

**Draft  
Environmental Assessment for the  
“Camp Verde Townsite Act” Project**

Prepared for

**Red Rock Ranger District  
Coconino National Forest**

Prepared by

**SWCA Environmental Consultants**

May 2005

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**DRAFT  
ENVIRONMENTAL ASSESSMENT  
FOR THE “CAMP VERDE TOWNSITE ACT” PROJECT**

Prepared for

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COCONINO NATIONAL FOREST**

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## **CHAPTER 1**

### **PURPOSE AND NEED FOR ACTION**

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Chapter 1 describes the project scope, background, purpose and need for action, proposed action, decisions to be made, public involvement, and issues.

### **DOCUMENT STRUCTURE**

This Environmental Assessment (EA) has been prepared to describe and assess the environmental consequences that may result from the Coconino National Forest (CNF) considering the sale of land under the Authority of the Townsite Act (P.L. 85-569, 72 Stat. 438) and for compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. The Town of Camp Verde (the Town) would purchase the land for development of a park.

This document discloses the direct, indirect, and cumulative impacts that would result from the No Action and Preferred Action alternatives and is organized into four parts: Chapter 1, Purpose and Need; Chapter 2, Alternatives; Chapter 3, Environmental Consequences; Chapter 4, Agencies and Persons Consulted; and Chapter 5, References and Literature Cited.

### **LOCATION**

The parcel that would be purchased by the Town, called the airstrip site, is approximately 223 acres in size and is located approximately 1.5 miles southeast of the Town's center in portions of Sections 4 and 9 of Township 13 North, Range 5 East (Figure 1). It currently falls within the jurisdiction of the Coconino National Forest Red Rock Ranger District.

Camp Verde is located in Yavapai County approximately 86 miles north of Phoenix, Arizona. The National Forest Service (Forest Service) administers a majority of the area surrounding the Town, with Coconino National Forest bordering the community to the east and Prescott National Forest to the west. Adjacent national forest land, the Verde River, and tributary creeks and washes are popular areas for outdoor recreational use.

### **PURPOSE AND NEED FOR ACTION**

In 1990, the Town prepared a Comprehensive Land Use and Transportation Study that identified a need for additional park and recreational facilities within the community. According to this 1990 study (BRW 1990), the Town population was projected to reach 11,000 by 2010. To accommodate the anticipated increase in the number of Town residents, the study identified a need for an additional 119 acres of park and recreational use space. Since the 1990 study, the Town has increased in population by over 4,000 residents and has added only two additional acres of parkland. In 2000, the Town's population was 9,451 (U.S. Census) and increased to 9,940 in 2002 (Arizona Department of Commerce). At this growth rate, the Town's population is expected to exceed the 1990 projection.

The Town's purpose in acquiring the project area is to obtain an appropriate community park site that would provide its residents with additional parkland and recreational opportunities. The Town's population growth and the small amount of parkland within the community have created a need for this additional park and recreational space.

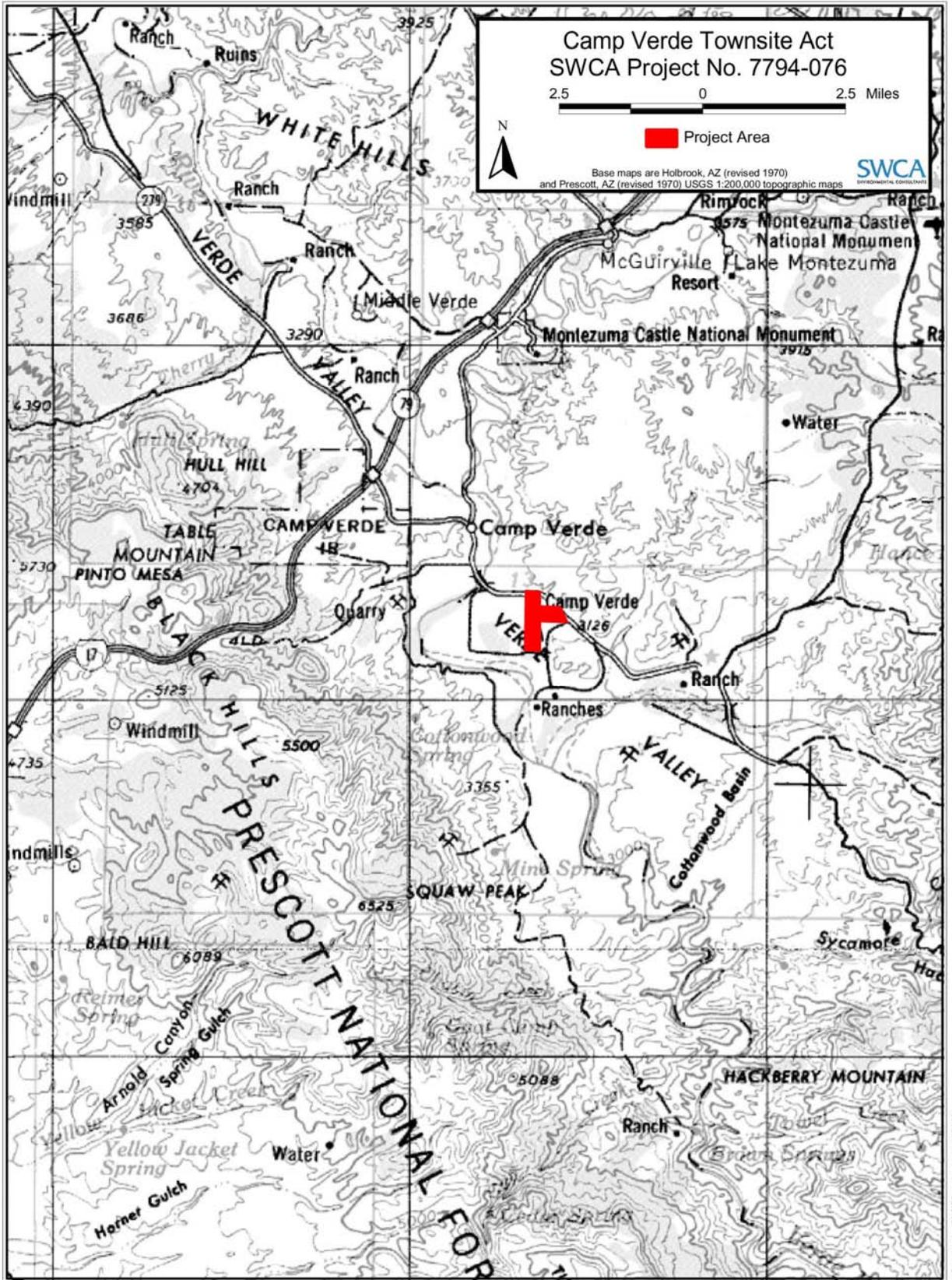


Figure 1. General project vicinity.

## **PROJECT BACKGROUND**

The Town has been looking for a community park site for several years to meet the area's current and future recreational needs. In anticipation of purchasing one of several possible sites, including the currently proposed project area (the airstrip site), for development of a community park, the Town began a public scoping effort in 1990.

The purchase of the airstrip site was considered after a thorough exploration of possible private and public land acquisitions. Other sites initially considered included property currently occupied by the Verde Ranger Station site and a 260-acre parcel of State Trust Land (each being proposed for sale separately by a competitive sale process). It is unlikely that the Town can afford properties sold through a competitive sale process due to its limited budget; however, site acquisition is feasible if the acquisition falls under the Townsite Authority Act. Therefore, the airstrip site, which can be purchased through the Townsite Act, became the Town's preferred location. The site selection process is described in more detail in Chapter 2, Alternatives.

Town planners determined that public outreach would be important to their decision-making process. By using input from Town residents, planners could incorporate the community's preferences as a basis for the activities and facilities that would be developed for the park. To acquire this information, town planners worked with the Arizona Hospitality Research and Resource Center (AHRRC) at Northern Arizona University (NAU) to conduct a study on parks and recreation. The NAU group prepared and distributed a survey questionnaire to Town households, evaluated the responses to the questionnaire, and prepared a report on the study for the Town (AHRRC 1999).

In addition to collecting information from residents through survey, the park's development was discussed in several City Council meetings (the idea having been discussed, periodically, in these meetings since 1998), as well as reported about in local newspapers. Information gleaned from these sources, along with subsequent Town planning, helped in the development of the Town's current proposal of park uses.

