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File Code: 1570-1/2300

Date: June 8, 2005

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DNA-People's Legal Services
201 E. Birch Avenue, Suite 5
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**CERTIFIED MAIL – RETURN
RECEIPT REQUESTED
NUMBER: 70002870000011350617**

Re: Appeal #05-03-00-0012-A215, Norris Nez and Bill "Bucky" Preston appeal of Arizona Snowbowl Facilities Improvement Decision, Peaks Ranger District, Coconino National Forest

Dear Mr. Zukosky (Attorney for Appellants);

This is my review decision concerning the appeal you filed regarding the Record of Decision and Final EIS, which approves snowmaking using reclaimed water as a source, additions and modifications to the Snowbowl's lift and terrain network, improvements to day lodges and parking, and a lift-served snowtubing facility. This decision includes a Forest Plan amendment to update the Snowbowl Ski Area Master Plan.

BACKGROUND

Forest Supervisor Nora Rasure issued a decision on March 11, 2005 for the Arizona Snowbowl Facilities Improvement Decision as described above. The Forest Supervisor is identified as the Responsible Official, whose decision is subject to administrative review under 36 CFR 215 appeal regulations.

Pursuant to 36 CFR 215.17, an attempt was made to seek informal resolution of your appeal. The record indicates that informal resolution was not reached.

My review of this appeal has been conducted in accordance with 36 CFR 215.18. I have reviewed the appeal record and the recommendation of the Appeal Reviewing Officer. My review decision incorporates the appeal record.

APPEAL REVIEWING OFFICER'S RECOMMENDATION

The Appeal Reviewing Officer concluded:

- 1) The purpose and need was clear and the Proposed Action was appropriate and consistent with the purpose and need.
- 2) The project record shows that the environmental analysis was thorough, reasoned and in line with environmental laws and regulations.



- 3) The scoping and public involvement process was appropriate and effective in developing alternatives and evaluating effects.
- 4) The analysis and decision documented in the project record are consistent with national policy, direction and agency objectives.
- 5) The proposed project is consistent with the Coconino Forest Plan as amended with the exception of cutting eleven trees in a Mexican spotted owl (MSO) Protected Activity Center (PAC).
- 6) Several documents utilized and referenced in the record and in the analysis and decision-making process were not included in the project record.

APPEAL DECISION

At the onset, I wish to recognize the importance of the values and issues raised in your appeal. During my review, I gave them utmost consideration. After a detailed review of the record and the Appeal Reviewing Officer's recommendation, I affirm with instructions the Responsible Official's Arizona Snowbowl Facilities Improvement Decision with the following instructions:

- 1) The eleven trees scheduled for cutting in the PAC along the pipeline must be left in place in accordance with Plan direction.
- 2) Supplement the Project Record with the following documents and any other documents not included in the record that were used in the project analysis and decision-making process:
 - Coconino National Forest Plan
 - ISA & Report 1987-104-W White Vulcan Mine Settlement Agreement, in which San Francisco Peaks are formally determined eligible for the National Register.
 - July 14 and 28, 1998 letters to tribes informing them of CNF intent to nominate Peaks to National Register.
 - December 7, 1998 and January 28, 1999 letters to Havasupai and Hualapai attempting to set up meeting to discuss National Register nomination.
 - January 28, 1999 and November 22, 1999 annual consultation letters to San Juan Southern Paiute Tribe on National Register nomination process.
 - September 13, 1999 letters to tribes about proposal for snowplay area.
 - February 17, 2000 letters to tribes about feasibility work being conducted on Arizona Snowbowl.
 - June 20, 2002 pre-proposal letter to tribes.
 - December 2002 Arizona Snowbowl Scoping Response- Preliminary Issue Themes, meeting summary and second copy with notes.
 - May 12, 13, and 19, 2003 letters to tribes enclosing preliminary drafts of National Register nomination form.

- Big Game status report for GMU 17, from Arizona Dept of Fish and Game, 2003.
- April 26, 2004 letters to ACHP, SHPO, Snowbowl and tribes with first MOA draft.
- August 9, 2004 letters to tribes advising them of a determination of adverse effect for all Snowbowl alternatives and request for MOA consultations.

My decision constitutes the final administrative determination of the Department of Agriculture [36 CFR 215.18(c)].

Sincerely,

HARV FORSGREN
Appeal Deciding Officer, Regional Forester

2 enclosures: Technical Review and Findings, ARO letter

cc: Mailroom R3 Coconino, Clifford Dils, Nora Rasure, Judy Levin, Judy Yandoh, Constance J Smith, Mailroom R3, Sandra Nagiller

REVIEW AND FINDINGS

of the

Norris Nez and Bill “Bucky” Preston’s Appeal**#05-03-00-0012-A215,****Arizona Snowbowl Facilities Improvement Record of Decision****ISSUE 1: The EIS violates the Religious Freedom Restoration Act.**

Contention: The Religious Freedom Restoration Act, specifically listed in FSM 1563.01, is totally ignored and nowhere addressed anywhere within the ROD/FEIS. The free exercise of religion of the all tribes is unduly and substantially burdened by the FS’s decision, and the Forest Service lacks a compelling justification for this.

