Decision Notice and Finding of No Significant Impact (FONSI)

Tusayan Wildlife Waters Project

USDA Forest Service Tusayan Ranger District, Kaibab National Forest Coconino County, Arizona

[District-wide: portions of Townships 28, 29, 30, 31, and 32 North, and Ranges 1 West and 1, 2, 3, 4, 5, and 6 East, Gila & Salt River Base & Meridian]

Decision and Reasons for the Decision

Background

This decision notice summarizes my decision to implement actions proposed in the Tusayan Wildlife Waters Environmental Assessment (EA, May 2008). The purpose and need of the actions are to increase the availability of more reliable and larger capacity wildlife water sources throughout the Tusayan Ranger District in order to provide for the water needs of wildlife. These actions are also designed to reduce impacts to vegetation and soil resources around existing water developments by better distributing elk habitat use patterns throughout the district, and to reduce water hauling costs to wildlife water developments by the Arizona Game and Fish Department (AGFD).

The Tusayan District has no perennial streams, rivers, lakes, or springs. Natural waters consist of small ephemeral water bodies that develop in low-lying areas where seasonal runoff collects. A variety of water sources have been developed historically on the Tusayan District. The earliest water developments were earthen tanks constructed since the late 1800s primarily to support livestock grazing. Approximately 150 earthen tanks have been constructed on the Tusayan District including those on private property inholdings.

The majority of wildlife water developments, or catchments, on the Tusayan District were constructed in the 1960s. Most of these water developments are fenced to exclude livestock and permit wildlife access. There are 37 existing wildlife water developments on the Tusayan District. The water storage tanks and drinkers on the existing catchments are much smaller because precipitation was more plentiful in the years they were constructed. AGFD reconstructed 9 older wildlife water developments in 2006 and 2007 to increase water storage and drinker capacity, and to improve wildlife access, safety, and maintenance. Because of the larger water storage tanks and improved components, these reconstructed water developments are already providing more reliable waters for wildlife.

AGFD's water hauling activity has increased substantially due to frequent drought conditions since the mid-1990s and increased wildlife water demand, in part, due to increased population abundance of elk. Hauling water is costly, and those costs have increased in recent years due to increased fuel costs.

Repeated browsing by elk and deer has impacted various tree and shrub species on the district, especially near existing water developments. These impacts are more pronounced when drought conditions persist and reliable water sources are more limited across the district. New water developments will be sufficiently well-distributed to allow AGFD to achieve its wildlife management objectives and lessen the undesirable levels of wildlife impacts to vegetation, soil, and watershed resources on the district.

AGFD, in partnership with the Rocky Mountain Elk Foundation, is funding the project to increase the number of reliable waters on the district to better manage and benefit wildlife. The new water developments are strategically placed in areas that don't have reliable water sources nearby. Another goal is to improve the distribution of wildlife and their impacts to vegetation and watershed by strategically hauling water to key catchments while leaving others dry. Water availability at the catchments can also be managed when browse monitoring indicates undesirable impacts to key tree and shrub species such as Gambel oak, ponderosa pine, fourwing saltbush, cliffrose, sagebrush, etc.

Kaibab Forest Plan Direction

This decision helps implement the standards and guidelines of the Kaibab National Forest Land and Resource Management Plan (USDA 1987, as amended), specifically:

- Cooperate with Arizona Game and Fish Department to achieve management goals and objectives specified in the Arizona Wildlife and Fisheries Comprehensive Plan. Support the AGFD in meeting its objectives for the state.
- Provide for intensive management of wildlife habitats. Make habitat surveys, analyses, and formulate plans in concert with the Arizona Game and Fish Department and ensure high level of habitat diversity and capability.
- Formulate and execute habitat investments to improve habitat components and diversity through vegetative manipulations and the coordinated interaction of other planned resource projects. Plan and execute cooperative habitat projects with conservation groups and volunteers.
- Provide one permanent water source per 640 acres (one square mile) in other coniferous forest timberland and seral grassland (guideline for Ecosystem Management Area 10); provide one permanent water source per 640 aces in other coniferous forest timberland and seral grassland for wildlife.
- Apply best management practices to mitigate adverse effects of activities and maintain site soil productivity.

Applicable Laws and Executive Orders

The laws, regulations, and policies applicable to this decision include the Federal Land Policy and Management Act of 1976, the National Forest Management Act of 1976, and the National Environmental Policy Act of 1969 (and their amendments). It also complies with the following:

• <u>Endangered Species Act of 1973, as amended</u> This decision complies with the Endangered Species Act, and specifically with Section 7 of this Act, in that potential effects of the proposed action on listed species have been analyzed and documented.

