

United States
Department of
Agriculture

Forest
Service

Southwestern
Region



February 2004

Draft Environmental Impact Statement for Arizona Snowbowl Facilities Improvements

Coconino National Forest Coconino County, Arizona

Legal Description:

Northeast corner of section 1, Township 22 North, Range 6 East
Southeast corner of section 36, Township 23 North, Range 6 East
Southern half of section 31, Southwestern corner of section 32,
Township 23 North, Range 7 East
Northern portion of section 6, Northwestern portion of section 5,
Township 22 North, Range 7 East

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DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE

ARIZONA SNOWBOWL FACILITIES IMPROVEMENTS PROPOSAL

COCONINO NATIONAL FOREST
COCONINO COUNTY, ARIZONA

FEBRUARY 2004

Lead Agency: USDA Forest Service

Responsible Official: Nora B. Rasure, Forest Supervisor
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Abstract: This Environmental Impact Statement (EIS) has been prepared to analyze and disclose the environmental effects of a proposal to provide a consistent/reliable operating season through snowmaking and to enhance the overall recreational experience at the Arizona Snowbowl. The Arizona Snowbowl is located on the Coconino National Forest in Coconino County, Arizona and operates in accordance with the terms and conditions of a Special Use Permit issued by the US Forest Service. The Proposed Action includes installation of snowmaking infrastructure to support approximately 205.2 acres of season-long snow coverage; realignment and/or lengthening of the Sunset, Hart Prairie, and Aspen lifts; installation of one new chairlift and four surface lifts; development of approximately 73.7 acres of new skiing terrain; development of a snowplay/tubing area, with associated surface lifts, parking, and guest service facilities; the creation of a halfpipe; and improvement of service facilities and ski area infrastructure. This EIS discusses the purpose and need for the Proposed Action; alternatives to the Proposed Action; potential direct, indirect, and cumulative impacts of implementing each alternative; and mitigation measures. Three alternatives are analyzed in the EIS.

Reviewers should provide the Forest Service with their comments during the review period of the draft EIS. Comments for the draft EIS shall be accepted for 60 days following the date of publication of the Notice of Availability (NOA) in the *Federal Register* pursuant to 40 CFR parts 1500-1508 (June 4, 2003). The 60-day comment period for proposed actions analyzed and documented in a draft EIS begins on the first day after publication of the NOA. Those wishing to be eligible for appeals must provide the following:

- i. Name and address
- ii. Title of the Proposed Action
- iii. Specific substantive comments (36 § 215.2) on the proposed action, along with supporting reasons that the Responsible Official should consider in reaching a decision.
- iv. Signature or other verification of identity upon request; identification of the individual or organization who authored the comment(s) is necessary for appeal eligibility.

This will enable the Forest Service to analyze and respond to the comments at one time and to use information acquired for the preparation of the final EIS, thus avoiding undue delay in the decision making process. Reviewers have an obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the agency to the reviewers' position and contentions. (*Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 553 [1978]). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final EIS (*City of Angoon v. Hodel* (9th Circuit, 1986) and *Wisconsin Heritages, Inc. v. Harris*, 490 F. Supp. 1334, 1338 [E.D. Wis. 1980]). Comments on the draft EIS should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3).

Because of these court rulings, it is very important that those interested in this Proposed Action participate by the close of the 60-day comment period so that substantive comments are made available to the Forest Service at a time when it can meaningfully consider them and respond to them in the final EIS.

Individuals and organizations who submit substantive written or oral comments during the 60-day comment period for a draft EIS may file an appeal (36 § 215.6, 40 CFR 1506.10; FSH 1909.25, Chapter 20), except for federal agencies (who may not appeal). Comments received from an authorized representative(s) of an organization are considered those of the organization only; individual members of that organization do not meet appeal eligibility solely on the basis of membership in an organization; the member(s) must submit substantive comments as an individual in order to meet appeal eligibility. It is the responsibility of persons providing comments to submit them by the close of the comment period. Those who provide substantive comments during this comment period are eligible to appeal the decision under the regulations.