Response: The Religious Freedom Restoration Act states that the government shall not substantially burden a person’s exercise of religion without a compelling reason. In *Boerne v. Flores* (521 U.S. 507), the Supreme Court found that the Religious Freedom Restoration Act (RFRA) exceeded Congress’s power and reversed the judgment of the Fifth Circuit Court of Appeals which had affirmed RFRA’s constitutionality (73 F.3d 1352). The constitutionality of RFRA as applicable to federal law remains questionable. However, even if RFRA had continued applicability, the Forest Supervisor’s decision does not substantially burden tribal member’s exercise of religion in terms of the First Amendment to the Constitution (*Wilson v. Block*, 708 F. 2nd 735, cert. denied, 104 S. Ct. 371, 1983; *Northwest Indian Cemetery Protective Association v. Peterson*, 485 U.S. 439).

The DEIS (PR #93, pp.3-14 through 3-20) and FEIS (PR #199, pp. 3-16 through 3-30; PR # 200 pp. 25-39) document and disclose the sincere beliefs of many tribal members that the Snowbowl improvements, particularly the use of reclaimed water for snowmaking, will have a devastating impact on the spiritual values of the Peaks and will contaminate natural resources needed to perform ceremonies.

The decision to implement these improvements, however, does not prohibit individuals from practicing their religion. Nor does it coerce them into acting contrary to their religious beliefs or penalize them for practicing their religion. Tribal members have not identified any specific shrines or locations for ceremonies that will be impacted by the Snowbowl improvements (PR #199, p.3-8) and have not identified any plants, springs, or natural resources within the SUP area that will be affected (PR #199, p.3-12; #200, Comment 5.8, p.27). Religious practitioners will still have access to the SUP area and the remaining 74,000 acres of the Peaks for religious purposes. The FEIS (#199 p.3-18) and the MOA (Memorandum of Agreement, PR #199,

Appendix D) provide that the FS will work with the tribes to assure continued access to special places on the Peaks and to natural resources needed for ceremonies and medicinal purposes and to assure that ceremonial activities conducted on the Peaks continue uninterrupted. The Forest will continue to consult with the tribes to accommodate religious practices.

In the ROD (PR #201, pp. 22-28), the Forest Supervisor acknowledges that the decision was a very difficult one. In making her decision she considered the purpose and need, the environmental and cultural effects, and the significant differences in cultural beliefs and perspectives regarding how the Peaks should be managed. The decision authorizes improvements within the existing ski area to provide a more consistent and safer recreation experience for the public and community while 1) mitigating the adverse effects identified by the tribes to the extent practical and possible and 2) continuing to accommodate tribal cultural and religious use of the Peaks, recognizing that most of the Peaks are managed in a way much more closely aligned with tribal values. The Forest will continue to work with the tribes to attempt find ways to address tribal concerns.

Finding: While many tribes and tribal members have stated that the Snowbowl improvements will have an adverse impact on their religion, in terms of RFRA and the First Amendment to the Constitution, these impacts do not substantially burden the free exercise of religion.

ISSUE 2: Project violates the National Historic Preservation Act.

Contention A: FS failed to consult in good faith with all affected tribes. NHPA and the ACHP Regulations mandate meaningful consultations conducted in a timely and good faith manner with all affected tribes. Of the 13 tribes identified by the FS, some never had a single meeting with FS, and only a few of the recognized agencies and chapters were consulted. FS had an obligation to consult with each tribe. The MOA should not have been signed and the consultations should have been terminated. Only a short time after a meeting with tribes, the ROD was signed which implies that the Responsible Official had in fact already made her decision.

Response: The project record (PR #117, #118, #190, #191, and #201, pp.8-9) contains documentation that the Forest Supervisor identified and initiated contacts with 13 affected tribes regarding the anticipated proposal for improvements to the Snowbowl as early as 1997. Letters were sent to the tribes on September 13, 1999 (not in the record) requesting input on the idea of adding a snowplay area at the Snowbowl and offering three fieldtrip options to discuss the proposal. On February 17, 2000, letters (not in the record) were sent to the tribes informing them that the Arizona Snowbowl was conducting feasibility work on a snowmaking proposal and letting the tribes know that if such a proposal were received, it would be evaluated through the NEPA process. A pre-proposal letter was sent to the tribes on June 20, 2002 (not in the record) with follow-up phone calls to discuss input and to begin preparations for meetings to discuss the proposal in greater detail. The Forest followed up (PR #18), and four tribal meetings (PR #24, 26) were held prior to sending the tribes the proposed action in September 2002 (PR #37). The letter transmitting the proposed action included an invitation to attend a Flagstaff open house and to schedule tribal-specific meetings.