### ***PARKS AND RECREATION STUDY***

A total of 1,848 AHRRC Parks and Recreation Study questionnaires were sent to Town households in 1999. Of the 1,848 questionnaires, the U.S. Postal Service returned 34 as undeliverable, resulting in 1,814 questionnaires successfully mailed. A total of 453 usable responses were returned to the Town. Because the Town was still considering different locations at the time of the survey (the project location had not been finalized), the public feedback was sufficiently general to be applied to any of the park locations still being considered.

Approximately 61% of the respondents stated that they used park and recreation facilities. Of the respondents who indicated that they did not use park and recreation facilities, two-thirds were 61 years of age or older.

According to the questionnaire responses, the greatest use was of Town swimming pools and softball/baseball fields. Class/meeting rooms, weight rooms, and indoor basketball courts also had a high amount of daily or weekly use, as did open areas, playgrounds, and football and soccer fields. Citizens also stated that current sports fields and other developed recreation facilities are not adequate to meet the needs of the community's residents.

Respondents indicated that development of picnic areas, playground areas, neighborhood parks, open areas, and softball fields was necessary for the community within the next five years. Less of a need was expressed for additional baseball fields, equestrian trails, fishing ponds, and rodeo grounds. Residents did not perceive a need for a stargazing observatory, shuffleboard, golf course, driving range clubhouse, ATV-motor bike area, or BMX track.

Approximately 83% of the survey's respondents believed that Camp Verde needs additional park and recreation facilities to meet its growing population. The majority of residents surveyed believed that the community requires expanded park and recreational facilities within one to three years from the date when they were surveyed (1999). Another 20% believed these facilities needed to become available within one year.

### ***CITY COUNCIL MEETINGS***

Since 1998, several Camp Verde City Council meetings have included discussions concerning the development of a park in town. The airstrip and the Verde Ranger Station sites were alternatives already being considered in 1998. In 1999, the Council directed Town staff to develop methods to purchase a park site and also approved a 1% sales tax increase to be used for funding a list of projects, noting the development of parks as a priority on that list. In 2000, the Council directed Town staff to pursue a binding Memorandum of Understanding with the Forest Service to document the Town's intent to purchase property from them. Within the same year, the Council created a Special Projects fund from sales tax revenues, with 40% of it going to parks. In 2001, the Town directed the prioritization of some alternatives for a park location, designating the Verde Ranger Station site as their first priority and the airstrip site, the current project area, as their second priority.

As noted above, the Verde Ranger Station site may be proposed for sale through a competitive sale process, likely at a value the Town could not afford; therefore, the airstrip site became the Town's preferred park location.

The Town has not finalized its site plan for the airstrip site. If the site were to be purchased, the Town would incorporate all public input, including its most recent scoping effort (see Public Involvement Summary section of this chapter and Appendix A), into the design of the park and its facilities.

### **DECISION TO BE MADE**

The Coconino National Forest Supervisor will decide whether to authorize the transfer by purchase of a 223-acre parcel to the Town as described in Alternative B (Preferred Alternative).

### **PUBLIC INVOLVEMENT SUMMARY**

A site visit and meeting between the project proponent (Town) and Forest Service personnel occurred on March 29, 2004. A mailer detailing the purchase of the parcel, the project background, and the NEPA process was mailed on April 23, 2004 to members of the public who were known to be interested in projects related to the Coconino National Forest and the Town (adjacent landowners, interested organizations, and other local agencies). The mailer was also available at the Verde Ranger Station and the Town's Park and Recreation Department, and a public notice requesting the public's involvement was published in a local newspaper. The Yavapai Apache Tribe, the Native American tribe in the immediate vicinity, was also contacted during preliminary scoping for consultation.

Sixty-one comments were identified within the 28 responses received. Public input was favorable regarding the development of the park. Comments also addressed the park’s proposed location; the need for a park; access to park facilities; the security and safety of the park; authorized uses (including off-highway [OHV] use); monetary concerns related to park development and maintenance; noise, light, and air pollution; and the area’s soil, vegetation, and water resources.

## ISSUE IDENTIFICATION

Based on comments received in response to the scoping mailer, the Forest Service interdisciplinary (ID) team summarized the issues as shown in Table 1. Besides the issues stated in the table, the public input also presented concerns already described in the Public Involvement Summary section of this document.

The Town, through its design of park facilities and adherence to existing Town code and zoning regulations, would address these comments through the subsequent park planning process. The community’s residents would have opportunities to voice concerns related to the park’s design through the Town’s community planning public outreach program. For the purposes of this analysis, however, the Forest Service has identified the following issues as significant, and these will be addressed in this document (Table 1).

**Table 1.** Significant Issues within the Scope of the EA

<b>Issues</b>	<b>Location in Document where These Concerns Are Addressed</b>
Sale of proposed park site could result in loss or blocking of existing recreation opportunities, such as equestrian trails, informal aircraft use and OHV activities.	Public Access and Recreation Issues, Page 30
OHV users displaced by the sale of the site would move to other areas in the Town or other nearby National Forest lands and cause soil and vegetation impacts in those areas.	Public Access and Recreation Issues, Page 30
Noise and lights from a park site and associated recreation developments and activities could result in disturbance or impacts to land values for adjacent residential areas.	Visual Resources, Page 14 and Noise, Page 20

## CHAPTER 2

### ALTERNATIVES INCLUDING THE PROPOSED ACTION

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This chapter describes and compares the alternatives considered for transfer of the land and/or development of a park site for the Town. Each alternative considered is described, as well as other alternatives that were initially considered but eliminated.

#### ALTERNATIVES CONSIDERED BUT NOT ANALYZED IN DETAIL

##### *ALTERNATIVE LOCATIONS CONSIDERED*

As described in the discussion of the project background in Chapter 1, the Town investigated several parcels within and surrounding the community for developing a park. Criteria for a site included its proximity to the Town's population center, accessibility to the area, proximity to a water supply that could be used for irrigation and possible associated activities, location relative to the Town's population center, and the parcel's size. The Town's Parks and Recreation five-year master plan identifies a desire to provide neighborhood parks, community parks, and specific-use areas. The neighborhood park is typically 10 acres or smaller and is most accessible to the residents within a particular neighborhood. The Town currently has four such parks and is in the process of developing a fifth park in the Verde Lakes area. The Town also recognizes that not all recreational activities (e.g., equestrian arenas and ball fields) are appropriate for a neighborhood park. These uses would need more land for development and would be included in the planning of a community park. Community parks typically range in size from 60 to 200 acres and are large enough for the variety of activities described above. The purpose of this project is to develop a community park that could include these types of uses, and, therefore, locations for the park site were limited to larger parcels.

The Town initially investigated five sites and quickly narrowed that number to three feasible locations. The two sites eliminated from further consideration were a site near the Camp Verde School System and a site located adjacent to, and on the east side of, the airstrip site. These sites are both 20 acres in size. The first site was eliminated primarily due to its small size; a 20-acre site is not large enough for development of a community park. Development of that parcel also would have been difficult due to drainage issues on site. In addition, the noise and light impacts of a community park would have been more significant at this location, as it is surrounded by numerous residential neighborhoods. Although the second site also was too small for a community park, the site was given some consideration because it could be combined with the airstrip parcel; the two parcels together would be more than adequate for development of a community park. The Town ultimately did not pursue acquisition of this property for two reasons: (1) the site alone was not large enough to be developed as a community park; and (2) the expense of \$35,000 per acre was cost prohibitive. Therefore, only three of the five parcels originally considered remained feasible for a community park. In addition to the airstrip site, which was ultimately selected, the Town considered the State Trust site on Hwy 260 and the Verde Ranger Station site.

The State Trust and the Verde Ranger Station sites are no longer being considered because they are obtainable only through a competitive sale process with no guarantee that the Town would be able to afford the ultimate purchase price of either site. In particular, the State Trust land was eliminated from further consideration due to the onerous acquisition process. The purchase of the parcel would have to begin with the submittal of a request that the land be put up for sale. If the Town were successful in getting the land put up for sale, the State would then offer it through a competitive sale process.