- <u>National Historic Preservation Act of 1966, as amended</u> Section 106 requirements for survey and evaluation have been met for all undertakings listed under this proposed action.
- <u>Forest Service Manual 7700 Transportation System</u> Chapter 7710 Transportation Atlas, Records, and Analysis (also known as the Roads Analysis Process or RAP)
- Clean Water Act, Sections 303, 319, 404 Section 303(d) directs states to list water quality impaired water bodies and develop total daily maximum loads to control the non-point source pollutant causing loss of beneficial uses. The designated uses for ephemeral surface waters in the State of Arizona are aquatic, wildlife, and partial body contact. Section 319 directs states to develop programs to control non-point source pollution, and includes federal funding of assessment, planning, and implementation phases. At this time, no known Section 319 projects would be detrimentally affected by this decision.
- Executive Order 11988 Flood Plain Management: Direction to avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.
- Executive Order 11990 Protection of Wetlands: Direction to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative.
- State of Arizona Water Quality Criteria and Designated Beneficial Uses for Water.

Decision and Rationale

This decision applies to the area and activities analyzed under the Tusayan Wildlife Waters Environmental Assessment (EA, May 2008). Based on the results of public scoping and the analysis documented in the EA and project record, it is my decision to implement Alternative 2, the Proposed Action, as described in the EA in Chapter 2 with minor modifications that do not change or affect the analysis of impacts. These modifications are to approve 16 of the 24 proposed wildlife developments (project map and Table 1) in response to resource concerns and public comments. Of the 16 approved catchments, O, R, and V, will be relocated within the vicinity of their original locations to mitigate resource concerns (Table 1). These three sites will be surveyed prior to implementation, so that there are no impacts to heritage, sensitive plants, threatened and endangered species, watershed, or other resource concerns, and are also accessible by existing roads. I decided to leave Catchment J at its current location to benefit antelope movement even though there may be some slight impacts to disturbed rabbitbrush though it will not impair the overall population. My decision also approves the decommissioning of water catchment 254 and its reconstruction at site 999; and the construction of the 12.2 mile long wildlife water pipeline. My decision falls within the scope of the analysis and the effects disclosed and documented in the EA. This project was developed in consideration of the best available science which also informed my decision.

I am selecting the alternative for wildlife water development based on several factors:

• Wildlife on the Tusayan District are a valued resource and contribute to the district's unique character and public enjoyment. As stated earlier, the district has no perennial streams, rivers, lakes, or springs. Wildlife are well established on the district and became

accustomed to using earthen water tanks originally developed for livestock. In the last 50 years, wildlife water catchments have been developed to exclude livestock and enhance wildlife habitat. A sustained drought in recent years has substantially increased water hauling and the cost of water hauling by AGFD. More reliable wildlife catchments with greater storage capacity will reduce the amount of water hauling and save money for other important wildlife work.

- More reliable and larger capacity waters in areas that currently don't have reliable waters are needed to ensure wildlife health and survival during drought years.
- The wildlife catchments are well designed with good access, safety, and maintenance features that will benefit all species of wildlife.
- More reliable catchments (D, J, and O) in the southern half of the district will facilitate antelope movement from the southern end to the northern end of the district. The district has improved grassland conditions by thinning and burning in the area where "J" is located (Moqui Grassland Restoration Project). A key objective of the Moqui Project was to improve antelope habitat by opening up the travel corridor they use to move from one end of the district to the other.
- Catchments Q, R, and S in the Upper/Lower Basin of the district area are critical to sustaining the antelope herd that has become established in the area.
- Ongoing browse monitoring by Forest Service range and wildlife specialists will be the definitive tool to inform AGFD of undesirable impacts on key vegetation species. This information will be used by AGFD to manage water availability at catchment sites in order to encourage the distribution of wildlife, particularly elk, and their impacts.
- AGFD is committed to managing the district's elk herd to stabilize or reduce overall numbers to lessen impacts to vegetation and the watershed. Depending on the results of browse monitoring, AGFD agreed to consider an archery cow elk hunt in October.
- The 12.2 mile wildlife water pipeline has strong support from the community and the South Grand Canyon Sanitary District (SGCSD) located in Tusayan. There are two existing waters along the proposed pipeline that were reconstructed in 2006-07 to increase water storage and drinker capacity. The improved catchment design facilitates wildlife access and safety, and maintenance. Wildlife are already drawn to this area and are accustomed to using the existing catchments and overflow from the SGCSD water treatment facility. This overflow will be distributed via newly constructed pipeline to 5 catchments and encourage wildlife to disperse along its corridor. Anchor catchment C, a larger capacity catchment, will serve as a source of water for suppressing wildfires and as a supply source for AGFD to haul water to drinkers in the northwest part of the district. This will help reduce water hauling costs for AGFD and Forest Service costs associated with wildfire suppression.
- The dismantling of Catchment 254 and its reconstruction at Site 999 will address and resolve safety concerns.