From September 2002 to February 2004 when the DEIS was released, the record includes documentation of numerous letters and phone calls to schedule meeting dates and locations in

response to tribal requests (PR #190, pp.2-6). Twelve meetings with tribal officials occurred during this time, including meetings at Hopi (PR #51), four Navajo chapter houses (PR #60, 63), tribal public meetings at Tuba City and Kykotsmovi (PR #64), and a meeting at Navajo Western Agency Council. In addition, two public meetings were held in Flagstaff (PR #53, 59). On May 12, 2003, a letter enclosing a preliminary draft of a National Register nomination (not in the record) was sent to the tribes, requesting input and additions on tribal-specific sections.

In February, 2004, the DEIS was sent to the tribes, along with follow-up phone calls and faxes (PR #190, p.6). Following release of the DEIS, letters and phone calls with the tribes continued (PR #190 pp.6-14), along with 16 meetings, including meetings at Hopi (PR# 123), several Navajo chapter houses (PR #109; 132; 188), the Yavapai-Apache Tribe, the Hualapai Tribe (PR #160) and the Yavapai-Prescott Tribe, plus a meeting with officials from the Navajo Cultural Preservation Office (PR #190, p.13). During this period the draft MOA was sent to the tribes with an invitation to participate as a consulting party in developing the agreement (PR #140). This was followed up with phone calls, an additional letter on August 9, 2004 (not in the record) and additional phone calls. Throughout this process, the Forest received numerous tribal responses, including tribal resolutions (PR # 68, 79, 86, 124, 133), letters (PR #201, Appendix B), telephone conversations, and comments recorded in meeting notes and on meeting response forms, in addition to individual comments on the proposed action and DEIS. The record documents that the Forest Service offered to meet with tribes and made a concerted effort to set up meetings when tribes indicated they would like to meet.

NHPA and the Advisory Council regulations do not require that agencies meet with every tribe. The Council regulations state that it is the responsibility of the agency official to make a reasonable and good faith effort to identify Indian tribes to be consulted in the Section 106 process and to provide tribes a reasonable opportunity to identify concerns, articulate views on the undertaking's effects on historic properties, including those of traditional cultural and religious importance, and participate in the resolution of adverse effects (36 CFR 800.2(c)(ii)(A)).

Finding: The record demonstrates that the Forest Service consulted in good faith and complied with NHPA and the Advisory Council regulations. The execution of the MOA by the Forest Service, SHPO, and Advisory Council documents compliance with NHPA and the Council's regulations, including tribal consultation requirements.

Contention B: FS failed to mitigate adverse effects. Any further expansion of Snowbowl will have adverse and devastating effects, therefore the MOA should not have been signed and consultations should have been terminated.

Response: The record demonstrates that the Forest Service followed the Advisory Council regulations in developing the MOA (PR #67, 99, 171, 212). While agreement on mitigation measures among all consulting parties is desired, the Council's regulations do not require this. The regulations state that if the agency, SHPO, and Council are in agreement, they shall execute an MOA (36 CFR 800.6(b)(2)). Termination occurs only if one of those parties determines that further consultation will not be productive (36 CFR 800.7(a)). The ROD (PR #201, pp. 26-27) acknowledges that from the tribes' perspective there may be no mitigation measures for some of the impacts, but indicates the Forest will try to address these issues through the MOA and ongoing consultation.

Finding: The MOA was completed in accordance with the Advisory Council's regulations, including providing the tribes a reasonable opportunity to participate in the resolution of adverse effects.

ISSUE 3: Project violates the National Environmental Policy Act.

Contention A: FS failed to consider a reasonable range of alternatives. FS must look at alternatives which not only emphasize differing factors but lead to differing results. The FEIS continuously lumps together the effects analysis for the action alternatives (Alternatives 2 and 3) showing that they are really only slight variations of the same alternative. Appellant cites to Project Record to contend that FS had predetermined the proposed action. Several specific proposals were provided but were ignored and rejected such as the use of freshwater.

Response: "[A]n agency must look at every reasonable alternative, within the range dictated by the 'nature and scope of the proposed action' and 'sufficient to permit a reasoned choice'" *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1520 (9th Cir. 1992). For an alternative to be reasonable, it must meet the stated purpose and need (FSH 1909.15 14.2) and address one or more issues. The formulation of alternatives is driven by significant issues identified in scoping (40 CFR 1501.2 (c)).

The purpose and need is identified in the FEIS (PR #199, p.1-6) as: "...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."

Two issues were identified during the scoping process: 1) The installation and operation of snowmaking infrastructure as described in the Proposed Action and the use of reclaimed wastewater as a water source will impact cultural and spiritual values associated with the San Francisco Peaks, and 2) proposed ground disturbances and vegetation removal may result in permanently evident, visible alternatives of the San Francisco Peaks' landscape (PR #199, pp.1-14 through 1-15). The identification of these issues led to the development of Alternative 3, which eliminated snowmaking and eliminated the development of a snowplay area.