Pursuant to 7 CFR 1.27(d), any person may request the agency to withhold a submission from the public record by showing how the Freedom of Information Act (FOIA) permits such confidentiality. Persons requesting such confidentiality should be aware that, under FOIA, confidentiality may be granted in only very limited circumstances, such as to protect trade secrets. The Forest Service will inform the requester of the agency's decision regarding the request for confidentiality, and where the request is denied, the agency will return the submission

and notify the requester that the comments may be resubmitted with or without name and address within 10 days.

Send Written Comments to:

Nora B. Rasure
Forest Supervisor Coconino National Forest
Snowbowl DEIS Comments
2323 E. Greenlaw Lane
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(928) 527-3600
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Electronic comments must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), and Word (.doc) to: comments-southwestern-coconino-peaks@fs.fed.us. Please include a physical mailing address with all oral or electronic comments.

Comments must have an identifiable name and address attached, or verification of identity will be required. A scanned signature may serve as verification on electronic comments.

EXECUTIVE SUMMARY

ARIZONA

SNOWBOWL

Coconino National Forest
Peaks Ranger District



EXECUTIVE SUMMARY

INTRODUCTION

The San Francisco Volcanic Field covers approximately 1,800 square miles in northern Arizona. The field lies along the southern perimeter of the Colorado Plateau, defined by the Mogollon Rim to the south of Flagstaff. The most prominent peak within the field is Humphreys Peak, which at 12,633 feet is the highest point in Arizona. Collectively, Humphreys Peak, Agassiz Peak (12,345 feet), and Fremont Peak (11,696 feet) are identified on USGS maps as the San Francisco Mountain. However the mountain is more commonly referred to as the San Francisco Peaks by the local population, and for the purpose of this analysis, it shall be hereafter referred to as such.

The Arizona Snowbowl (hereinafter referred to as “Snowbowl”) is owned and operated by Arizona Snowbowl Resort Limited Partnership. The Snowbowl is located entirely on the Coconino National Forest (CNF) on the western flank of the San Francisco Peaks. The ski area is operated under a 777-acre Forest Service-issued Special Use Permit (SUP), which is renewed on a 40-year basis. Snowbowl is approximately 15 miles north of Flagstaff, one of the four largest metropolitan areas in Arizona (refer to Figure 1-1). Snowbowl is surrounded on three sides by the 18,616-acre Kachina Peaks Wilderness Area, which was designated by the U.S. Congress in 1984.

Skiers¹ have been using the Snowbowl since 1938, when the ski area’s original base area was established in Hart Prairie. The foundation of the base lodge (which was destroyed by fire in 1952) can still be seen just above the first tower of the Hart Prairie Chairlift. Originally a dirt road, the Snowbowl Road was constructed by the Civilian Conservation Corps. A rope tow, powered by a car engine, was the only means of uphill transport. In 1954 the road was extended to the site of the Agassiz Lodge and in 1956 the Agassiz Lodge was constructed. A Poma surface lift was installed in 1958 and part of that lift line is now the *Blackjack* (trail #17). The original Agassiz Chairlift was installed by the Riblet Corporation in 1962. Relatively little activity was seen until the 1970's when Summit Properties purchased the area with plans for a base village, however, a land use plan issued in 1971 restricted development to the existing permit area. In 1977 the area was purchased by Northland Recreation and a Master Concept Plan was filed with the Forest Service. This plan was tested in the courts with final approval coming from the US Supreme Court (on appeal). In 1982 the Hart Prairie Chairlift was built. Fairfield Communities purchased the ski area in November of that same year and began an improvement program in 1983, including construction of the Hart Prairie Lodge, Sunset Chairlift and transfer of the rope tow back to Hart Prairie. In 1985 parking lots #5 and #6 were completed along with a new maintenance shop. In 1986 a new CTEC triple chairlift was installed on the site of the original Agassiz Chairlift; the rope tow and the Poma were removed and the Aspen Chairlift was installed in Hart Prairie. A two-year Snowbowl Road improvement and paving project began in 1988.

¹ At ski areas, one may see people using Alpine, snowboard, telemark, cross-country, and other specialized ski equipment, such as that used by disabled or other skiers. Accordingly, the terms “ski, skier, and skiing” in this document encompass all lift-served sliding sports typically associated with a winter sports resort.