I am aware of the main issue that the establishment of new and more reliable wildlife waters may increase the size of the elk herd, and therefore increase negative impacts to vegetation from elk browsing. I believe that monitoring browse species in key areas will provide the necessary information to gain AGFD's cooperation in continuing to reduce elk numbers on the Tusayan District and thereby mitigate potential negative impacts. Furthermore, the benefits to all wildlife, particularly mule deer and antelope, outweigh the impacts that may occur. I am confident that when the mitigation measures are followed and browse monitoring is implemented, the Forest Service and AGFD can work together to manage and lessen the impacts to vegetation and soils by wildlife, particularly elk. This is critical for the success of this project and public support.

Implementation of the Proposed Action (Alternative 2) encompasses the following specific activities:

- <u>Decommission Water Catchment 254</u>: This catchment will be dismantled and reconstructed at Site 999 (project map) to improve the safety of residents and visitors from big game hunting and hunters within one-quarter mile of the Tusayan Ranger District's administrative site and Grand Canyon National Park's South Rim entrance station. Removal of this catchment will further lesson conflicts between wildlife and humans.
- Construction of 16 New Water Developments: Sixteen new wildlife water developments will be constructed across the Tusayan District (project map). Each water development consists of a corrugated metal catchment apron, underground water storage tanks, and a 750-gallon drinker. A large trench will be dug and up to 3 fiberglass storage tanks installed underground and plumbed together with shut-off valves between the tanks. Each tank holds 7,100 gallons of water and is 20 feet in diameter and 3 feet deep. A steel frame will be constructed above the trench/tank area. On this frame, a water collection apron 24 feet by 96 feet will be constructed using metal siding typically used in metal buildings (called R panels, 26 gauge steel sheeting). The grooved apron will be screwed to the steel frame and have a fiberglass trough that collects and funnels runoff from rain and snow into the storage tanks below. The entire storage area will be enclosed by a field fence 8 feet high to prevent wildlife, people, or vehicles from entering and damaging the apron. The drinker unit consists of a fiberglass box over a steel frame and is 5 feet wide, 8 feet long, and 3 feet deep. Plumbing from the storage tank area to the drinker will be buried underground. Concrete will be poured around the ends and sides of the drinker to handle overflow. A 3-rung black steel pipe fence will be installed around the water development enclosing a little over a 1/2 acre. The water development will be in the center of the fenced area with construction disturbing about 1/4 acre of land. Following installation of each new water development, the area will be cleaned up, the soil graded and smoothed, the disturbed area mulched and seeded with native grass species, and the site signed as a wildlife water development. Tree removal will be minimal.
- <u>Construction of Water Pipeline</u>: The 12.2-mile long water pipeline connects 2 existing water developments (reconstructed in 2006-07) and 3 new water developments. Four of the water developments represent smaller capacity systems. Each of these smaller water developments will have one underground 8,000-gallon fiberglass water storage tank, a 24 feet by 24 feet metal water collection apron, an 8-feet high field fence around the water storage and apron area, and a 750-gallon drinker. The new water development at the west end of the pipeline is in an open area and will be a full-sized water development (three 7,100-gallon storage tanks plumbed together for a total of 21,300 gallons). This water development will serve not only the needs of wildlife, but firefighting needs (filling fire engines, helicopter water buckets), and also be used to refill other water developments on the west side of the district thus reducing overall hauling efforts and costs. The water source for the pipeline will be reclaimed water from the South Grand

Canyon Sanitary District's municipal wastewater facility. The reclaimed water goes through tertiary treatment and has an A+ classification. After tertiary treatment, the reclaimed water undergoes ultraviolet radiation disinfection. Excess reclaimed water is discharged into a pond adjacent to the municipal wastewater facility that typically holds approximately 10,000,000 gallons. Natural runoff from rain and snowmelt also flows into this pond, further diluting the reclaimed water. AGFD estimates an annual use of approximately 200,000 gallons of reclaimed water for the pipeline operation.