Three alternatives were analyzed and considered in detail: Alternative 1- No Action, Alternative 2 – Proposed Action, and Alternative 3 – No Snowmaking or Snowplay. Twelve additional alternatives were considered, but not analyzed in detail for reasons described in the FEIS as required by 40 CFR 1502.14 (a). One alternative not considered in detail explored alternative on-site and nearby water sources. This alternative described how the operators of Snowbowl explored the possibility of using numerous different water sources to meet potential snowmaking needs. These various options included: drilling deep wells, developing nearby wells drilled in the 1970s, drilling wells on private property, acquiring the rights to an existing well in Fort Valley, hauling water by tanker truck, tapping into the pipeline/storage distribution system used by the City of Flagstaff, using potable water from City of Flagstaff, and collecting rain from summer monsoons.

Finding: The Agency considered a range of reasonable alternatives driven by the significant issues identified through scoping.

Contention B: FS fails to consider scientific evidence on the use of reclaimed or grey water for artificial snow making. FEIS contains no discussion or analysis of studies on the use of reclaimed water in fragile alpine areas. Studies mentioned by commenter Paul Torrence were ignored in the FEIS. The FEIS fails to address the effects on children and adults intentionally playing in grey water, which is different from using it for irrigation purposes in golf courses and parks.

Response: A technical report containing over 100 citations of relevant scientific information on reclaimed water and transport mechanisms through the environment (PR#113) was used as the basis for the FEIS discussion of environmental effects. In addition, scientific references and citations used in the analysis of soil and water effects are found in PR# 89, PR# 89a, PR # 90 and PR# 90a. The agency received several comments from Dr. Torrence (email, petition, open house, and letter) and responded to those comments in Volume 2 of the FEIS (PR# 200, see comments: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 5.2, 6.1, 6.2, 9.1, 9.3, 10.2, 13.0, and 18.0).

Physical and chemical soil column testing was performed using representative subalpine soils collected in the SUP and treated wastewater from the City of Flagstaff (PR#90.10, PR# 199, pp.3-260 to 3- 269). Results were analyzed for effects to each soil horizon and to the water exiting the soil column and are displayed in PR# 199, pp. 3-268 to 269. In addition, the effects on vegetation contains analysis of effects on alpine, subalpine and spruce fir vegetation, including four threatened, endangered or sensitive species which grow in the alpine and subalpine ecosystems in the San Francisco Peaks (PR# 199, pp. 3-280 to 3-294).

The analysis indicates that the potential exposure pathways of artificial snow produced from reclaimed wastewater are primarily incidental ingestion and dermal contact. For these pathways, the hazard is lessened due to the nature of skiing as a limited seasonal pursuit and the general need for participants to wear winter garments to protect against the wet and cold (PR# 200, p. 46). Signs will be posted to alert recreational users regarding the use of reclaimed water and to avoid intentional ingestion of snow. Any risks connected with unintentional ingestion are low since recent monitoring of the reclaimed water indicates that all regulated parameters in the water currently meet the established numerical limits for Aquifer Water Quality Standards, which are equivalent to EPA's Primary Drinking Water Standards, and that no enteric viruses or parasites have been detected (PR# 199, p. 3-206).

Finding: The agency considered relevant scientific evidence regarding the use of reclaimed water for artificial snowmaking.

Contention C: FEIS fails to provide support for its prediction that the use of reclaimed water for artificial snowmaking will not harm the environment. The FEIS fails to meet the standard for scientific integrity of 40 CFR 1502.24 in regard to use of reclaimed water. FS has failed to provide information about the array of opinions on this matter and failed to provide this information to the public in the FEIS as is required under NEPA.

Response: A technical report containing over 100 citations of relevant scientific information on reclaimed water and transport mechanisms through the environment (PR#113) was used as the basis for the FEIS discussion of environmental effects. Dozens of additional scientific references and citations used in the analysis of soil and water effects are found in PR# 89, PR# 89a, PR # 90 and PR# 90a. Opinions expressed regarding the environmental analysis are part of the public record (PR# 39, PR# 98, and PR# 137).

Finding: The scientific integrity of the environmental analysis is substantiated.

Contention D: The FEIS has no analysis of the 25 fan guns and 25 tower guns that could be in operation at one time, while only giving the dBA (noise level) of one tower gun. The FEIS fails to provide quantitative analysis of the use of even one tower gun on the Mexican spotted owl and other species. The FEIS dismisses any possible effect on any bird. This fails to meet the requirements of a hard look as required by NEPA.

Response: The FEIS (PR#199) addresses the specific issue of noise to wildlife on pages 3-323 to 3-324. Effects of noise from snowmaking machinery are specifically disclosed on page 3-324. This section notes that snowmaking would occur mostly at night, and would occur outside the breeding season. The dBA level of a single snowmaking gun is disclosed, and it is noted that this dBA level is below the threshold for disturbance for raptors, which is approximately 90 dBA (PR #199 p. 3-323).