The Town decided that it would not be able to obtain the parcel through competitive sale. In addition, the land itself was going to be more costly to develop due to the topography (hills) and drainage issues. The property would also require irrigation through either drilling a well or using water from the Camp Verde Water system.

The probability of the Town acquiring either the State Trust parcel or the Verde Ranger Station site is unknown, whereas the airstrip site is available to the Town through the Townsite Act. Park planning and development needs to occur on a site the Town can realistically purchase; therefore, both the State Trust and the Verde Ranger Station sites were eliminated from further consideration.

## **ALTERNATIVES CONSIDERED FURTHER**

### ***ALTERNATIVE A (NO ACTION ALTERNATIVE)***

Under the No Action alternative, the land purchase would not occur. The United States of America would retain ownership of the parcel and the USDA Forest Service would administer the parcel; a community park would not be developed at this site. The parcel would continue to be managed as national forest.

### ***ALTERNATIVE B (PROPOSED ACTION)***

Under the Proposed Action, the Forest Service would sell the airstrip site to the Town. This site is considered the preferred location due to the site's:

- availability for purchase under the Townsite Act;
- topography (it is relatively flat and would be easy to develop); and,
- close proximity to
  - the water treatment plant (which would provide irrigation water for the park);
  - existing utilities and infrastructure;
  - business district (the park is not directly adjacent to many homes, which is beneficial given the proposed activities and hours of operation); and,
  - ready access to the majority of the Camp Verde population base.

The site that the Town would like to purchase and develop into a community park is currently owned by the Forest Service and is undeveloped. This parcel, which is already used recreationally by some residents, lies within the Town boundaries and includes an old airstrip, which people occasionally use to land small, recreational aircraft. Some areas, however, are being abused through illegal trash dumping, vandalism, and trail creation and vegetation destruction from OHV use.

The Town would acquire the 223-acre airstrip parcel to develop a park. Once purchased, the Town would complete the park's design and decide the type of recreational activities that would occur on-site. This design process would include public input opportunities through the Town Park and Recreation Department's public involvement process and Town Council Meetings. Some uses initially considered include the development of ball fields, an equestrian arena, open space, and an on-site trailhead. The Town is working with developers to bring Camp Verde Water (potable water source) closer to the project area. If that occurs, the Town would look to extend that service to the proposed park site. The treatment plant water would be used for irrigation and associated activities. If the Town acquires the 223 acres, it may decide to develop a trailhead for hiking and equestrian use on approximately one and one-half acres on the north side of Hwy 260 (within the project area). The Camp Verde Trails and

Pathways Committee has asked the Town for a trailhead within the park site. The one and one-half acres would provide safer passage to the community trails and the Mail Trail, which is in the process of receiving State recognition, on the north side of the highway (State Route 260) without the need to cross the highway. This trailhead would help accomplish the mission of the trails committee to connect the entire community with trails.

All uses are subject to compliance with Town code and zoning regulations such as Camp Verde's Noise Ordinance (Town Code, Section 10-2-1 Noise), the Town's Dark Sky Ordinance, and Zoning Code (Zoning Code, Section 406 Outdoor Lighting). Under this analysis, it is assumed that any development to occur on-site would comply with all applicable local, state, and federal regulations. Only the purchase and the intent to develop the 223-acre site is within the scope of this analysis, not the specific uses intended for this site. Details regarding park facilities and uses are outside of the scope of this analysis. Decisions regarding these aspects of the Park's design would be planned through Town processes after completion of the sale.

### ***COMPARISON OF ALTERNATIVES***

This section provides a summary table of the effects of implementing the No Action and Proposed Action alternatives (Table 2). Information in the table is focused on effects, if any, that can be distinguished between alternatives.

**Table 2.** Comparison of Alternative Impacts

Topic	Impacts	
	Alternative A (No Action)	Alternative B (Proposed Action)
Soils	Soil disturbance would continue under the No Action alternative. Indirectly, loss in soil productivity resulting from ongoing soil disturbance and loss would occur. Cumulative impacts would likely include more disturbance of soil on-site and on other undeveloped lands within the vicinity.	No direct impacts would occur. Indirect impacts however, may include soil disturbance during construction activities. Short-term soil loss during construction would be minimized through stormwater control planning and BMPs. Cumulatively, under Alternative B, with more development and an increasing population, development of a park would help alleviate some of the need for recreational space in Town and may reduce the amount of cumulative soil disturbance when compared to Alternative A.
Minerals and Energy Resources	No direct, indirect, or cumulative impact.	No direct, indirect, or cumulative impact.
Visual Resources	There would be no direct, indirect, or cumulative impact to visual quality within the project area.	Scenic vistas would not be impacted; There would be minimal direct and indirect impacts to dark skies because activities would comply with dark sky preservation measures. Although the Proposed Action will not meet the prescribed VQO of Partial Retention, it will meet the standards for a Modification VQO, one classification level below Partial Retention; therefore the Proposed Action is consistent with Forest Plan criteria for scenic quality management. Cumulatively, the proposed action would continue the trend of community and residential development at the expense of the natural appearing landscape. As noted, the parcel has already assumed some of the characteristics of a developed site so the transition would not be as drastic as it would be with a site that was less altered.
Cultural Resources	Cultural resources would be vulnerable to disturbance due to the current activities; however, current uses of the project area are not likely to disturb subsurface features.	One prehistoric site is recommended for mitigation; mitigation activities would include further testing, and possibly data recovery prior to development of these areas. No cumulative impact.
Water Resources	Soil disturbance may result in some erosion losses, indirectly impacting water resources. Illegal dumping may have impacts to surface and ground-water quality if hazardous materials are involved. No cumulative impact.	Proposed water use would not constitute a risk to groundwater or surface water quality. Dumping is less likely to occur due to development of the area. No cumulative impact.
Noise	No direct, indirect, or cumulative impact.	Any action on-site must comply with local noise ordinances; therefore, no adverse direct, indirect, or cumulative impacts would occur.

**Table 2.** Comparison of Alternative Impacts, continued

Topic	Impacts	
	Alternative A (No Action)	Alternative B (Proposed Action)
Land Use and Land Use Requirements	No direct, indirect, or cumulative impact.	The project area's use would change however the uses proposed under this alternative would still comply with the Town's General Plan, retaining the parcel as undeveloped and for recreational uses. No cumulative impacts.
Air	No direct, indirect, or cumulative impacts.	No direct or indirect, or cumulative impact to air quality of the project area or its vicinity in the long-term. Construction activities would be conducted with the appropriate dust abatement.
Vegetation	Disturbance of vegetation by current activities would continue. Cumulatively, other Forest Service parcels developed would also lose vegetation, decreasing the amount of undeveloped, vegetated land within the project area's vicinity.	Vegetation would be removed and replaced with recreational facilities; it is expected that any open space at the site would be landscaped with grasses and trees. Fencing would be around ball fields, if developed, and all other park areas would be unfenced, minimizing fragmentation from surrounding habitat. Under the Proposed Action, cumulative impacts would be the same as described under the No Action alternative.
Wildlife	Disturbance is likely to continue, resulting in less groundcover and foraging habitat for wildlife species compared to nearby non-disturbed areas. There are no structures, walls, or fences currently on the property except along the portion of the property that is adjacent to State Route 260; therefore, no fragmentation of habitat is occurring. Cumulatively, under Alternative A, with more development, fragmentation of habitat would continue to occur within the vicinity but not on-site.	Wildlife use within the area is not anticipated to change considerably if the site is developed into a park. Existing vegetation within the area would be replaced with native species commonly used for park landscaping. Wildlife species that currently use the area would likely be displaced to the surrounding landscape. However, there may be an increase in species that thrive in the presence of human activity. Depending of the final uses of the site, there is a potential for habitat fragmentation due to fencing, however, no fencing is planned for the perimeter of the park, minimizing habitat fragmentation. The only fencing that would occur would be around ball fields, if developed. Cumulatively, fragmentation of habitat would continue to occur as described under the No Action alternative.
Special Status Species	Current uses of the property would not likely affect the Arizona night lizard, Tonto Basin agave, Hualapai milkwort, and Ripley wild buckwheat and would not result in a trend toward listing of the species. This alternative would have no adverse impact on any of these species or alter their potential to occur within the project area and therefore would have no direct, indirect, or cumulative impacts on these species.	The Proposed Action alternative would eliminate all existing or potential habitat for Arizona night lizard, Tonto Basin agave, Hualapai milkwort, and Ripley wild buckwheat within the project area; however, this loss of this habitat would be inconsequential in comparison to the large amount of habitat available habitat for this species region-wide and therefore would have no direct, indirect, or cumulative impacts on these species.