Catchments approved for Construction	Catchments dropped from Proposed Action
A - Part of pipeline	H - too close to Havasupai Reservation, GCNP, and private property; lots of tanks in area and ongoing livestock/horse trespass
B - Part of pipeline	 I – adverse impacts to disturbed rabbitbrush (CHMO)
C - Part of pipeline; larger capacity to provide water for firefighting and haul water to catchments in NW section of district.	L – adverse impacts to CHMO
D – Disturbed rabbitbrush (CHMO) in north end of site location; "may impact individuals or habitat, but will not likely contribute to a trend towards federal listing or loss of viability to the population or species" (Biological Evaluation for Threatened, Endangered, and Sensitive Plants, 2008)	N – adverse impacts to CHMO
 E – May need to control water availability based upon browse monitoring results 	 P – Too close to FS/Navajo Nation boundary; problems with livestock trespass
F - May need to control water availability based upon browse monitoring results	 T – In semi-primitive non-motorized area – Coconino Rim restricted travel area; use not compatible with Forest visual quality objectives (VQO's).
G – will survey for plants prior to construction, area is outside of CHMO habitat; beneficial to have one catchment in northwest area of district	 W – Catchment location is within extensive and prominent archaeological site that is difficult to mitigate
J – CHMO common within 100 feet of site – refer to effects determination in "D" above; a critical water to facilitate antelope movement; recent vegetation projects have restored area to more open grassland conditions to benefit antelope	X – In semi-primitive non-motorized area – within Red Butte restricted travel area; use not compatible with Forest VQO's; tribal concerns with proximity to Red Butte (a traditional cultural property)
K – No concerns; outside of CHMO habitat	
M – No concerns; outside of CHMO habitat; AGFD may experience maintenance and security issues	
** O – Relocate to a more suitable location nearby with road access	

Q – Outside of CHMO habitat; may need to control water availability based upon browse monitoring results	
** R – Relocate to a more suitable location nearby; currently, catchment is sited in poor location between a fence and deep wash that will funnel elk and invite trampling erosion to the banks of the wash and damage to the fence.	
S - No effect to CHMO habitat; may need to control water availability based upon browse monitoring results	
 U – Outside of CHMO habitat; no resource concerns 	
**V – Relocate just south of existing site to avoid resource conflicts (proposed ATV Trail and badly gullied road/erosion); a need for a dependable water in this area since catchments W and X were dropped	

*CHMO = *Chrysothamnus molestus*, disturbed rabbitbrush; a FS sensitive species and preferred browse plant by ungulates (cattle, elk, deer, antelope)

** Relocated sites will be surveyed prior to implementation, so that there are no impacts to heritage, sensitive plants, threatened and endangered species, watershed, or other resource concerns, and are also accessible by existing roads.

Roads. The existing forest road system provides adequate access for implementation of project activities. Therefore, a site-specific roads analysis process (RAP) was not undertaken for this project.

Construction Timeline. AGFD plans to construct the 12.2 mile pipeline and Catchment C, the anchor catchment, in 2008. In 2009, Catchments A and B would be constructed along the pipeline. The remaining 13 new catchments would be constructed from 2009-2014.

Mitigation Measures Specific to Alternative 2, the Proposed Action

Mitigation measures are measures that are taken to minimize potential negative impacts that may occur from implementing the proposed action. Mitigation measures are also developed to address concerns that might be raised about the proposed action. Following are the mitigation measures developed for the proposed action:

Range

- 1. Coordinate activities with Range Staff and the grazing permittee.
- **2.** Protect, to the degree possible, permanent range transects. Minimize ground disturbance for new construction for sites that are adjacent to any transects. Maintain or replace any witness trees/posts for study sites.

3. Avoid (if possible) construction of new wildlife waters in the vicinity of livestock waters, or in close proximity to fences and corrals. Modify fences with elk jumps where needed.

Soils and Watershed

- **4.** Berms, silt traps, or other erosion control structures will be used on each construction site in order to re-route water flow to prevent soil erosion when vegetation, litter, and rock cover is removed.
- **5.** Work may only be conducted when soils are dry, in order to prevent soil compaction and puddling.
- **6.** Designate off- road driving trails in order to avoid excessive soil and vegetation disturbance by vehicles and heavy equipment.
- **7.** It may be necessary to bury the pipeline deeper in a few areas in order to prevent it from surfacing over time due to the churning action of shrink-swell clays.
- **8.** Grade and smooth the soil after construction is complete. Seed the disturbed sites to native grasses. Use a weed-free mulch to protect the soil from erosion while the new seedlings are becoming established.

Sensitive Plants and Noxious Weeds

- 9. Survey for sensitive plants and noxious weeds before any ground disturbing activity.
- **10.** Protect, to the degree possible, known populations of disturbed rabbitbrush (CHMO). Minimize ground disturbance at project sites that are adjacent to these populations.
- **11.** Document new locations of noxious weed populations. Treat existing weed populations at each project site before construction. Minimize ground disturbance at project sites to prevent new populations. To avoid the spread of weeds, vehicles must be cleaned of all plant material when moving from an area of infestation.