Further information on the effects of noise on wildlife are found in the BAE (PR#134, pp.22-26). There is an extensive literature review of the effects of noise on raptors and the Mexican spotted owl in particular, including a summary table containing citations and summaries of the findings in this literature (PR#134, pp.24-25). The conclusions specific to the Mexican spotted owl are summarized on page 23 and are paraphrased here;

1. Response frequency and intensity to noise were generally low except in close proximity to the nest.
2. Responses were lower during incubation and nestling periods than at other times.
3. Response to sudden or instantaneous noise is higher than to noise with a gradual onset.
4. Birds habituated to repeated noise stimuli over time.

While there was no specific analysis of the noise levels of multiple snowguns, there was clearly disclosure that the noise from such activities would have some effect on wildlife in the immediate vicinity of the snowmaking activities (conclusions 2 and 3, above). This was specifically stated in the response to comment 11.13 (PR#200, p.169), where it is stated that resident winter birds may be displaced. It is also noted that the cold weather (especially at night) and snowpack in the Snowbowl area precludes use by most wildlife species, and that the snowmaking activities would occur outside of the breeding season (PR#199, p.2-323).

Finding: The effects of noise from snow-making equipment on wildlife and birds in particular were analyzed and disclosed.

Contention E: FS fails to address the changing precipitation and temperatures over the years that tie to Snowbowl ski area use and economics. Low use may be more attributable to warmer than normal temperatures than to lack of adequate moisture. What does it matter if the winters are too warm to make natural or artificial snow?

Response: The initial snowmaking feasibility study used five years (1998-2003) of temperature data gathered at Snowslide Canyon on the Coconino NF (same elevation as Snowbowl's base area) to determine the feasibility of snowmaking under average temperature conditions at Snowbowl (PR#200, pp. 214, 217-218, 238-239). The analysis determined that in 80 percent of operational seasons (8 out of 10 ski seasons), a total of 1,269 hours of snowmaking operation

(359 AF of snow covering 204 acres with 1.75 feet of snow) would be possible over the entire snowmaking season from November 1 to February 28.

Climate, including monthly precipitation and temperatures, was analyzed in the FEIS (PR#199, pp.3-225 through 3-228 and PR#200 pp.211-217). Table 3I-2 displays average, maximum, and minimum temperatures over a 30-year period from the Fry SNOTEL site (site closest to Snowbowl) on the Coconino NF. Average temperatures between November and March ranged from a low of 13.3 degrees F in December to a high of 20.3 degrees F in March.

The feasibility study conducted to determine the sustainability of snowmaking at Snowbowl found even if regional temperatures warmed by as much as six degrees, the ability to produce 189 acre feet of snow for the Christmas holiday period would warrant the proposed investment in a snowmaking system.

The FEIS (PR#199 p.3-354) listed the potential implications of climate change for Snowbowl as shorter winters, warmer winter temperatures, faster and sooner snowpack melt, and increased elevation where snowpacks could be maintained. An increase in average temperatures would have more of an effect on ski areas at lower elevations. Snowbowl's base elevation of 9,800 feet offers a comparatively cold existing temperature and there would be less of an impact by temperature warming.

The FEIS analyzed the relationship between natural snowfall and skier visits (PR#199, pp.3-106 through 3-107). Figure 3E-2 compared natural snowfall and skier visits over the last 22 ski seasons at Snowbowl. The analysis showed variation in snowfall at Snowbowl resulted in a similar variation in skier visits. When natural snowfall was low, so were skier visits. Table 3F-1 (PR#199 p.3-130) compared annual snowfall, ski area operating days and visitation at Snowbowl for the last 22 ski seasons. The analysis documented that operating days and resulting skier visits at Snowbowl were dependent on natural snowfall. Low snowfall years resulted in a low number of operating days at Snowbowl and low skier visits. Annual snowfall was recognized as a useful statistic in predicting skier visitation 79.6 percent of the time.

Finding: Analysis in the FEIS found that snowmaking at Snowbowl was feasible and sustainable. The FEIS clearly links levels of snowfall with levels of skier visits. The FEIS adequately addressed the effects of warmer temperatures on the proposed action

Contention F: There is virtually no relationship between winter tourism in Flagstaff and winter ski visits. Notwithstanding the forgoing, the Forest Service has no problem concluding that snowfall and skier visits do have impacts on winter tourism in Flagstaff.

Response: An analysis of five years of tourist data determined an average of 35% of the area's tourism occurred during the winter months. An attempt was made in the FEIS to determine if there was a statistical relationship between winter tourism in Flagstaff, annual snowfall and annual skier visits at Snowbowl. It was found neither snowfall or skier visits were useful in projecting total winter tourism in the Flagstaff area (PR#199 pp.3-117 through 3-122). The FEIS (PR #199 pp. 3-83, 3-116) states "The Arizona Snowbowl is a positive contributor to area tourism and the Flagstaff area economy. Snowbowl draws visitors to the Flagstaff area who spend dollars at the ski area and other area businesses. However, in an economy of this size, and with county wide tourism drawing over eight million visitors annually, it is unrealistic to think that Snowbowl would be a significant driver of tourism activity or the economy."

