Pony Express Trail • Pollock Pines, CA • 916-644-1358

SITE RESTORATION: The proposed restoration is a good balance with removal of buildings, removal of vegetation for safety and public enjoyment in some locations and replanting in other areas.

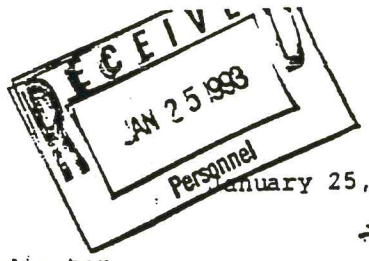
LAND MANAGEMENT PLAN: I feel it is good to change the Land Management Plan to address the changes being made. The old Echo Summit Ski Area site is too small to every be a viable ski area in today's competitive market.

Thank you for giving me the opportunity to read over the Draft EIS. Please change my address to the one below and keep me on the mailing list for future meetings and plan reviews.

Sincerely,

Carol J Bonser

Carol Bonser
907 Hillcrest St.
Placerville, CA 95667
916-642-8153



January 25, 1993

Diana Erickson, Echo Summit EIS Coordinator
Eldorado National Forest
100 Forni Road; Placerville, CA 95667

Dear Diana:

Please include the following in the "public comments", on the proposed future uses of the Echo Summit Ski Area Site.

The majority of the options outlined in the Echo Summit Ski Area Draft Environmental Impact Statement reflect winter recreational activities. A year round use for the area may provide a more attractive enterprise for any potential public or private operator. Now that the Pony Express and California Emigrant Trails are included in the National Trails System Act it appears that the Echo Summit Site would be an excellent location for a Trails Information Center or California Pony Express Museum. The site is an ideal location to tell the stories of the Johnson Pass Emigrant Trail, the first engineered road over the Sierra (Hawley Grade), the Comstock Rush, the Pony Express, the first State highway and the first Federal highway. Should this suggestion be pursued, suggest also the participation of a corporate sponsor such as Wells Fargo be explored.

The Draft Environmental Impact Statement reflects waste disposal as a major consideration. Attached is an interesting article from the December 1992 issue of U.S. Water News wherein processed waste water will be used for artificial snow making at Snow Valley Ski Resort in the San Bernardino Mountains.

Sincerely,

Tom Mahach
6830 Aerie Road
Pollock Pines, CA 95726
(916) 644-4384

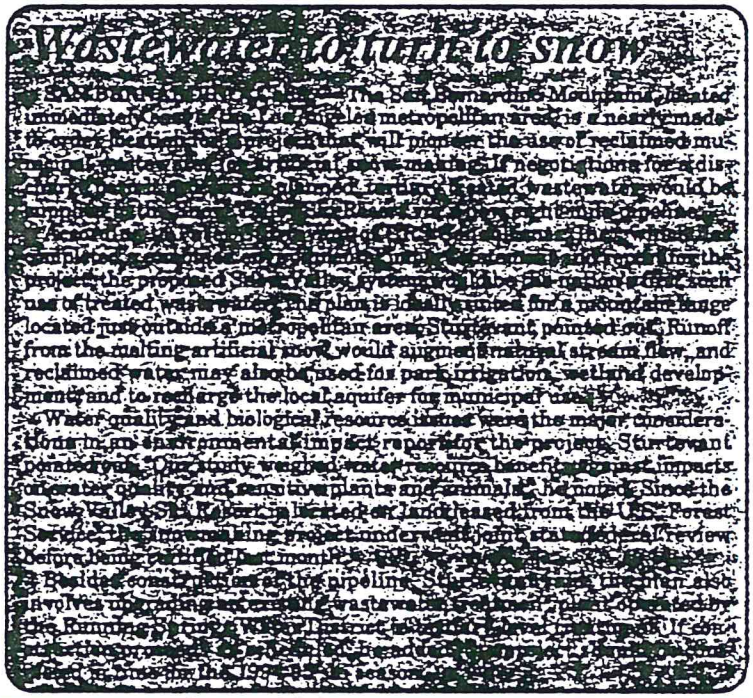
from Southeast a mistrial

becomes a "bucket" into which the chemicals are dumped, then they settle into the silt, the toxicologist said. He said he found dioxin and other chemicals along the river and around the lake as well as in the fish and water. The chemical is formed in making paper when bleach combines with organic compounds.