Wildlife

- **12.** The Kaibab National Forest South Zone wildlife biologist must be informed at least two weeks prior to project implementation. If planned project implementation is during the goshawk breeding season (March 1 to September 30), the wildlife biologist will determine whether project implementation would likely disturb potential goshawk nesting activity. If there is an active goshawk nest near any of the proposed water development sites, the wildlife biologist will determine how long implementation at that site must be delayed to avoid disturbing goshawk nesting activity.
- **13.** If a condor shows up at a catchment site under construction, the Forest Service will be contacted immediately and any project-related activity likely to harm the condor will halt temporarily until the condor flies away or is driven away by permitted personnel (Fish and Wildlife Service or Peregrine Fund personnel). Project workers will be instructed to avoid any interaction with condors.

Recreation and Scenic Resources

14. Any temporary roads created during implementation will be decommissioned when work is completed. Roads will be effectively closed at entrances/exit points, and surface will be scarified, seeded with native species, and mulched to promote re-vegetation.

Heritage

- **15.** All sites will be marked for avoidance prior to project activities. AGFD project leaders must consult with South Zone Archaeologist prior to beginning project to ensure site boundaries (flagging and/or paint) are still marked and visible. For the 12.2 mile pipeline section, close daily coordination is required between AGFD project leaders and Forest archaeologists using handheld GPS units to locate and avoid all heritage sites along the water line. Archaeologists must also be consulted during project work to monitor that the conditions of the heritage survey report are followed.
- **16.** If any unrecorded sites are discovered during project implementation, work in the vicinity of the site must cease and the Forest Archaeologist must be notified immediately.
- **17.** <u>Road Maintenance and Reconstruction</u>: Routine road maintenance activities within existing prisms and features, *where no heritage resource sites are known to exist*, will require no protective or mitigation measures. If ground disturbing activities are proposed in areas of no prior disturbance, project managers must contact the Forest Archaeologist so that protective measures, if warranted, can be devised.

Monitoring of Alternative 2, the Proposed Action

Monitoring was incorporated into the proposed action due to public and resource specialist concerns about browse utilization levels on key tree and shrub species. AGFD will monitor and manage the elk population in the area, and Kaibab National Forest range and wildlife staff will monitor vegetation and soil conditions on the Tusayan Ranger District.

AGFD will continue to monitor the elk population in Game Management Unit (GMU) 9. Two types of monitoring data would continue to be gathered and analyzed by AGFD: 1) ground and/or aerial elk surveys; and 2) elk harvest data from the various GMU 9 hunts. Population survey data include numbers of elk by age class and sex and bull/cow and calf/cow ratios (Arizona Game and Fish Department 2007). Harvest data include numbers of permits issued, numbers of elk harvested by age class and sex, and hunt success (Arizona Game and Fish Department 2007).

In addition to elk population monitoring that will be conducted by AGFD, the Kaibab National Forest will continue to monitor vegetation and soil conditions on the Tusayan District. Range staff from the Kaibab National Forest currently monitor vegetation and soil conditions within the Anita-Cameron and Moqui cattle allotments using the Parker three-step method and pace transects. Kaibab National Forest range and wildlife staff will establish additional pace transects or other sampling methods to monitor browse levels on key browse species such as ponderosa pine, Gambel oak, cliffrose, sagebrush, and four-wing saltbush. Kaibab National Forest range and wildlife staff will coordinate and share results of vegetation and soil monitoring with AGFD personnel so that the two agencies can effectively address potential habitat concerns.

Other Alternatives Considered

In addition to the selected alternative, I considered two other alternatives; one considered in detail (No Action) and one other considered, but eliminated from detailed analysis (EA, p. 13). A comparison of the alternatives considered in detail can be found in the EA, on pages 16-19.

No significant issues were generated during public scoping that would have required the development of additional action alternatives. Key features of the detailed alternative are summarized below with accompanying rationale for non-selection:

<u>Alternative 1 - No Action</u>: Under this alternative, the dismantling and reconstruction of Catchment 254 to Site 999 would not occur, and the 12.2 mile long water pipeline and 16 approved wildlife catchments would not be constructed. I did not select Alternative 1 because it does not lessen critical water needs for the variety of wildlife that utilize the Tusayan Ranger District; it would not facilitate the distribution of elk and their impacts to vegetation and watershed by strategically placing waters throughout the district and hauling to key waters during drought years; it would not facilitate antelope movement and survival; and it would not reduce water hauling costs for AGFD and its partners.