Arizona Snowbowl Resort Limited Partnership purchased the ski area in December 1992 and proceeded to make immediate improvements to the facilities and ski trails. Hart Prairie Lodge was expanded by constructing a new guest service office, rental shop and children's ski school. *Logjam* (trail #25) was widened and new trails – *Lava* (trail #43c) and *Volcano* (trail #43a) were constructed.

In addition to wintertime skiing and snowboarding, the Snowbowl offers summertime scenic chairlift rides on the (Sky ride program) Agassiz Chairlift. Guided horseback rides, banquets and restaurant facilities are also available.

RELATION OF THE CURRENT PROPOSAL TO PREVIOUS NEPA ANALYSIS AND APPROVALS

In 1979, a master plan for upgrading Snowbowl was produced, which provided for the installation of new lifts, trails, and facilities. These projects were analyzed in the 1979 Arizona Snowbowl Ski Area Proposal Final Environmental Statement (1979 Environmental Statement) and ultimately approved via an associated Record of Decision (ROD). Two of the approved lifts were subsequently installed – Hart Prairie and Sunset. In addition, the Hart Prairie Lodge and new parking were added in accordance with the 1979 Environmental Statement.

Many of the projects analyzed in this current EIS are consistent with the 1979 Master Plan. However, because of the length of time that has passed since the approval of the 1979 Master Plan, the advent of new procedural requirements, and potentially changed conditions, these approvals are no longer valid without additional site specific environmental analysis. Currently proposed projects that were not specifically approved in the 1979 ROD have been designed to remain within the contextual scope of the 1979 approvals. From the selected alternative identified in the 1979 ROD, this analysis carries forward the size of the ski area (777 acres), skiable acreage and the comfortable carrying capacity (CCC)² of 2,825.

In relation to this EIS, the alternative that is ultimately approved via a ROD will provide the framework for a new master development plan (MDP), which will guide development of Snowbowl for the subsequent five to eight years.

The 1987 CNF Forest Plan³ (hereinafter referred to as “the Forest Plan”) adopted the 1979 Environmental Statement into its standards and guidelines for Management Area 15, which provides direction for developed recreation sites.

² CCC is defined as the number of guests that can be comfortably accommodated by a ski area at any point in time. It provides for a pleasant recreational experience by not overburdening a ski area’s facilities (including, but not limited to, parking, restaurant seating, restrooms, and uphill/downhill capacity). CCC is utilized by ski area planners and the Forest Service as a planning tool and *does not constitute a cap on visitation*. Facilities are typically designed to accommodate 125 percent of a ski area’s CCC in order to preserve the guest experience on peak visitation days, which are anticipated periodically throughout the season.

³ USDA Forest Service, 1987 as amended

PURPOSE AND NEED FOR THE PROPOSED ACTION

The Forest Service and Snowbowl cooperatively determined general categories important for improving the Snowbowl's facilities. From these categories, a list of proposed projects was created, and the Proposed Action ultimately emerged. The Proposed Action responds to the goals and objectives outlined in the Forest Plan,⁴ and helps move the project area towards desired conditions described in it.

The overall Purpose and Need for these projects responds to two broad categories: 1) to provide a consistent/reliable operating season, and 2) to improve safety, skiing conditions, and recreational opportunities by bringing terrain and infrastructure into balance with existing demand.

PURPOSE #1:

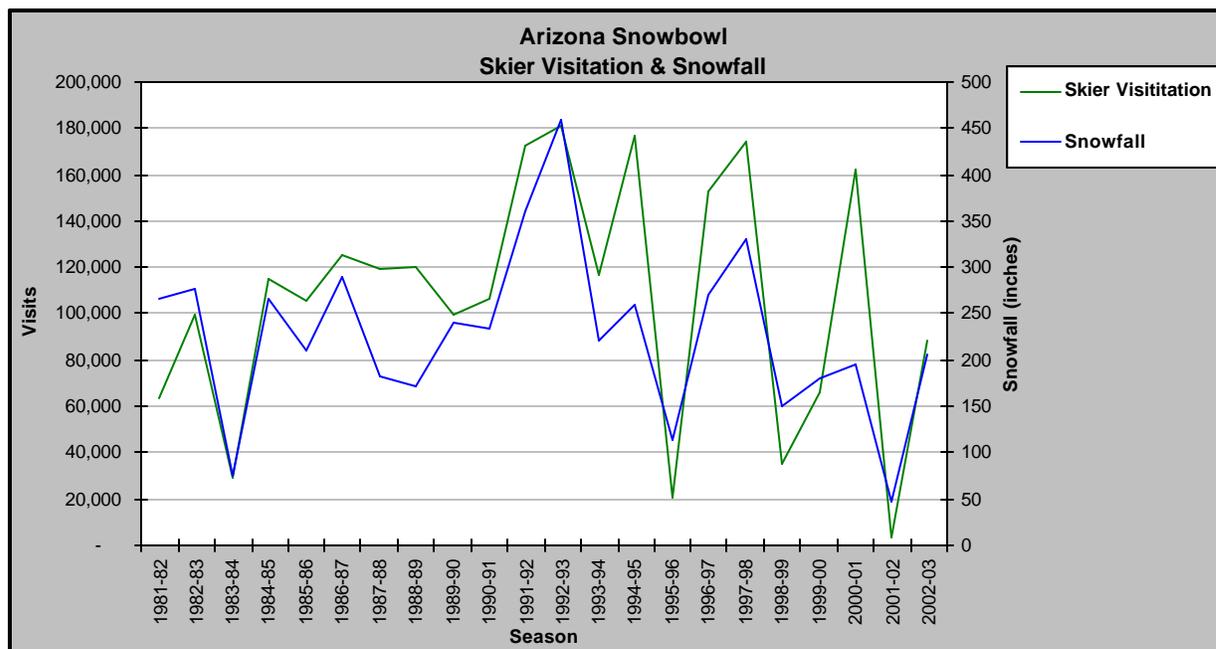
To ensure a consistent and reliable operating season, thereby maintaining the economic viability of the Snowbowl, and stabilizing employment levels and winter tourism within the local community.

Existing Condition:

Inconsistent annual snowfall has historically led to a sporadic operating season and therefore broad fluctuations in annual visitation. This has created unstable employment levels and has affected local winter tourism. Snowbowl's ability to maintain or improve its current level of service endure the business conditions caused by unreliable snowfall is questionable. Figure ES-1 correlates annual snowfall (inches) with annual visitation for the past 22 seasons at Snowbowl:

⁴ USDA Forest Service, 1987

**Figure ES-1
Skier Visitation and Snowfall**



Need:

The installation and operation of snowmaking infrastructure would provide a reliable and consistent operating season helping to stabilize Snowbowl’s investment, increase local employment levels, and boost winter tourism within the community.

PURPOSE #2:

To improve safety, skiing conditions, and recreational opportunities, bringing terrain and infrastructure into balance with current use levels.

Existing Condition:

Currently, areas of intermediate and beginner terrain are inadequately sized to accommodate the public’s demand for terrain of these ability levels on peak days. This lack of terrain often results in significant use of the existing terrain and high skier densities on peak days. This creates safety issues because of overcrowded ski runs. When compared to ski industry norms (and guest expectations), Snowbowl exhibits a deficit of intermediate and beginner level terrain and a surplus of novice level terrain as shown in Table ES-1.

Need:

Improve the quantity and distribution of beginner and intermediate terrain and skier safety by developing additional terrain within the existing SUP area.

**Table ES-1
Existing Terrain Distribution**

Skier/Rider Ability Level	Trail Area (acres)	Skiing Terrain Capacity (guests)	Existing Skier Distribution	Typical Skier Market	Difference
Beginner	0.5	15	1%	5%	-4
Novice	44.0	790	44%	15%	+29
Low Intermediate	31.3	438	25%	25%	0
Intermediate	38.1	381	22%	35%	-13
Adv. Intermediate	15.4	108	6%	15%	-9
Expert	9.4	28	2%	5%	-3
Total	138.6	1,760	100%	100%	

Existing Condition:

Public demand at Snowbowl has grown significantly in the past 20 years, increasing from 63,000 annual visits in 1981/82 to 162,175 during the 2000/01 season, an increase of 157 percent. The inadequate size and limited conditions of on-mountain facilities have resulted in a crowded, undesirable guest experience in many areas, such as in the lodges and on the chairlifts. Additionally, Snowbowl frequently experiences peak demand days which significantly exceed the current CCC of the existing facilities and infrastructure.