**Table 2.** Comparison of Alternative Impacts, continued

Topic	Impacts	
	Alternative A (No Action)	Alternative B (Proposed Action)
Invasive Species	No invasive plant species were documented within the project area. If the No Action alternative were implemented, continued use of OHVs in the project area would directly and indirectly increase the risk of invasive plant introduction on site. The Coconino National Forest also follows BMPs for weed control (Appendix B). Cumulatively, development of other parcels within the vicinity may increase the potential for weed introduction without proper BMPs.	Disturbance and use of equipment would increase the potential for invasive species introduction. To minimize this potential, (1) all earth moving and hauling equipment shall be washed at the contractor's storage facility prior to arriving on site and (2) any disturbed ground shall be seeded using native species, if applicable.  Cumulative impacts under the Proposed Action would be the same as described under the No Action alternative.
Economic Base	No direct, indirect, or cumulative impact.	No direct, indirect or cumulative impacts to community demographics are expected to occur under this alternative.
Cost	Direct and indirect impacts would be the loss of funding for project site and other funding used for other projects. Cumulative, funding for other development surrounding the project area would not affect Town funding, unless the Town was the project proponent. If the Town were the project proponent, the no action would affect Town funding distribution.	Under this alternative, the above stated funding sources would be used to develop and maintain park facilities within the project area. Cumulative impacts would be the same as described under the No Action alternative.
Environmental Justice	No direct, indirect, or cumulative impact.	No direct, indirect, or cumulative impact.
Public Access and Recreation Issues	No direct, indirect, or cumulative impact.	There is an adverse impact potential due to elimination of off-road vehicle use but it not measurable. Indirect impacts due to this change in use would likely be minor. Cumulatively, other development in the area would likely lead to further displacement of these activities.

## CHAPTER 3

# AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

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This chapter describes the effects that the alternatives, if implemented, would have within the project area. While some effects would occur within the project boundary, others may be cumulative with environmental effects from the past, present, or reasonably foreseeable future within or near the project area. For each impact topic, the analysis includes a brief description of the affected environment and an evaluation of effects.

Major issues define the scope of the environmental concern for this project. These issues were described in Chapter 1 (Issue Identification and Management). Environmental resources considered during this evaluation include: land resources, water resources, living resources, cultural resources, socioeconomic conditions, and other values. Resource areas that were not evaluated due to the lack of relevance to the proposed activities include wilderness resources, resource use patterns, and fish recreation resources.

## APPLICABILITY OF THE FOREST PLAN, LAWS, REGULATIONS, POLICIES, AND OTHER DIRECTIONS

### *PLANS OF OTHER AGENCIES*

There are no other federal lands adjacent to or within the immediate vicinity of the project area. Therefore, other agency plans would not impact any Forest Service decision-making actions.

### *APPLICABLE LAWS, REGULATIONS, AND POLICIES*

Following is a list of federal laws and executive orders pertaining to project-specific planning and environmental analysis on federal lands. While most pertain to federal lands in general, some are specific to Arizona.

*Endangered Species Act (ESA) of 1973 (as amended)*  
*The National Forest Management Act NFMA of 1976 (as amended)*  
*Archaeological Resource Protection Act of 1980*  
*Executive Order 11593 (cultural resources)*  
*Executive Order 11988 (floodplains)*  
*Executive Order 11990 (wetlands)*  
*Executive Order 12898 (environmental justice)*  
*Executive Order 13186 January 11, 2001 (Migratory Bird Treaty Act)*  
*National Historic Preservation Act of 1966, amended 1986*  
*National Environmental Policy Act (NEPA) of 1969 (as amended)*  
*Arizona Administrative Code, Title 12, Natural Resources.*  
*Arizona Administrative Code, Title 18, Environmental Quality, Chapters 9 and 11*

## ***FOREST PLAN MANAGEMENT DIRECTION AND CONSISTENCY***

The National Forest Management Act (NFMA of 1976 [as amended]) calls for developing, adopting, and revising land and resource management plans for the National Forest System as required by the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended. These regulations prescribe how land and resource management planning is to be conducted on National Forest System lands. The Proposed Action is consistent with this Act.

The project area is located within the Coconino Forest, Management Area 11, Verde Valley and is managed under the Coconino National Forest Plan (CNF 1987) as amended. Management in this area is focused on watershed condition, range management, wildlife habitat for upland game birds, and dispersed recreation. The specific standards and guidelines with respect to lands states that the Coconino National Forest coordinates with local governments in evaluation of land proposals. The Proposed Action is consistent with this Plan.

## **EFFECT ON PHYSICAL FACTORS OF THE SITE**

### ***SOILS***

#### **AFFECTED ENVIRONMENT**

Most of the site consists of soils belonging to the Penthouse-Latene-Cornville Association. This association consists of well-drained soils on dissected fan surfaces along the Verde River and is formed from old alluvial sediments derived from calcareous sedimentary and volcanic rocks. These soils have fair to good potential for forage production, but such production is limited by precipitation. They commonly are used as winter range for cattle and sheep due to their proximity to the high plateaus to the east. Crops grown on Cornville and possibly Latene soils include alfalfa, corn, grains, and pasture grasses. The dominant limiting factors for community use on these soils are the cobbly surface and slow permeability of the subsoils (Hendricks 1985).

Less than 10% of the soils at the site, those along the eastern edge, belong to the Lithic Torriorthents-Lithic Haplustolls-Rock Outcrop Association. This association consists of well-drained, shallow soils and rock outcrops on semiarid, mid-elevation hills and mountains. These soils formed from a variety of rock types, including granite, gneiss, rhyolite, andesite, tuffs, limestone, sandstone and basalt. Factors limiting the potential of these areas for community uses are steep slopes, shallow depth to bedrock and rock fragments on the surface (Hendricks 1985).

#### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

##### ***ALTERNATIVE A (NO ACTION)***

Current use of the site by OHV enthusiasts has resulted in a soil disturbance of the site. The amount of actual soil loss due to erosion is unknown. Soil disturbance would continue under the No Action alternative. An indirect impact of this alternative would be the continued loss in soil productivity resulting from ongoing soil disturbance and loss. Recreation use, including OHV disturbance, is resulting in accelerated soil erosion and vegetative loss and would continue if OHV use continues.

Cumulatively, under Alternative A, several undeveloped areas are available for future development in the vicinity of the project area. It is likely that the two parcels that were up for a competitive sale process, previously mentioned, would be developed once purchased, and the Forest Service has stated it is considering the Camp Verde School District's offer for purchase of another site (Site B discussed in Chapter 2). The parcel along the northern side of State Route 260, north of the project area, is currently vacant, but the Town plans to develop the site and install a water treatment facility. Another site is adjacent to the eastern border of the project area. Two other sites (one is State land, the other is Forest Service land) initially considered for this project are also currently vacant and are being proposed for sale through a competitive sale process. In addition, Highway 260 is being developed and other private property is being developed in the area. Developed areas would not contribute to erosion losses due to local ordinances and Best Management Practices (BMPs). However, this may lead to a cumulative increase in residents using this undeveloped site as recreational space due to the fact that and there would still be a need for recreational facilities in Town under the No Action alternative. Cumulative impacts would likely include more disturbance of soil on-site and on other undeveloped lands in the vicinity.

### ***ALTERNATIVE B (PROPOSED ACTION)***

Under this alternative, no direct impacts would occur. Indirect impacts however, may include soil disturbance during construction activities. Once constructed, use of the recreation facilities would not result in further unwanted soil disturbance or soil loss. Short-term soil loss during construction would be minimized through implementation of stormwater control planning and BMPs. Any long-term effect would be mitigated by landscaping or other measures.

Cumulatively, under Alternative B, with more development and an increasing population, development of a park would help alleviate some of the need for recreational space in Town and may reduce the amount of cumulative soil disturbance when compared to Alternative A.