Finding: The FEIS adequately addresses the effects of the proposed action on Flagstaff area tourism.

Contention G: The FEIS fails to take the requisite hard look at the economic impacts of the project. The FS touts the positive economic impacts but fails to acknowledge the negative ones. Effects are not analyzed, for example, the cost of road maintenance of the Snowbowl Road is not accounted for in the economic analysis.

Response: FEIS and Volume 2 of the FEIS (PR#199 pp.3-73 through 3-128, PR#200 pp.94-151) considered in depth the potential direct, indirect and cumulative effects of the proposed action and alternatives on the Flagstaff area economy. The major conclusions of the analysis were the proposed action would result in a significant increase in total visitation to Snowbowl with a resulting impact of an additional 563 FTEs (full time equivalents) at Snowbowl and outside the ski area in Coconino County, and \$17.23 million in economic output in the Flagstaff area at the end of a ten-year planning period. The proposed action would also result in substantial increases in fees and taxes paid the public sector. Short-term impacts of construction of the proposed action's ski area improvements would create 232 FTEs and \$21.24 million in economic output in Coconino County (PR#199 pp.3-85 through 3-86). The Snowbowl Road was designed and constructed following a ski season with high skier visitation to accommodate the projected traffic flows. The FEIS did not anticipate a need for increased maintenance of the road (PR# 200 p. 176 Comment 13.2 and p.99 Comment 9.14). Based on analysis in the FEIS, no significant effects related to the Flagstaff area economy were anticipated.

Finding: The effects of the proposed action on the Flagstaff area economy were adequately disclosed and addressed in the FEIS.

Contention H: There is no clear purpose and need for the project other than to make operating profitable for the permit holder.

Response: As identified in the FEIS: "The overall Purpose and Need 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" (PR #199, p.1-6). While the first broad category speaks to the existing situation of inconsistent annual snowfall and addresses a need for a more consistent operating season, the second category is not based on economics. Rather, it responds to the existing situation as described in the FEIS (#199, pp.1-7 through 1-9) with respect to limited recreation opportunities, lack of infrastructure, and safety concerns.

Finding: The purpose and need was appropriately established and clear justification of the purpose and need, including a discussion of the existing condition is presented in the FEIS.

Contention I: FS failed to adequately consider cumulative impacts. First the FS failed to provide quantified or detailed information on cumulative effects. Secondly the FS does not address important effects such as the cultural value of the San Francisco Peaks following the implementation of the project. It is possible that the Peaks may no longer be eligible for listing as a Traditional Cultural Property if the project is implemented.

Response: Cumulative effects are the effects on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions (FSH 1909.15, 05). The Environmental Consequences section of the FEIS (PR #199, Chapter 3) considered the potential direct, indirect, and cumulative effects related to the following: Heritage and Cultural Resources (pp.3-16 through 3-29) which addresses the cultural values of the San Francisco Peaks, Noise (pp.3-35 through 3-39), Traffic and Ski Area Access(pp.3-45 through 3-51), Aesthetic Resources (pp.3-57 through 3-72), Social and Economic Resources (pp.3-83 through 3-127), Recreation (pp.3-138 through 3-149), Infrastructure and Utilities (pp.3-153 through 3-159), watershed (pp.3-206 through 3-224), Soils and Geology (pp.3-240 through 3-279), Vegetation (pp.3-287 through 3-299), Wildlife (pp.3-316 through 3-334), Geotechnical (pp.3-340 through 3-350), and Air Quality (pp.3-357 through 3-361).

With respect to Native people's traditional uses of natural resources in the area, the FEIS discloses the spiritual and cultural impacts resulting from the implementation of activities associated with Alternative 2 may in fact be considered irreversible in nature (p.3-30).

The Peaks have been determined to be eligible to the National Register of Historic Places (PR #40). The Forest Service is currently working in consultation with tribes on completing a National Register nomination for the Peaks as a Traditional Cultural Property. Implementing Alternative 2 will not prevent such designation.

Finding: A cumulative effects analysis was completed and is disclosed in the FEIS. Implementing the project will not impact the qualities that make the Peaks eligible for listing as a Traditional Cultural Property.

ISSUE 4: The project is inconsistent with National Forest Management Act and Coconino National Forest Plan.

Contention A: The guidelines in the Forest Plan for protection of Mexican spotted owl are violated by cutting trees for installation of the reclaimed water pipeline within a MSO PAC. The Snowbowl PAC is located one to two miles from the Special Use Permit Area. Cutting trees can only be removed in PACs under the Coconino Forest Plan for fuelwood, fire risk abatement, or for roads or trails as a "pressing management reason" under the Forest Plan guidelines.