Need:

To increase the capacities of the day lodges, chairlifts, and other ski area infrastructure, bringing it into proper balance with *current* use levels, while remaining within the ski area's previously approved CCC of 2,825 skiers.

Existing Condition:

Approximately 30,000 visitors ride the summer Scenic Sky ride annually. Although numerous summer visitors express interest, guests are not allowed to hike down the mountain due to the steep grades and cobbled surface.

Need:

To allow guests to hike from the top back to the base area by providing an established hiking trail from the top of the Agassiz Chairlift. Additionally, this trail would allow Snowbowl lift maintenance personnel to periodically access the top terminal of the Agassiz Chairlift using all terrain vehicles during the summer.

Existing Condition:

In the past, numerous snowplayers illegally parked along the Snowbowl Road and at the ski area to sled, slide, and saucer in existing openings off the edge of the road and at the ski area. This dispersed use often leads to injuries, traffic management issues, garbage, and sanitation problems.

Need:

To develop a professionally designed and managed snowplay/tubing facility at the ski area to fill the demonstrated public demand for snowplay. The facility should provide restrooms, a warming building, ticketing, concessions, parking, and trash receptacles.

SUMMARY OF THE PROPOSED ACTION

In response to the purpose and need, the following Proposed Action was assembled by Snowbowl and the Forest Service. A detailed description of the Proposed Action is provided in Chapter 2.

Because Forest Plan direction for management of the Snowbowl SUP area does not specifically allude to amenities such as snowtubing and snowmaking, a non-significant Forest Plan amendment is included as a portion of the Proposed Action in order to allow the Forest Service and Snowbowl to respond to key portions of the Purpose and Need. The complete amendment language is contained in Appendix B.

SNOWMAKING

- Approximately 205 acres of snowmaking coverage throughout the SUP area utilizing Class A reclaimed water as a source
- Construct a 10 million-gallon snowmaking water reservoir near the top terminal of the existing Sunset Chairlift

SNOWPLAY/TUBING FACILITY

- Construct a professionally designed and managed snowplay/tubing facility at the base area

LIFTS/UPHILL CAPACITY

- Replace the Sunset Chairlift with a high speed, detachable chair
- Relocate the existing Sunset Chairlift as the Humphreys Chairlift, accessing a pod of proposed ski trails
- Upgrade and extension of the Hart Prairie Chairlift with a high-speed, detachable lift
- Upgrade and realignment of the Aspen Chairlift
- Install three surface conveyors in the area north of the Hart Prairie Lodge
- Install a handle tow is proposed to service the proposed halfpipe and terrain park

TERRAIN

- Approximately 74 acres of new trails
- Approximately 47 acres of thinning to created improved glades
- Approximately 87 acres of terrain improvements (grading/stumping and smoothing)
- Create a dedicated teaching area near the Hart Prairie Lodge
- Construct a halfpipe

GUEST SERVICE FACILITIES

- Enlarge the Hart Prairie Lodge by approximately 6,000 square feet to a *total* of 24,900 square feet
- Construct a new 10,000 square foot guest services facility adjacent to the Agassiz Lodge⁵
- Construct a 2,500 square foot Native American cultural and education center constructed in or near the Agassiz Lodge
- Replace existing on-mountain ski team buildings

SUMMER TRAILS

- Construct a hiking trail from the existing Agassiz Chairlift mid-station to the top terminal
- Construct an Americans with Disabilities Act (ADA) compliant summer access trail into Hart Prairie from the parking lot near Agassiz Lodge

INFRASTRUCTURE AND UTILITIES

- Construct a 14.8-mile pipeline to transport reclaimed water from Flagstaff to Snowbowl
- Install snowmaking pipelines buried within existing and proposed trails
- Redesign the entrance circle, which would have signs directing guests to parking lots, day lodges, and snowplay parking
- Construct a 400-space parking area to service the proposed tubing facility
- Combine parking lots #1 and #2 by re-grading and leveling them
- Develop approximately 1,110 feet of additional on-mountain access road
- Reconstruct approximately 3,650 feet of existing two-track mountain access road
- Decommission approximately 3,050 feet of existing two-track mountain access road

PUBLIC INVOLVEMENT

Public Scoping

On September 23, 2002, a scoping notice was mailed to approximately 350 community residents, interested individuals, public agencies, and other organizations. This notice was designed to elicit comments, concerns, and issues pertaining to the Proposed Action. A press release and legal notice were distributed to key local and regional media. On October 7, 2002, the Forest Service published a Notice of Intent (NOI) to prepare an EIS in the Federal Register. In addition, two public open houses were held at the Flagstaff High School on October 10, and 26, 2002. Forest Service representatives and members of the consultant team were present to answer questions and collect comments.