## ***MINERALS AND ENERGY RESOURCES***

### **AFFECTED ENVIRONMENT**

No oil, gas, or metallic mineral resources are located in the vicinity of the project area. The Camp Verde area, however, has potential for gypsum mineral resources, as is evidenced by the presence of the active Verde Gypsum Mine and the presence of the old Camp Verde Salt Mines, located south of Town. Gypsum mineral resources have not been identified on the site itself.

### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

#### ***ALTERNATIVE A (NO ACTION) AND ALTERNATIVE B (PROPOSED ACTION)***

The No Action and Proposed Action alternatives would not have any direct, indirect, or cumulative impact on mineral or energy resources.

## ***VISUAL RESOURCES***

### **AFFECTED ENVIRONMENT**

One objective of the Town's General Plan includes the preservation of dark sky and scenic vistas; the Town prides itself on these values. The view of the Verde Valley from the Mogollon Rim, as well as

from the southern access road entrance into the Town, are considered valuable viewsheds for Camp Verde visitors (Town of Camp Verde 1998). The project area's northern boundary, for the most part, is adjacent to State Route 260, a 4-lane, lighted state highway. The southern boundary is adjacent to residential developments.

The Town adheres to recommendations of "dark sky" with respect to public lighting; its General Plan aims to preserve dark sky by implementing lighting ordinances that promote not only dark skies but property owners' needs, as well. Through planning, the Town is committed to updating and enforcing ordinances regulating lighting systems and has recommend lighting types for all Town areas and signage. These ordinances are to prevent the implementation of lighting that would invade neighboring property or obscure views of the night sky.

The project is proposed for a parcel of public land managed by the US Forest Service as part of the Coconino National Forest. The parcel would be transferred to the City of Camp Verde prior to project construction and would not be under the jurisdiction of the US Forest Service when developed.

All landscapes within the National Forest System are classified by "character type" that defines the broad regional context for the appearance of the landscape, and by "variety classes" that define the relative "attractiveness" of the landscape within each character type. Character types for the Forest Service's southwest region are described in "Landscape Character Types of the National Forests in Arizona and New Mexico", an appendix to the Visual Management System handbook (FSH 462).

The project area's northern boundary, for the most part, is adjacent to State Route 260, a 4-lane, lighted state highway. The southern boundary is adjacent to residential developments.

#### Character Type and Variety Class

The project area is located within the Tonto character type and Upper Tonto sub-type. This sub-type is located in central Arizona and typically consists of tablelands (mesa and buttes). The dominant feature of this sub-type is the Mogollon Escarpment or "Rim" located to the north and east of the project area. The predominant vegetation in the higher elevations is coniferous forest and pinyon-juniper woodland in the intermediate and lower elevations. The principle perennial watercourses of this sub-type are the Gila, Verde, and Salt Rivers, and Oak, Beaver, Clear, Tonto, and Cherry Creeks.

The project area is classified as variety class "C – minimal" (C) (Forest Service 1989); meaning that compared to other areas within the character type, this site has "minimal" scenic attributes.

Characteristics of this site include a rolling or slightly dissected landform that provides little illusion of special definition or landmarks. Vegetation is desert grassland with little variation in texture and color. There are no water bodies on the site. The site has suffered some degradation from the natural appearing condition through past use. An airstrip is still evident on the site along with other evidence of casual use typical of unoccupied lands adjacent a community (vehicle tracks, areas of bare ground, some trash, etc).

#### Distance Zones

Distance zones are divisions of a landscape; zone determinations describe the part of a characteristic landscape that is being viewed. There are no topographic features on site and the parcel is relatively flat. Therefore, the distance zone for this area has been determined as "Foreground" (FG) (Forest Service 1974) as seen from the adjacent state highway and from nearby residences.

### Sensitivity

Sensitivity levels are a measure of people's concern for scenic quality. Levels are determined for travel routes through the Forest on developed, system roads and trails, and for "use areas" and residences within and adjacent the Forest. The project area is adjacent a well-traveled state road classified as Level 1 and from nearby residences (1), (Forest Service 1974). Therefore; the area is within the foreground view of sensitivity level 1 viewing areas as seen from the highway and from the residences. Level 1 is the highest sensitivity level in the Forest Service rating system and reflects the highest level of concern for scenic quality by those likely to view the area.

### Visual Quality Objective

Evaluation of these characteristics determines the visual quality objective of the site. Due to this site's characteristics, the project area is managed by the Forest Service for Partial Retention. When the Forest manages an area that is designated for management under Partial Retention (PR), activities must remain visually subordinate to the natural characteristic landscape (Forest Service 1974). (Figure 2). The site has been classified for management, as documented in the Coconino Forest Management Plan (1989) as FG1C/PR. The site's existing conditions meets the criteria for a "modification" visual quality objective and therefore falls short of Plan objectives for the area.

## **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

### ***ALTERNATIVE A (NO ACTION)***

Under the No Action alternative, Coconino Forest Management Plan direction would guide eventual visual resource enhancement of the project area to a "natural appearing" condition. Practically, considering present and projected funding and other Forest priorities for visual resource enhancement; the project area would remain basically the same as it now appears for the foreseeable future. The existing airstrip would still be visible, as would private property development along the west and south sides. The parcel would continue not to meet the partial retention (PR) visual quality objectives due to the disturbed conditions of the site.

There would be no direct, indirect, or cumulative impact to visual quality within the project area. The parcel may return to the natural characteristics of the Upper Tonto sub-type C in the future and the Forest would maintain the authority to manage the site.

### ***ALTERNATIVE B (PROPOSED ACTION)***

Under the Proposed Action, assuming the proposal is implemented as described, the site will be altered significantly from the natural characteristics of the area and assume characteristics more typical to community recreation park development as outlined in the proposal. Therefore, based on the Proposed Action description, the proposed development would not meet the management goal of Partial Retention. Under the Proposed Action, a park would be developed and would not restore the natural characteristics of the Upper Tonto sub-type. The Proposed Action, as described, does meet the objective of Modification. Modification is a management objective with a degree of greater acceptable alteration of the natural landscape. Under Modification, management activities may visually dominate the original characteristic landscape. The Coconino Forest Management Plan allows "one classification movement downward" in visual quality objectives. Although the Proposed Action will not meet the prescribed VQO of Partial Retention, it will meet the standards for a Modification VQO, one classification level below Partial Retention; therefore the Proposed Action is consistent with Forest Plan criteria for scenic quality management.