Response: The appellant correctly cites the 1996 Plan amendment which allows tree cutting in Mexican spotted owl Protected Activity Centers (PACs) for fuel wood, fire risk abatement or for roads or trails as a pressing management reason. The ROD does not include a plan amendment which would allow the removal of eleven trees from the MSO PAC. No site-specific amendment to the Coconino Land Management Plan was issued to allow the removal of the 11 trees from within Mexican spotted owl Protected Activity Centers (PACs).

Finding: The removal of the 11 trees from Mexican spotted owl PACs is not consistent with the Coconino Land Management Plan, as amended.

Contention B: The FS failed to ensure the viability of Management Indicator Species and monitor their population trends and habitat changes. The FEIS is not clear whether a survey of MIS has ever been conducted. On the Abert squirrel, the FS relies upon number of squirrels

killed per day as recorded by Arizona Game and Fish Dept. The information is statewide, not site specific statistics or Forestwide, and is from 1998-1999. Many of the other MIS information comes from personal communication in 2003. The FS must obtain "site-specific" information before proceeding with the project.

Response: Disclosure of the project impacts to MIS within Management Areas for which MIS have been designated are found in the FEIS (PR#199) in Chapter 3K. Descriptions of the affected vegetation types and the MIS associated with those habitat types are found on pages 3-307 to 308, and the effects to the forest-wide habitat and population trends for those species are found on pages 3-317 to 3-334. The project was determined to have no effect on the forest-wide habitat trends and population trends for any of the species analyzed. The FEIS referenced the Management Indicator Species Status Report for the Coconino National Forest (PR#88.46), which included available quantitative information on population trends for each MIS as well as information on the forest-wide habitat trends for each species. The information in the FEIS was updated with more recent information where it was available; these sources are cited in the FEIS (note, one report from Arizona Dept of Fish and Game of 2003 needs to be incorporated into the record).

The appellants have argued that the information on Abert's squirrel was not sufficient to meet the requirements for monitoring populations because harvest information was used. The section on Abert's squirrel in the MIS Status Report (PR#88.46, pp.35-39) used harvest information as only a portion of the reasoning in determining forest-wide population trend. Several studies of Abert's squirrel, which occurred on the Coconino National Forest, are cited, and evaluated populations or indices of populations during 1985-1987, 1996-1997, and 1999-2001 (PR#88.46, p.36). All the studies indicated that squirrel populations were either stable or that density estimates showed consistency among years and observers.

Finding: Quantitative data were available and utilized in analyzing project effects to Management Indicator Species.

Contention C: The FS jeopardizes the viability of the MIS with the use of reclaimed water. Some contaminants of pharmaceuticals and personal care products are direct-acting endocrine disrupting compounds. More rigorous studies need to be completed on effects.

Response: The effects of reclaimed water on wildlife were disclosed in the FEIS (PR#199, pp.3-206 to 224, pp.3-326 to 328) and the Response to Comments (PR#200 pp.42-49, 160-162, and 164-165). The summary of these impacts is as follows:

- Direct consumption of snowmelt and surface runoff is limited due to the rapid infiltration and percolation of surface water in the area.
- Where direct consumption would occur, the concentrations of contaminants would be diluted by natural precipitation or mixing of natural snowmelt with reclaimed water snowmelt.
- While sublimation of snow from reclaimed water could concentrate solutes, this increased concentration would be insignificant compared to the dilution from natural snow and precipitation.
- The reclaimed water would not contaminate natural springs used by wildlife.
- The reclaimed water reservoir would be fenced to exclude most wildlife.

In addition, it is noted in the response to Comment 6.4 (PR#200, pp.43-47) that most of the contaminants present in the water do not bioaccumulate, and that water consumption is not the major transmission route for most compounds.

Potential effects of the reclaimed water and snowmaking on vegetation are disclosed in the FEIS (PR#199, pp. 3-291 to 294) and in the Response to Comments (PR#200, pp. 151-152, 154-156). The summary of these effects are that the additional nitrogen will increase plant growth, and this may alter plant community composition by increasing forbs at the expense of perennial cool-season grasses. However, these effects would be limited to the cleared ski trail and the immediately adjacent areas. Effects outside of these areas would be limited by the rapid infiltration and run-off, as well as dilution from natural precipitation, of the artificial snow.

Finding: The use of reclaimed water will not jeopardize the viability of management indicator species.

ISSUE 5: The project is in violation of the Endangered Species Act.

Contention: The finding that the proposed expansion would not likely adversely affect Mexican spotted owls is not supported by fact. The one pair of owls that will be directly affected is the most reproductively successful pair of owl on the Coconino National Forest according to the FS biologist. The FS made no attempt to assess the effect on this pair. The San Francisco groundsel, a federally-listed plant, occurs within the project area and there is critical habitat within the project area. By allowing the destruction of critical habitat of a threatened plant and not providing mitigation measures for its recovery, the FS is in violation of ESA.