Public Involvement

The proposal was listed in the Schedule of Proposed Actions (SOPA) in July 2005 and has been listed quarterly since that time. The initial proposed action was provided to the public and other agencies for scoping and comment on November 1, 2006 with a comment period extending through November 30, 2006. A Kaibab National Forest press release was sent to various media on November 1, 2006. The *Grand Canyon News* published an article regarding the proposal, "Forest Service seeks input on wildlife watering project" on November 22, 2006. Nine letters of comment were received that included 5 letters of support, one letter requesting more information, and 3 letters with concerns regarding the proposal.

Incorporating the comments from initial scoping, the final proposed action was analyzed and documented in the Tusayan Wildlife Waters Project Environmental Assessment (May 2008) and distributed for 30-day Notice and Comment on May 5, 2008. The Legal Notice was published in the *Arizona Daily Sun* on May 4, 2008. A Kaibab National Forest press release was issued on May 6, 2008 to a variety of media and public contacts. Additionally, as part of the public involvement process, the Arizona Game and Fish Department (AGFD) has been involved throughout the planning process. A total of 6 comments were received: 3 letters of support for the project and 3 letters with concerns regarding the scope of the project. (All public involvement documents are in the Project Record.)

The Forest Supervisor initiated government-to-government consultation (via letter) on August 26, 2005 with the Hopi Tribe, the Havasupai Tribe, the Hualapai Tribe, and initiated public scoping of tribal communities represented by the Bodaway-Gap, Cameron, Coalmine, Coppermine, Lechee, Leupp, and Tuba City Chapter Houses of the Western Agency of the Navajo Nation. The Forest Supervisor initiated government-to-government consultation (via letter) on August 30, 2005 with the Navajo Nation, the Pueblo of Zuni, and the Yavapai-Prescott Indian Tribe.

In addition to the tribal contacts identified above, the following agencies and organizations were also contacted during scoping:

- Apache Stables
- Arizona Antelope Foundation

- Arizona Game and Fish Department
- Audubon Arizona
- Auza & Sons Farms (Anita-Cameron Allotment Permittee)
- Babbitt Ranches (Moqui Allotment Permittee)
- Center for Biological Diversity
- Coconino County Board of Supervisors
- Forest Guardians
- Grand Canyon ATV Adventures Inc.
- Grand Canyon National Park
- Grand Canyon Outback Jeep Tours
- Grand Canyon Trust
- Rocky Mountain Elk Foundation
- Rocky Mountain Research Center
- Sierra Club, Grand Canyon Chapter
- South Grand Canyon Sanitary District
- The Wildlife Society, Arizona Chapter
- Tusayan Fire Department
- Wildlands Council
- Williams-Grand Canyon News

Issues

An issue is defined as a discussion, debate, or dispute regarding effects. The issues were separated into two groups: significant and non-significant issues. Non-significant issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; 4) conjectural and not supported by scientific or factual evidence, or 5) limited in duration, distribution, and intensity, so that the level of effect is not significant. The Council for Environmental Quality (CEQ) NEPA regulations require this delineation in Sec. 1501.7, "...identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (Sec. 1506.3)..."

Important concerns were identified during public scoping, and these concerns were used in development of the Proposed Action or addressed and analyzed in Chapter 3 of the Environmental Assessment. Based on the criteria listed above, none of the concerns identified during public scoping was identified as a significant issue. Relevant concerns within the scope of the action and also meeting the purpose and need were either resolved or mitigated. Therefore, no additional action alternatives were developed or analyzed in detail.

The primary concern identified during scoping was the concern that the elk population is currently impacting vegetation and soil resources on the Tusayan District, and that implementation of the Proposed Action would benefit elk and possibly result in increased elk numbers or season of use and additional elk impacts to vegetation and soil resources.

This concern has been addressed in two different sections of the Environmental Assessment. First, it has been addressed in the monitoring section at the end of Chapter 2 (*Monitoring*

Specific to the Proposed Action Alternative). The monitoring section describes how AGFD will monitor the elk population in the area, and how Kaibab National Forest range and wildlife staff will monitor vegetation and soil conditions on the Tusayan Ranger District, especially browse utilization levels on key tree and shrub species. Second, potential effects of altered elk distribution and habitat use patterns are fully analyzed in Chapter 3 of the Environmental Assessment.