Tribal Scoping

The Forest Service also initiated tribal consultation in June 2002 with 13 Native American tribes which hold the San Francisco Peaks sacred. Tribal consultation concerning the Proposed Action was initiated in June 2002 with a formal letter from the

⁵ Facilities in both the Hart Prairie and Agassiz lodges would be brought into ADA compliance.

Forest Supervisor to 13 tribal leaders. Also in June 2002, the District Ranger contacted tribal representatives from Cultural Preservation Offices of 13 affiliated tribes to discuss the Snowbowl proposal and suggest pre-proposal meetings. Phone contacts between the District Archaeologist and several tribal Cultural Preservation Officers (Hopi, Navajo, Hualapai, San Carlos Apache, Yavapai-Apache) were made during the months of June-December 2002. In addition, follow-up phone calls to interested tribes were made by the District Archaeologist to ensure receipt of letters. Overall, numerous phone calls and letters have been sent to tribes and the tribal public requesting input.

Two formal public meetings were held on the Hopi Indian Reservation (Tuba City and Kykotsmovi) on Monday, December 9, 2002. The emphasis of these two public meetings was to explain the Proposed Action to tribal members and to elicit comment/concerns on behalf of individuals and the tribe.

Additional tribal contacts included:

- August 6, 2002: Forest Service, Shereen Lerner, and representatives from Yavapai-Apache (all Apache tribes invited; only Camp Verde attended)
- August 18, 2002: Heather Cooper and Mae Franklin (Navajo liaison) set up information booth at Tuba City Flea Market as part of the Western Navajo Fair
- August 21, 2002: Forest Service, Shereen Lerner, and Hopi Land Team
- September 19, 2002: Forest Service, Shereen Lerner and Hopi Cultural Resource Advisory Team
- October 8, 2002: Mae Franklin attended Gap/Bodaway Chapter House meeting on Navajo Reservation and collects comments regarding Snowbowl proposal
- October 13, 2002: Mae Franklin attended Cameron Chapter House meeting and collects comments regarding Snowbowl proposal
- October 23, 2002: Shereen Lerner, Forest Service and representatives from the Hopi Tribe
- November 23, 2002: Mae Franklin and Heather Cooper attended Leupp Chapter House meeting and collect comments regarding Snowbowl proposal
- November 26, 2002: Heather Cooper presents "Collaborative Management of the San Francisco Peaks" to the Hopi Cultural Resources Advisory Team
- December 9, 2002: Tribal meeting held at Tuba City High School. Representatives include: Forest Service personnel (including Forest Supervisor Jim Golden and Peaks District Range Gene Waldrip); SE

GROUP; Shereen Lerner; and members of the Hopi Tribe and Navajo Nation

December 9, 2002: Tribal meeting held at Kykotsmovi Community Center. Representatives include: Forest Service personnel (including Forest Supervisor Jim Golden and Peaks District Range Gene Waldrip); SE GROUP; Shereen Lerner; and members of the Hopi Tribe

December 14, 2002: Mae Franklin, Gene Waldrip, and Heather Cooper attend Western Navajo Agency Council meeting, requesting comments on Snowbowl proposal

In response to public and tribal scoping, including the open houses, approximately 1,200 comment letters were received. Based upon the responses received during scoping, the Forest Service Interdisciplinary Team (ID Team) prepared a list of issues to be analyzed within this document.⁶ The issues and concerns are detailed in the following section and are examined individually by alternative in Chapter 3.

ISSUES AND INDICATORS

Based on the results of internal and public scoping, the ID Team identified specific areas (resources) of concern and classified them as 1) significant issues that drive alternatives, require mitigation, or generally require in-depth analysis/disclosure; 2) tracking issues that do not necessarily drive alternatives or mitigation but are tracked throughout the analysis with their effects disclosed; or 3) non-issues. This EIS focuses on analysis of the following issues (identified as either significant or tracking).