Response: A list of Threatened, Endangered, and Proposed species for the project area is in the project record (PR#21). This list showed that the Bald eagle, Black-footed ferret, Mexican spotted owl, and San Francisco Peaks groundsel were the only federally listed species in the project area. The Forest Service met with representatives of the U.S. Fish and Wildlife Service on July 31, 2002 to discuss the draft proposal and potential effects to listed and proposed species (PR#22). Effects to listed species are discussed in the EIS (PR#199) on pages 3-317 to 3-334 (for animals) and pages 3-289 to 3-297 (for plants).

Detailed analysis of effects are found in the Biological Assessment and Evaluation (PR#134). The BAE found that the project would have “No Effect” on the Bald Eagle, Black-footed ferret, and critical habitat for the Mexican spotted owl. The BAE found that the project “May Affect, but is Not Likely to Adversely Affect” the Mexican spotted owl, the San Francisco Peaks groundsel, and critical habitat for the San Francisco Peaks groundsel. The information contained in the BAE was submitted to the U.S. Fish and Wildlife Service for concurrence on the affected species and critical habitat, as required under Section 7(a)(2) of the Endangered Species Act of 1973, on March 29, 2004 (Request for Concurrence Letter, PR#125). The U.S. Fish and Wildlife Service concurred with the determinations made by the Forest Service on July 8, 2004 (Letter of Concurrence, PR#157).

Additional information on the effects to the Mexican spotted owl and informal consultation are found in the Response to Comments (PR#200) on page 162 (Comment 11.5) and page 168 (Comment 11.21).

Because the project determined that the effects to Mexican spotted owl were a “May Affect, Not Likely to Adversely Affect,” informal consultation under Section 7(a)(2) of the Endangered Species Act was completed. This type of consultation requires written concurrence with the effect determination from the Fish and Wildlife Service, which was obtained as noted above. A Biological Opinion is obtained through formal Section 7 consultation, when the effect determination is “May Affect, Likely to Adversely Affect.”

Finding: The effects to the Mexican spotted owl and to the San Francisco Peaks groundsel and its critical habitat were analyzed and disclosed to the U.S. Fish and Wildlife Service as required under Section 7(a)(2) of the Endangered Species Act of 1973, as amended.



United States
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Agriculture

Forest
Service

Santa Fe National Forest

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File Code: 1570-1/2300

Date: June 8, 2005

Route To: ()

Subject: ARO, Appeals of Snowbowl Facilities Improvement Project EIS, Peaks RD,
Coconino National Forest

To: Harv Forsgren, Regional Forester
Appeal Deciding Officer

This is my recommendation on the disposition of the appeals filed regarding the Arizona Snowbowl Facilities Improvement Record of Decision and Final Environmental Impact Statement, which approves snowmaking using reclaimed water as a source, additions and modifications to the Snowbowl's lift and terrain network, improvements to day lodges and parking, and a lift-served snowtubing facility. This decision included a Forest Plan amendment to update the Snowbowl Ski Area Master Plan.

Background

Forest Supervisor Nora Rasure issued a decision on March 11, 2005 for the Arizona Snowbowl Facilities Improvement Decision as described above. The Forest Supervisor is identified as the Responsible Official, whose decision is subject to administrative review under 36 CFR 215 appeal regulations.

Pursuant to 36 CFR 215.17, an attempt was made to seek informal resolution of these appeals. The record indicates that informal resolution was not reached.

Review and Findings

My review was conducted in accordance with 36 CFR 215.19 to ensure that the analysis and decision are in compliance with applicable laws, regulations, policies and orders. The appeal records, including the appellants' issues and requests for relief have been thoroughly reviewed. Having reviewed the Environmental Impact Statement (EIS), Record of Decision (ROD), and the project record file, as required by 36 CFR 215.19(b), I conclude the following:

- 1) The purpose and need was clear and the Proposed Action was appropriate and consistent with purpose and need.
- 2) The Project Record shows that the environmental analysis was thorough, reasoned, in line with laws, regulations and national policy, and appropriate for the decision to be made.
- 3) The scoping and public involvement process was appropriate and effective in developing alternatives and evaluating effects.



- 4) The analyses and decision documented in the Record are consistent with the Coconino National Forest Plan direction as amended with the exception of cutting eleven trees in a Mexican Spotted Owl Protected Activity Center (MSO PAC).
- 5) The project record does not include several documents utilized in the analysis and decision making process.

Recommendation

I recommend that the Responsible Official's decision relating to these appeals be affirmed with the following instructions:

1. Supplement the project record with all documents used in the analysis and decision-making process.
2. Any tree cutting in the MSO PAC must be consistent with the Coconino Forest Plan direction.

/s/ Clifford J. Dils
CLIFFORD J. DILS
Deputy Forest Supervisor
Appeal Reviewing Officer

cc: Constance J Smith