The Tusayan District is located within AGFD's Game Management Unit 9, and AGFD's clearly stated elk population management objective for GMU 9 is <u>not</u> to allow the population size to increase. In their Regional Elk Management Operational Plan for Region II, AGFD states that the primary objective for GMU 9 is "1. Stabilize or slightly reduce this herd in response to continued drought conditions and habitat concerns." (Arizona Game and Fish Department 2006). AGFD has worked at keeping the elk population in the Tusayan District area from increasing since the 1990s as evidenced by significant increases in the number of antlerless elk permits in GMU 9 from 51 in 1991 to 800 in 2005-2008.

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base by finding on the following:

A. <u>Context</u>: The setting of the proposed action is local as it pertains to short and long-term effects on both human and natural resources. The effects of this site-specific project, including cumulative effects, are limited to a small portion of Coconino County on the Tusayan Ranger District.

B. <u>Intensity</u>: The following discussion is organized around the Ten Significance Criteria described in the National Environmental Policy Act (NEPA) regulations (40 CFR 1508.27).

1. Impacts that may be both beneficial and adverse.

Direct, indirect, and cumulative effects of project activities on resources are discussed in Chapter 3 of the EA. Project activities will not significantly affect any resource.

2. Effects on public health and safety.

There will be no significant effects on public health and safety (EA, pp. 57-59). Moving Catchment 254 will improve the safety of residents and the public by reducing the hazards of big game hunting so close to the community and Grand Canyon National Park, and will lessen the incidence of human-wildlife interactions.

3. Unique characteristics of the geographic area.

There will be no significant effects on unique characteristics of the area. The Tusayan Wildlife Waters Project area does not contain park lands, prime farmlands, wetlands, wild and scenic rivers, fisheries, or ecologically critical areas. The project area is typical

of many areas on the Coconino Plateau in geology, soils, vegetative complexes, wildlife species, and heritage resources. The intended action will have no adverse effects on historic or cultural resource areas (EA, Chapters 2 and 3).

4. The degree to which the effects on the quality of the human environment are not likely to be controversial.

There is no known controversy over project effects on the quality of the human environment, based on the analysis and public comments received. There is no scientific controversy regarding the effects of this project on the quality of the human environment (EA, Chapter 3).

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

AGFD and the Forest Service have considerable experience with the types of activities to be implemented. The effects analysis shows that the degree of possible effects on the human environment is not highly uncertain, nor are there unique or unknown risks involved (EA, Chapter 3).

6. The degree to which the action may establish a precedent for future actions with significant effects, or represents a decision in principle about a future consideration.

Wildlife water catchment construction and the use of reclaimed water for wildife have been used to sustain wildlife populations and improve habitat conditions throughout the arid Southwest and in other parts of the United States (EA, References, pp. 61-63). Future actions will be evaluated through the NEPA process and will stand on their own as to the environmental effects and project feasibility.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Effects are discussed in Chapter 3 of the EA. The cumulative impacts are not significant (EA, Chapter 3).

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing in the National Historic Register of Historic Places, or may cause the loss or destrution of significant scientific, cultural, or historical resources.

The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because all activities have been evaluated for potential impacts and mitigated to avoid impacts (EA, pages 14-16, 56-57). Prehistoric and historic sites in the area will be located, marked, and then avoided prior to any ground disturbing activity. The analysis shows a "no effect" would be the appropriate determination for Section 106 compliance if all mitigations are followed. The Forest Service submitted a no effect determination to the State Historic Preservation Office. The State Historic Preservation Office concurred

with a no effect determination on December 2, 2005. The project record contains cultural resource clearance reports and concurrence from the State Historic Preservation Office.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973, as amended.

Biological Evaluations (BEs) were prepared for federally listed wildlife and plant species (Waters, 7/01/2008 and Phillips, 7/01/2008, respectively) and are included in the project record. Several federally listed wildlife species and their critical habitat were evaluated.

The Wildlife BE has determined that this action would not jeopardize the continued existence of California condors, and there would be "no effect" for all other animal species listed under the Endangered Species Act identified for Coconino County by the U.S. Fish and Wildlife Service (<u>http://www.fws.gov/arizonaes</u>). There was a "No Impact" determination from the proposed action on the northern leopard frog, a Forest Service sensitive species. An effects determination of "May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend Towards Federal Listing or Loss of Viability to the Population or Species" was established for the bald eagle, northern goshawk, burrowing owl, peregrine falcon, Merriam's shrew, spotted bat, Allen's Lappetbrowed bat, Townsend's big-eared bat, and the Mogollon vole, all Forest Service sensitive species.