HERITAGE RESOURCES

- The installation and operation of snowmaking infrastructure as described in the Proposed Action, and the use of reclaimed wastewater as a water source, may impact cultural and spiritual values associated with the San Francisco Peaks (Significant).
- Proposed ground disturbances and vegetation removal may result in permanently evident, visible alterations (i.e., “scarring”) of the San Francisco Peaks’ landscape (Significant).
- Some people feel the effects of the Proposed Action cannot be adequately described until the significant qualities of the San Francisco Peaks are identified as part of the National Register nomination process (Tracking).

⁶ The scoping comment disposition analysis is available in the project file.

NOISE

- The proposed snowmaking system may increase noise levels potentially disturbing residents, recreationists, and/or wildlife (Tracking).

TRAFFIC AND ACCESS

- The Proposed Action may affect traffic volumes and/or congestion on U.S. Highway 180 and/or the Snowbowl Road (Tracking).

AESTHETIC IMPACTS

- Proposed ground disturbance and vegetation removal within the SUP may incrementally affect the aesthetic quality of the west face of the San Francisco Peaks (Tracking).

SOCIO-ECONOMICS

- Implementation of the Proposed Action may have social and economic effects on Flagstaff and Coconino County (Tracking).

RECREATIONAL OPPORTUNITIES AND EXPERIENCES

- The Proposed Action may affect the quality, distribution, and opportunity for winter and summer recreational experiences within the SUP area (Tracking).

WILDERNESS VALUES

- Implementation of the Proposed Action may affect the experience of wilderness users within the surrounding Kachina Peaks Wilderness (Tracking).

SKI AREA INFRASTRUCTURE AND UTILITIES

- The Proposed Action may affect ski area infrastructure and supporting utilities within and beyond the SUP area (Tracking).

WATERSHED RESOURCES

- The application of Class A reclaimed water for snowmaking within the SUP area may affect water quality within the receiving subwatersheds (Tracking).
- Use of reclaimed water for snowmaking purposes between November and February of each year may affect aquifer recharge (Tracking).

SOILS AND GEOLOGY

- The Proposed Action has potential to change soil chemistry and moisture due to the application of machine produced snow (Tracking).

VEGETATION

- Plant communities (including T, E and S plant species, and regionally important plants) within the SUP area may be altered as a result of the proposed projects (Tracking).
- The Proposed Action has potential to change vegetation composition within the SUP area due to the application of machine-produced snow (Tracking).

WILDLIFE

- The Proposed Action may result in the alteration and/or removal of habitat for terrestrial wildlife species within the SUP (Tracking).
- Proposed snowmaking activities may result in a longer-duration snowpack and additional water storage for wildlife in the SUP area (Tracking).

GEOTECHNICAL ANALYSIS

- Geotechnical feasibility and associated hazards associated with construction of the proposed snowmaking impoundment on the ridge above the Sunset Chairlift must be analyzed (Tracking).

AIR RESOURCES

- Snowplay activities at Snowbowl may increase vehicular traffic and may negatively impact air quality in the region (Tracking).

ALTERNATIVES

ALTERNATIVES CONSIDERED IN DETAIL

Three alternatives, including No Action and the Proposed Action, are considered in detail in this EIS. The Proposed Action was summarized earlier in this Executive Summary; it is also described in detail in Chapter 2 of the EIS. Alternative 3 was developed primarily in response to heritage and cultural resource issues raised during the scoping and consultation process with the tribes; it includes all elements of the Proposed Action except snowmaking and the snowplay facility (and all related infrastructure). Refer to Chapter 2 for a more detailed description of Alternative 3.

ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

Federal agencies are required by NEPA to rigorously explore and objectively evaluate all reasonable alternatives and to briefly discuss the reasons for eliminating any alternatives that were not analyzed in detail (40 CFR 1502.14). Public comments received in response to the Proposed Action provided suggestions for alternative methods for achieving the established project purpose and need. Some of these alternatives may have been outside the scope of the proposal, duplicative of the alternatives considered in detail, or determined to be components that would cause unnecessary environmental harm. Therefore, a number of alternatives were considered but eliminated from detailed consideration. Refer to Chapter 2 for a more detailed description of these alternatives considered but eliminated from the EIS.