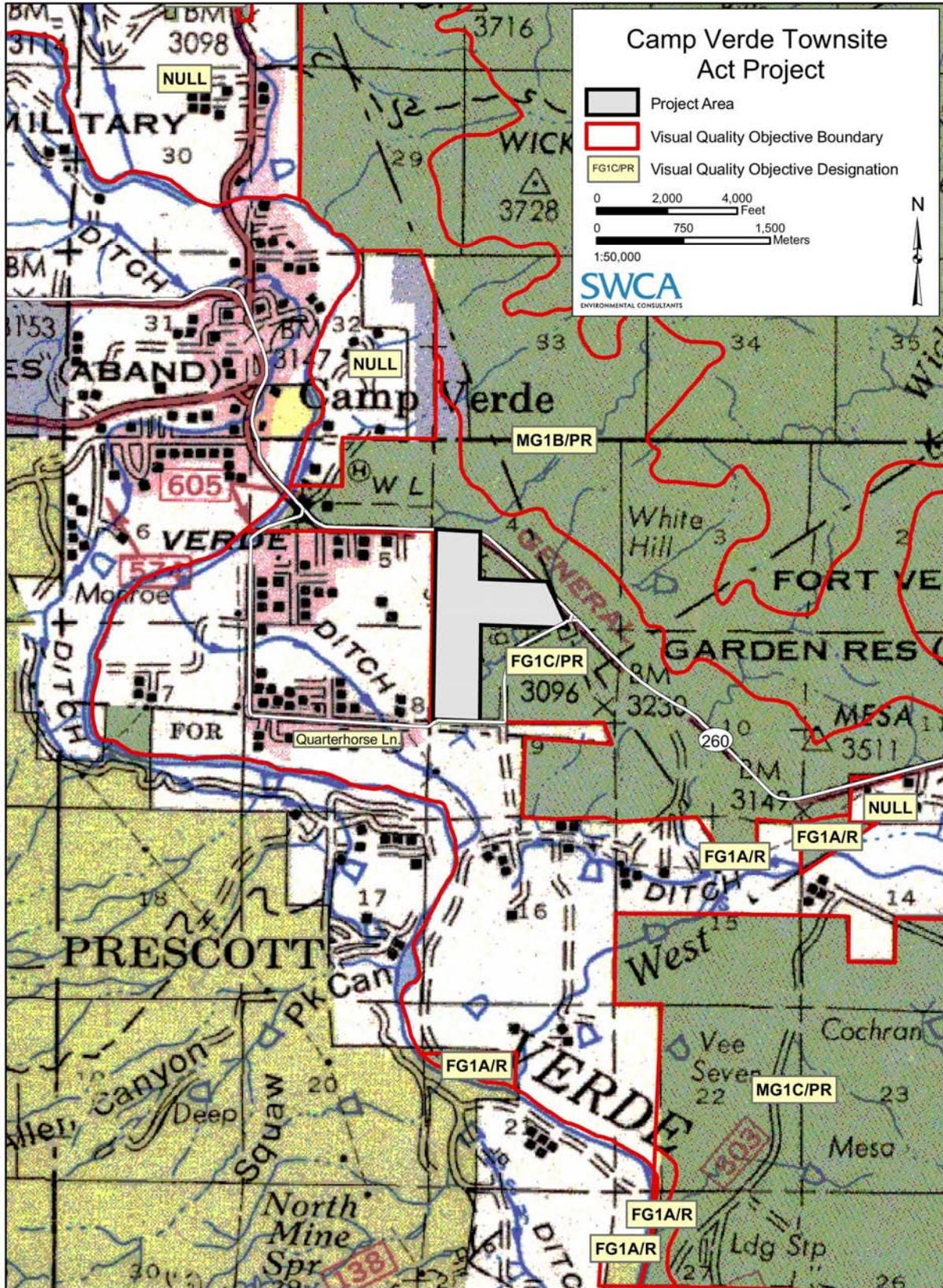


Figure 2. Visual resource quality objective of the project area.

Once the parcel is transferred out of Federal ownership, there is no requirement or guarantee that the project proposal will be implemented or that the parcel will remain in community ownership. Assessing other possible development scenarios aside from the project proposal are beyond the scope of this assessment.

Cumulatively, the proposed action would continue the trend of community and residential development at the expense of the natural appearing landscape. As noted, the parcel has already assumed some of the characteristics of a developed site so the transition would not be as drastic as it would be with a site that was less altered.

Therefore, based on the information and Proposed Action description, the Forest Service has determined that proposed activities would not meet the management goal of Partial Retention. Under the Proposed Action, a park would be developed and would not restore the natural characteristics of the Upper Tonto sub-type. The Proposed Action, as described, does meet the objective of Modification. Modification is a management objective with a degree of greater acceptable alteration of the natural landscape. Under Modification, management activities may visually dominate the original characteristic landscape. Although, Modification is not this site's management objective, it is an acceptable change under the Coconino National Forest Plan.

## ***CULTURAL RESOURCES***

### **AFFECTED ENVIRONMENT**

An archaeological site file search and pedestrian survey of the project area was completed for this project. All isolated occurrences and sites identified during the course of this survey were evaluated for cultural and historical significance in accordance with the National Historic Preservation Act of 1966, as amended.

The archaeological site file search was conducted at the CNF Supervisor's office to identify previous surveys and known sites in or immediately adjacent to the current project area. The site file search and survey resulted in relocating one previously recorded archaeological site and identifying four isolated features and 20 isolated occurrences.

One site is recommended as eligible for inclusion in the National Register of Historic Places (NRHP); the isolated features and occurrences are recommended as ineligible for inclusion.

### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

#### ***ALTERNATIVE A (NO ACTION)***

Under the No Action alternative, the cultural resources identified within the project area would not be disturbed by construction activities or ground clearing. These resources, however, would remain vulnerable to disturbance due to the current public uses of the property, including the use of OHVs.

The other probable development/sale of public lands within the Town would equal several hundred acres. Any sites identified would require archaeological investigations prior to development. Therefore, cumulatively, there would be no impact to cultural resources on-site.

## ***ALTERNATIVE B (PROPOSED ACTION)***

In order to minimize the potential risk of disturbance resulting from implementation of the Proposed Action, testing and data recovery at a prehistoric site would be required prior to approval and sale of the property to the Town. There would be no cumulative impact to cultural resources-on site.

## ***WATER RESOURCES***

### **AFFECTED ENVIRONMENT**

There is no perennial surface water within the boundaries of the site, which is located approximately 0.5 mile from the Verde River. No wetlands occur within the project area. No surface water rights within the site have been registered with the Arizona Department of Water Resources (ADWR 2001).

No groundwater wells are registered with ADWR on the site; however, there are a large number of small-capacity domestic wells located on the private land immediately west of the site (ADWR 2004). Groundwater occurs at relatively shallow depths in the vicinity of the project area, and can be at or near ground surface in the Holocene alluvial material immediately along the Verde River. Depth to groundwater generally is 50–100 feet below ground surface for wells completed away from the Verde River in the Verde Formation (ADWR 2003).

Water quality in the vicinity of the site is generally acceptable for domestic use, with concentrations of total dissolved solids (TDS) ranging from approximately 600 to 1,000 milligrams per liter (mg/L), although these levels exceed the advisory secondary Maximum Contaminant Level (MCL) of 500 mg/L set by the U.S. Environmental Protection Agency (USEPA). There are widespread problems with excessive concentrations of arsenic associated with groundwater from the Verde Formation, in excess of both the current Arizona Aquifer Water Quality Standard (AWQS) of 0.05 mg/L and the new USEPA MCL of 0.01 mg/L that takes effect in 2006 (USEPA 2003). Well yields in the vicinity of the site are modest, generally less than 50 gallons per minute (gpm), with some wells discharging several hundred gpm (ADWR 2003).

### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

#### ***ALTERNATIVE A (NO ACTION)***

Current site use does not involve use of groundwater resources, and there are no surface water resources present within the project area. No wetlands occur on-site; therefore wetlands would not be impacted under this alternative. Under the No Action alternative, delivery of sediment and potential contaminants via stormwater conveyance from the site to the section of the Verde River closest to the project area, 0.5 mile, may occur. Soil disturbance may result in some erosion losses that may impact water quality if drainage reaches perennial water bodies such as the Verde River. Illegal dumping observed at the site could have impacts to surface and groundwater quality if hazardous materials are involved.

Cumulatively, water resources on-site would not be affected; Town ordinances would provide protection from runoff and water quality issues.

### ***ALTERNATIVE B (PROPOSED ACTION)***

Future site use currently does not include use of groundwater resources, well drilling, or surface water use. Under this alternative, delivery of sediment and potential contaminants to the section of the Verde River closest to the project area, 0.5 mile, would occur in the short-term during construction; however, implementation of storm water control planning and BMPs should minimize the effects. Any long-term effect would be mitigated by landscaping and other measures. No wetlands occur on-site; therefore wetlands would not be impacted under this alternative. The Proposed Action may call for the use of septic tank systems or sewer installation at the site; systems are widely used in the area, and would not constitute a risk to groundwater quality.

Eventually, reclaimed effluent may be used for water needs on the site. Use of reclaimed effluent does not constitute a risk to groundwater or surface water quality. The Town is working with developers in the hopes of bringing Camp Verde Water (potable) to the project area. If final park planning includes sewer installation, and if this were to be accomplished with a septic tank system installed per local and state regulations, then there would be no adverse effect on local surface and groundwater resources.

Cumulative impacts would be the same as described under the No Action alternative.

### ***NOISE***

#### **AFFECTED ENVIRONMENT**

Town noise regulations do not apply to National Forest lands. Those current on-site uses that generate noise include OHV, aircraft use, and other recreation activities. Because the site is currently undeveloped National Forest land, there are no noise-generating facilities located within the project area.

#### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

##### ***ALTERNATIVE A (NO ACTION)***

Under the No Action alternative, the Town would not purchase the parcel. There would be no direct, indirect impacts, or cumulative impacts to the current soundscape of the area resulting from this alternative. Current uses would continue to occur, creating some noise, but this noise is not measurable due to the unknown levels of motorcycle and OHV use on-site; these noise levels vary by day, time of day, and by level of use.