Champion claimed there is no evidence its mill, located some 40 miles from the Tennessee-North Carolina border, harmed lake and river property. However, Ross Kilpatrick, vice president for operations at the mill, testified on videotape that the plant has deposited dioxin, chemicals, and color in the river.

An attorney for Champion said the company's mill is undergoing a $330 million upgrade to modernize. He said the changes will help improve water quality.

Wastewater to turn to snow



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Dear Diana,

I would like to make a suggestion concerning alternative 6c. (pages s.5 and 20) Developing the easternmost ski run for snowboard use definitely gets my vote, but in my opinion a rope tow wouldn't be sufficient to get to the top of the run. A rope tow going up half way might be feasible, but I just don't think all the way up would work. What I do think would work is to leave the easternmost chair lift and completely block off any access to the snow play area. This could be done with a cyclone fence or possibly some kind of wooden fence that would be more aesthetically suited for the area. It would have to be high enough and strong enough to withstand a snowload equal to this winters.

Sincerly,

James Pike

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

January 25, 1993

Robert Smart, Jr.
District Ranger
Placerville Ranger District
Eldorado National Forest
Attn: Diana Erickson
100 Forni Road
Placerville, CA. 95667

Dear Mr. Smart:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the project entitled **Future Use of Echo Summit Ski Area, Placerville Ranger District, Eldorado National Forest, Eldorado County, CA.** Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508) and Section 309 of the Clean Air Act.

The DEIS documents the analysis of future Forest Service management options for the recently acquired Echo Summit Ski area facilities together with the surrounding 115 acres of Forest Service land previously leased to the operator. Facilities include a 9,000 square foot building (former ski lodge), two ski lifts, and maintenance buildings. A portion of the parking at the site has been allocated to continuing operation during the winter months of an adjoining California Department of Recreation Sno-Park site. A range of management alternatives are evaluated including no action, removal of the facilities and restoration of the site, special use permit for operation of the former ski lodge, special use permit including snowmobile events, Forest Service operation of the site, special use permit with potential for expansion, special use permit for a downhill ski area, downhill ski area with permittee operated Sno-Park, and special use permit for development of nordic skiing/snowboard area.

The Forest Service preferred alternative is to issue a special use permit for operation of the existing facilities with potential for some expansion of the facilities. Possible expansion might include construction of additional buildings, trailer pads, and decking. Additional construction would be limited to areas which have already been disturbed. Existing ski lifts and various ticket sales and other outbuildings would be removed and 12 acres revegetated with native trees, grasses, and riparian vegetation.

We commend the Forest Service for selecting a management alternative which provides a wide range of year round

recreational opportunities to the public in a variety of economic classes. EPA applauds the inclusion of habitat restoration as an integral part of the alternatives. We concur that the demand for additional developed downhill and Nordic ski facilities may not be high, especially in light of the number of nearby existing ski areas and their expansion proposals (pg.25). EPA has been concerned with the number of developed ski areas proposing expansion and the potential cumulative impacts on water quality, air quality, and natural resources.

While the selected management alternative is commendable, we have concerns with potential impacts to water quality and wetlands. We urge the Forest Service include stringent specifications for sewage treatment, the water supply source, and wetland and sensitive habitat protection in the FEIS and special use permit prospectus. We believe the selected special use permit operation proposal should maximize versatility while minimizing physical expansion and significant encroachment on the existing natural resources.

Based upon our review, we have classified this DEIS as category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of the EPA Rating System"). Our detailed comments are enclosed.