- Night Lighting
- Reduced Development of Additional Skiable Terrain - Humphreys Pod
- Reduced Snowmaking Coverage
- Alternative On-Site and Nearby Water Sources
- Alternative Summer Recreational Opportunities
- Alternative Snowmaking Water Pipeline Alignments

MITIGATION MEASURES AND BEST MANAGEMENT PRACTICES

NEPA and CEQ regulations require that all relevant, reasonable mitigation measures that will reduce the impacts resulting from a project be identified, even if those measures are outside the jurisdiction of the Forest Service. Mitigation, as defined in the CEQ regulations, includes the following:

- Avoiding the impact altogether by not taking a certain action or parts of an action
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action
- Compensating for the impact by replacing or providing substitute resources or environments

Table 2-2 – Mitigation Measures and BMPs – highlights mitigation measures and Best Management Practices (BMPs) designed to minimize impacts to resources as a result of project implementation. Each mitigation measure or BMP includes a rating of anticipated effectiveness and feasibility as well as an indicated objective. Responsibility for ensuring that these mitigation measures are implemented rests with the Snowbowl management and the Forest Service. In all cases, the ultimate enforcement mechanism for implementation of the specified mitigation measures would be the ROD for this EIS, and would extend to the Forest Service Special Use Permit Administrator, the District Ranger, and the Forest Supervisor.

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

While a description of the affected environment for each resource analyzed in Chapter 3 is beyond the scope of this summary, the reader is referred to Chapter 2, Table 2-5 - Summary of Direct and Indirect Environmental Consequences, which summarizes the environmental consequences associated with implementation of each alternative.

IDENTIFICATION OF THE PREFERRED ALTERNATIVE

At this time, considering the environmental impacts to public lands and the opportunities for use of those lands that would benefit the most people over the longest term, the Forest Supervisor prefers Alternative 2. Following review of public and agency comments on this EIS, the Forest Supervisor will make a final determination as to which alternative best serves the public interest on National Forest System lands. Modification of the preferred alternative may occur.

OPPORTUNITY TO COMMENT

Comments are encouraged on this EIS and should be provided during the review period of the draft EIS. Comments for the draft EIS shall be accepted for 45 days following the date of publication of the Notice of Availability (NOA) in the *Federal Register* pursuant to 40 CFR parts 1500-1508 (June 4, 2003). The 45-day comment period will begin on the first day after publication of the NOA.

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Send Written Comments to:

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Written comments may be hand delivered during office business hours between 7:30 a.m. and 4:30 p.m. - Monday through Friday, excluding federal holidays.

Oral comments must be provided at the Responsible Official's office during normal business hours via telephone (928) 526-3600, in person, or at an official agency function (i.e., public meeting) that is designed to elicit public comments.

Electronic comments must be submitted in a format such as an email message, plain text (.txt), rich text format (.rtf), or Word (.doc) to: comments-southwestern-coconino-peaks@fs.fed.us. Please include a physical mailing address with any electronic or oral correspondence.

RESPONSIBLE OFFICIAL AND DECISION TO BE MADE

This EIS is not a decision document. Its primary purpose is to disclose the environmental consequences that are anticipated to occur through implementation of the alternatives under consideration.

The final decision will be documented in a ROD issued by Nora B. Rasure, Forest Supervisor for the Coconino National Forest. The ROD will be issued together with the FEIS and will identify the Forest Supervisor's Selected Alternative as well as the environmentally preferable alternative. The decision contained in the ROD will be subject to appeal by the Regional Forester under the appeal regulations described in 36 CFR 215 (June 4, 2003). The Selected Alternative, as identified in the ROD, will provide the framework for a new MDP that will guide development of the Snowbowl for the subsequent five to eight years.

In addition to determining which alternative to select, the Forest Supervisor will also determine which mitigation measures to require. The Forest Supervisor may also require additional mitigation measures beyond those specific in Table 2-2 .

In compliance with Forest Service Handbook 1909.15 chapter 18, the Forest Service will continually review the relevancy of the analysis and subsequent decision for new and changed conditions as any approved projects are advanced for implementation.