##### ***ALTERNATIVE B (PROPOSED ACTION)***

Under the Proposed Action alternative, the Town would purchase the parcel and a community park would be developed. Town noise regulations would apply to this project area after conveyance to the Town. Any activities planned for the park would comply with local noise ordinances; therefore, no adverse direct or indirect impacts, and therefore no cumulative impacts, would occur.

## ***LAND USE AND LAND USE REQUIREMENTS***

### **AFFECTED ENVIRONMENT**

Within the incorporated Town boundary of Camp Verde there are approximately 28,000 acres of land, approximately 43% of which are public lands, mostly administered by the Forest Service as permitted rangeland and agricultural public lands. Land is administered and managed by the Forest Service for multiple use under the direction of the Prescott and Coconino National Forest Plans and Forest Service policies and regulations. The proposed site was identified in the Coconino National Forest Plan as base for exchange lands. These resources include recreation, as well as grazing, utilities, roads, trails and wildlife habitat. According to the current General Plan, retaining public lands as undeveloped or for public recreational use also serves the vision of the townspeople (Town of Camp Verde, 1998). The General Plan has also identified the project area as open space.

The Town is zoned for industrial, commercial, and residential uses. Industrial uses are authorized for 600 acres of land, and approximately 31% of this area is in such use. Of the 410 acres currently zoned for commercial use, 54% is utilized for commercial purposes. Residential land use accounts for approximately 14,250 acres in Town.

Within the project area, the airstrip has been officially closed and removed from all Federal Aviation Administration (FAA) records and maps, but FAA regulations do not prohibit the landing or takeoff of a plane from any location considered safe by the pilot. Therefore, the Forest Service has not officially prohibited use of the project area by aircraft (Bonomo 2004).

### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

#### ***ALTERNATIVE A (NO ACTION)***

Under the No Action alternative, the project area would remain CNF land and would be managed under current management regulations, policies, and guidelines. The other probable development/sale of public lands within the Town would equal several hundred acres. There would be no change in land use; therefore, no direct, indirect, or cumulative impacts would occur.

#### ***ALTERNATIVE B (PROPOSED ACTION)***

Under the Proposed Action, land use and ownership would change. The project area's use would become more formal after the sale to the Town. The Town has proposed the area be developed into a community park. This land use change would still comply with the Town's General plan, retaining the parcel as undeveloped and for recreational uses, consistent with the open space definition as stated in the Town's General Plan. The sale is consistent with the Coconino National Forest Plan as it is base in exchange. Change in land use of other areas would not cumulatively impact the overall land use of the area.

## ***AIR QUALITY***

### **AFFECTED ENVIRONMENT**

Air quality in the Forest, specifically in MA 11, has been included in the watershed management objectives of the area in the CNF Plan (CNF 1987) and although mentioned in the "Program" description

("Watershed, Soil, Air"), does not make specific mention to air quality. There is no management emphasis for air quality within the management area.

#### ***ALTERNATIVE A (NO ACTION)***

Under the No Action alternative, the project area would remain CNF land and current uses would continue. Although current uses would continue to contribute emissions, they would not directly, indirectly, or cumulatively alter the overall air quality of the project area or its vicinity.

#### ***ALTERNATIVE B (PROPOSED ACTION)***

Construction of park facilities would contribute short-term emissions; however, these emissions would not directly, indirectly, or cumulatively alter the overall air quality of the project area or its vicinity in the long-term. Construction activities would be conducted with the appropriate dust abatement.

### **EFFECT ON BIOLOGICAL FACTORS OF THE SITE**

#### ***VEGETATION***

##### **AFFECTED ENVIRONMENT**

SWCA Biologist Suzanne Rhodes conducted a biological survey of the site on April 9, 2004. The project area occurs within the Creosotebush-Crucifixion-thorn Series of the Arizona Upland Subdivision of the Sonoran Desertscrub ecotone (Brown 1994). Portions of the site are highly disturbed, with an unvegetated landing strip and several unpaved roads. In undisturbed areas, vegetation is dominated by either creosotebush or mesquite. Dense stands of mesquite occur throughout the site, and mature trees are present. No wetlands or wetland plants were noted. The area has been heavily disturbed by OHV use. An invasive species survey was conducted and is discussed in the Invasive Species section of this document. According to current landownership information for the Town, approximately 12,900 acres of National Forest land is located within the Town of Camp Verde's town limits. The project area consists of approximately 220 acres of vegetation within its boundary.

##### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

#### ***ALTERNATIVE A (NO ACTION)***

The area has been heavily disturbed by OHV use and weedy plants are present. Under the No Action alternative, this type of disturbance is likely to continue. Other undeveloped Forest Service parcels sold and subsequently developed would also sustain vegetation loss, decreasing the amount of undeveloped, vegetated land in the vicinity of the project area. Cumulatively, however, when compared to the amount of Forest Service land within the Town, would not result in a large area of vegetation removal even with multiple land use proposal in the area.

#### ***ALTERNATIVE B (PROPOSED ACTION)***

Some native vegetation would likely be removed and replaced with recreational facilities. The majority of open space would be landscaped with native grasses and trees that would thrive in the new park environment. The type of grass to be used if ballparks were developed has not yet been

decided. The Town intends to leave as much native vegetation as possible and would plant trees that would be, for the most part, native. Approximately 1.7% of Forest Service land within Town limits that consists of vegetation would be impacted. Under the Proposed Action alternative, cumulative impacts would be the same as described under the No Action alternative.

## ***WILDLIFE***

### **AFFECTED ENVIRONMENT**

SWCA Biologist Suzanne Rhodes conducted a biological survey of the site on April 9, 2004. The disturbed nature of the site has resulted in less groundcover and foraging habitat for wildlife species than in nearby non-disturbed sites. Wildlife species typically found in this type of desertscrub habitat would include jackrabbit (*Lepus* spp.), cottontail (*Sylvilagus* spp.), Merriam's Kangaroo Rat (*Dipodomys merriami*), ground squirrels, deer (*Odocoileus* sp.), javelina (*Tayassu tajacu*), and a variety of birds, snakes, and lizards (Brown 1983).

### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

#### ***ALTERNATIVE A (NO ACTION)***

Under this alternative, disturbance is likely to continue, resulting in less groundcover and foraging habitat for wildlife species compared to nearby non-disturbed areas. There are no structures, walls, or fences currently on the property except along the portion of the property that is adjacent to State Route 260; therefore, no fragmentation of habitat is occurring.

Cumulatively, under Alternative A, with development of the area reasonably foreseeable, fragmentation of habitat may occur.

#### ***ALTERNATIVE B (PROPOSED ACTION)***

Due to the existing activities at the site, wildlife use within the area is not anticipated to change considerably if the site is developed into a park. Existing vegetation within the area would be replaced with native species commonly used for park landscaping either through salvaging native species on site or through native species of nursery stock. Wildlife species that currently use the area would likely be displaced to the surrounding landscape; however, there may be an increase in species that thrive in the presence of human activity. Species may benefit from a parklike setting instead of existing human activities. Depending on the final uses of the site, there is a potential for habitat fragmentation due to fencing; however, no fencing is planned for the perimeter of the park, minimizing habitat fragmentation. The only fencing that would occur would be around ball fields, if such a development occurs.

Cumulatively impacts are the same as described under the No Action alternative.

## ***SPECIAL STATUS SPECIES***

### **AFFECTED ENVIRONMENT**

Special status species that are known to occur, or for which there is existing or potential habitat within the CNF, Red Rock District, are addressed in this section.

Those special status species that are not known to occur within the project area, or are unlikely to occur based on the absence of suitable habitat within the project area, are listed in Table 3.