The Plant BE states that according to the U.S. Fish and Wildlife Service, there are no federally listed threatened or endangered plant species that occur on the South Zone (Williams and Tusayan ranger districts) of the Kaibab National Forest. Populations of threatened, endangered, candidate, and conservation agreement plants are not known to occur within the Tusayan Ranger District. Populations of sentry milkvetch and Fickeisen pincushion cactus and suitable habitat for them occur near, but not on, the Tusayan Ranger District, thus the effects determination of the proposed action is "Not Likely to Impact". Two Regional Forester Sensitive Species (RFSS) are known to exist on the Tusayan District – Tusayan rabbitbrush and the Arizona leatherflower. Since existing wildlife waters and proposed waters (D, J, and O) do occur in suitable habitat for Tusayan rabbitbrush, the effects determination is "May Impact Individuals or Habitat, but Will Not Likely Contribute to a Trend Towards Federal Listing or Loss of Viability to the Population or Species". There is a "Not Likely to Impact" determination for Arizona leatherflower, Mt. Dellenbaugh sandwort, Flagstaff pennyroyal, Flagstaff beardtongue, and Grand Canyon rose.

Invasive and/or Noxious Weeds: As stated in the Plant BE, implementation of Forest Plan Standards and Guidelines, and mitigation measures will minimize or reduce potential dispersal from existing weed infestations. Effects are not expected to be significant under the proposed action alternative.

10. Legality of the action.

The action will not violate Federal, State, or local laws or requirements for the protection of the environment. Applicable laws and regulations were considered and listed in the

EA (pp. 5-6) and earlier in this decision notice. Additional requirements are project consistency with the Kaibab National Forest Land and Resource Management Plan (LRMP, 1987, as amended). This project will help meet the goals, standards, and guidelines of the LRMP for wildlife and support for AGFD goals. The project is located in Ecosystem Management Areas 8, 9, and 10 and is consistent with the stated emphasis of the areas. The project will not involve road construction, reconstruction, or road access changes within the project area. Public involvement has occurred during project planning, and potential environmental effects were considered and documented in the EA (EA, pp. 8-10, 16-19, and Chapter 3).

Administrative Review or Appeal Opportunities

This decision is subject to administrative review (appeal) pursuant to 36 CFR 215. Individuals or organizations who provided comment or otherwise expressed interest in the proposed action during the comment period may appeal. Interest expressed or comments provided on this project prior to or after the close of the comment period do not have standing for appeal purposes. The appeal must be filed (regular mail, fax, email, hand-delivery, express delivery, or messenger service) with the appropriate Appeal Deciding Officer. The appeal must be filed (regular mail, fax, email, hand-delivery) with the appropriate Appeal Deciding Officer.

Submit appeals to:

Mike R. Williams, Forest Supervisor Appeal Deciding Officer Kaibab National Forest 800 South Sixth Street Williams, Arizona 86046 Fax: 928-635-8208

If hand-delivered, the appeal must be received at the above address during business hours (Monday - Friday 8:00 am to 4:30 pm), excluding holidays. Electronic appeals may be submitted to: <u>appeals-southwestern-kaibab@fs.fed.us</u> (.doc, .rtf, or .txt formats only). The appeal must have an identifiable name attached or verification of identity will be required. Please put the project name in the "subject" line. Names and addresses of appellants will become part of the public record. A scanned signature may serve as verification on electronic appeals.

Appeals, including attachments, must be in writing, fully consistent with 36 CFR 215.14, and filed (postmarked) within 45 days following the date that the notice of decision is published in the *Arizona Daily Sun*, the newspaper of record. This publication date is the exclusive means for calculating the time to file an appeal. Those wishing to appeal this decision should not rely upon dates or timeframes provided by any other source.

Implementation Date

If no appeals are filed within the 45-day time period, implementation of the decision may occur on, but not before, five business days from the close of the appeal filing period established in the

Notice of Decision in the <u>Arizona Daily Sun</u>. If an appeal is filed, implementation may occur on, but not before, the 15th business day following the date of the last appeal disposition.

Information Contact

For additional information concerning this decision or the Forest Service appeals process, contact Barbara McCurry, NEPA Planner, Tusayan Ranger District, P.O. Box 3088, Grand Canyon, Arizona 86023; phone 928-638-2443 or 928-635-8220; or email <u>bmccurry@fs.fed.us</u>.

After July 25th, contact Linda Martin, Environmental Coordinator, Williams Ranger District, 742 S. Clover Road, Williams, Arizona 86046; phone 928-635-5614 ; or email <u>lindamartin@fs.fed.us</u>.

/s/ Richard Stahn_

July 2, 2008

RICHARD STAHN District Ranger Tusayan Ranger District Kaibab National Forest DATE

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