We appreciate the opportunity to review this DEIS. Please send three copies of the Final EIS to this office at the same time it is officially filed with our Washington, D.C. office. If you have questions, please call Ms. Laura Fujii at (415) 744-1579.

Sincerely,

Deanna M. Wieman

Deanna M. Wieman, Director
Office of External Affairs

Enclosure: (2 pages)

92-419
MI001207

cc: Wayne White, USFWS, Sacramento
Dave Flohr, Forest Service, SF Regional Office
CDFG, Region 2
RWQCB, Lahontan Region, South Lake Tahoe

COMMENTS

Water Quality Comments

Because of the high water table at the project site, adequate sewage treatment may be difficult. The DEIS states a new innovative design for a sewage disposal system meeting County standards will be required (pg. 34). The FEIS should provide an outline of the minimum sewage treatment specifications and requirements which must be meet. Evaluate contingency plans in case adequate sewage treatment on site is not feasible.

Section 404 Wetland Comments

1. The FEIS should expand the evaluation of effects of increased water use. Provide data to support the assumption that an increase use of the existing spring or a new well would not dewater or affect existing wetlands. The location of the spring and potential well sites should be described in the FEIS.

2. Maps of the project site show existing riparian and historical wet areas near heavy use areas (e.g., next to the ski lodge). Furthermore, the Forest Service plans to restore the wet habitat surrounding the lodge area (Map E). Riparian and wet meadow habitats are vulnerable to heavy human activity. We recommend the Forest Service address protection measures for existing sensitive habitats and restoration sites in the FEIS. For example, fencing vulnerable areas, implementing an aggressive education program, and restricting human activity during vulnerable seasons to areas without sensitive habitats may help minimize potential impacts of increased use. Effective protection measures will be crucial with the expansion of heavy use into seasons without protective snow cover. We encourage the Forest Service to select a special use permit operation proposal which includes an interpretive/education service component.

General Comments

1. The FEIS should evaluate possible mitigation measures for potential impacts to traffic (e.g., congestion, overflow parking across Highway 50). For example, discuss the feasibility of requiring carpooling or public transportation for special events.

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommend for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1-Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Affairs
600 Harrison Street, Suite 515
San Francisco, California 94107-1376

IN REPLY REFER TO:

February 16, 1993

ER 92/1118

Mr. Robert Smart Jr., District Ranger
Eldorado National Forest
100 Forni Road
Placerville, California 95667

Dear Mr. Smart:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement for the Future Use of the Echo Summit Ski Area Site, Eldorado National Forest, El Dorado County, California. The Department does not have any comments to offer.

We have appreciated the opportunity to comment.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc:
Director, OEA w/original incoming
Regional Director, FWS, Portland

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY

PETE WILSON, Governor

DEPARTMENT OF TRANSPORTATION
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February 17, 1993

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03-ELD-50-PM 66.5
Echo Summit Ski Area Site
DEIR

Ms. Diana Erickson
Echo Summit EIS Coordinator
El Dorado National Forest
1001 Forni Road
Placerville, CA 95667

Dear Ms. Erickson:

Thank you for the opportunity to review and comment on the above referenced document.

COMMENTS:

Any use increasing on-site parking by roughly 100 spaces should provide an east bound turn lane on US 50 as a mitigation measure.

Special events, such as snowmobile races, could create sharp peaks in traffic into/out of the site. Caltrans is specifically concerned about numerous vehicle-trailer combinations making left turns from the site onto US 50. This site may not be the appropriate location for such events.

Expansion of the parking along with downhill ski operations could also cause capacity and safety concerns at the intersection of US 50 and the entrance to the site due to the typically sharp departure rates that could be expected from the site area.

If you have any questions or need assistance please call Terri Pencovic at (916) 741-4199 or Fax (916) 741-5346.

Sincerely,

E. A. "LIB" HARAUGHTY
Chief, Planning Branch A

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