**Table 3. Special Status Species That Are Not Known to Occur within the Project Area**

Common Name	Scientific Name	Determination of Effect
<b>Federally Listed Endangered, Threatened, and Proposed (12 species)</b>		
<b>Birds</b>		
Bald Eagle	<i>Haliaeetus leucocephalus</i>	No effect
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	No effect
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	No effect
Yuma Clapper Rail	<i>Rallus longirostris yumanensis</i>	No effect
<b>Fish</b>		
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	No effect
Razorback Sucker	<i>Xyrauchen texanus</i>	No effect
Gila Chub	<i>Gila intermedia</i>	No effect
Loach Minnow	<i>Tiaroga cobitis</i>	No effect
Gila Trout	<i>Oncorhynchus gilae gilae</i>	No effect
Spikedace	<i>Meda fulgida</i>	No effect
<b>Amphibians</b>		
Chiricahua Leopard Frog	<i>Rana chiricahuensis</i>	No effect
<b>Plants</b>		
Arizona Cliffrose	<i>Purshia subintegra</i>	No effect
<b>Regional Forester's Sensitive Species (33 species)</b>		
<b>Mammals</b>		
Southwestern River Otter	<i>Lutra canadensis sonora</i>	No effect
<b>Birds</b>		
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	No effect
Common Black-Hawk	<i>Buteogallus anthracinus</i>	No effect
Northern Goshawk	<i>Accipiter gentilis</i>	No effect
Western Yellow-billed Cuckoo	<i>Coccyzus americanus occidentalis</i>	No effect
Bell's Vireo	<i>Vireo bellii</i>	No effect
<b>Fish</b>		
Roundtail Chub	<i>Gila robusta</i>	No effect
<b>Amphibians and Reptiles</b>		
Lowland Leopard Frog	<i>Rana yavapaiensis</i>	No effect
Northern Leopard Frog	<i>Rana pipiens</i>	No effect
Arizona Toad	<i>Bufo microscaphus microscaphus</i>	No effect
Narrow-headed Garter Snake	<i>Thamnophis rufipunctatus</i>	No effect
Mexican Garter Snake	<i>Thamnophis eques megalops</i>	No effect
<b>Snails</b>		
Fossil Springsnail	<i>Pyrgulopsis simplex</i>	No effect
Page Springsnail	<i>Pyrgulopsis morrisoni</i>	No effect

**Table 3.** Special Status Species That Are Not Known to Occur within the Project Area, continued

<b>Common Name</b>	<b>Scientific Name</b>	<b>Determination of Effect</b>
<b>Invertebrates</b>		
Maricopa Tiger Beetle	<i>Cicindela oregona maricopa</i>	No effect
Tiger Beetle	<i>Cicindela hirticollis corpuscular</i>	No effect
Freeman's Agave Borer	<i>Agathymus baueri freemani</i>	No effect
Neumogen's Giant Skipper	<i>Agathymus neumoeegeni</i>	No effect
Aryxna Giant Skipper	<i>Agathymus aryxna</i>	No effect
<b>Federally Listed Endangered, Threatened, and Proposed (12 species)</b>		
<b>Invertebrates, continued</b>		
Blue-black Silverspot Butterfly	<i>Speyeria nokomis nokomis</i>	No effect
Mountain Silverspot Butterfly	<i>Speyeria nokomis nitocris</i>	No effect
Obsolete Viceroy Butterfly	<i>Limenitis archippus obsolete</i>	No effect
Early Elfin	<i>Incisalia fotis</i>	No effect
Comstock's Hairstreak	<i>Callophrys comstocki</i>	No effect
Spotted Skipperling	<i>Piruna polingii</i>	No effect
<b>Plants</b>		
Eastwood Alumroot	<i>Heuchera eastwoodiae</i>	No effect
Flagstaff Penstemon	<i>Penstemon nudiflorus</i>	No effect
Heathleaf Wild Buckwheat	<i>Eriogonum ericifolium var. ericifolium</i>	No effect
Verde Valley Sage	<i>Salvia dorrii mearnsii</i>	No effect
Cliff Fleabane	<i>Erigeron saxatilis</i>	No effect
Flagstaff Pennyroyal	<i>Hedeoma diffusum</i>	No effect
Arizona Bugbane	<i>Cimicifuga arizonica</i>	No effect
Rusby Milk-Vetch	<i>Astragalus rusbyi</i>	No effect
<b>Management Indicator Species (1 species)</b>		
Antelope	<i>Antilocapra americana</i>	No effect

A summary of special status species that are known to occur or may occur based on the presence of potentially suitable habitat within the project area is provided in Table 4. SWCA Biologist Suzanne Rhodes conducted a site reconnaissance of the project area on April 9, 2004. No species-specific surveys were conducted as part of this reconnaissance.

### **ARIZONA NIGHT LIZARD**

In central Arizona, the Arizona night lizard ranges from the western slope of the Central Plateau (Weaver, McCloud, and Superstition Mountains, Tonto National Monument, and Valentine), in the Hualapai, Harquahala, Kofa, and Castle Dome mountains, and at other scattered localities (Stebbins 1985). Habitat for this secretive lizard is arid or semiarid lands, where it lives beneath fallen branches of Joshua trees, dead clumps of various other species of yucca, nolina, agave and cardons, in rock crevices, beneath cow chips, soil-matted dead brush and other debris, and beneath logs (Stebbins 1985). Arizona night lizards are seldom found in the open away from cover (Stebbins 1985). The species is widely distributed in the region and potentially suitable habitat, in the form of mesquite tree debris, is present in the project area.

**Table 4.** Special Status Species that are Known to Occur, or for which There Is Potentially Suitable Habitat within the Project Area

Common Name	Scientific Name	Suitable Habitat	
		Present	Occupied
<b>Regional Forester's Sensitive Species (4 species)</b>			
<b>Amphibians and Reptiles</b>			
Arizona Night Lizard	<i>Xantusia vigilis arizonae</i>	Yes	No
<b>Plants</b>			
Tonto Basin Agave	<i>Agave delamateri</i>	Yes	No
Hualapai Milkwort	<i>Polygala rusbyi</i>	Yes	No
Ripley Wild Buckwheat	<i>Eriogonum ripleyi</i>	Yes	No

### ***TONTO BASIN AGAVE***

This species is usually found between 2,800 and 3,400 feet atop benches (often high benches), at the edges of slopes, and on gentle slopes overlooking major drainages and perennial streams. It may also be found in association (sometimes direct, often indirect) with archaeological features, including multi-room foundations, and also above check dams and alignments. As with most agave species, *Agave delamateri* requires well-drained soil, being susceptible to root rot. Suitable habitat for the Tonto Basin agave occurs within the project area as well-drained soils on dry slopes at elevations between 2,800 and 3,400 feet.

### ***HUALAPAI MILKWORT***

Since little is known about the habitat of this species, it is possible that suitable habitat for the Hualapai milkwort may occur within the project area, which is within the known elevation range of the species (3,200–5,000 feet).

### ***RIPLEY WILD BUCKWHEAT***

Ripley wild buckwheat is a much-branched, low growing sub-shrub 2–8 inches in height. This woody perennial is found on calcareous soils in Sonoran desertscrub and pinyon-juniper woodland. It grows at elevations ranging from 2,000 to 6,000 feet and flowers between April and June. When not in flower it is difficult to see because it forms low mats that blend in with the soil. In Arizona it is known from near Horseshoe Lake and Chalk Mountain, the Cottonwood area, and from Frazier's Well on the Hualapai Indian Reservation (AGFD 1997). The project site lies at the lower elevational distribution for this species and no pinyon-juniper habitats are found within the project area.

## **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

### ***ALTERNATIVE A (NO ACTION)***

Current uses of the property likely would not affect the Arizona night lizard, Tonto Basin agave, Hualapai milkwort, or Ripley wild buckwheat and would not result in a trend toward listing of these species. This alternative would have no adverse impact on any of these species or alter their potential to occur within the project area and, therefore, would have no direct, indirect, or cumulative impacts on these species.

### ***ALTERNATIVE B (PROPOSED ACTION)***

The Proposed Action alternative could eliminate all existing or potential habitat for Arizona night lizard, Tonto Basin agave, Hualapai milkwort, and Ripley wild buckwheat within the project area, depending on the scale of future site development. This loss of habitat, however, would be inconsequential in comparison to the large amount of habitat available for this species region-wide. Therefore the Proposed Action alternative would have no direct, indirect, or cumulative impacts on these species. The Proposed Action may impact individuals but not result in a downward trend for any of these species.

### ***INVASIVE SPECIES***

#### **AFFECTED ENVIRONMENT**

The U.S. Geological Survey (USGS) Colorado Plateau Field Station's Southwest Exotic Plant Mapping Project database was accessed for the current list (Arizona Noxious Weed List) of invasive weed species in Arizona (available online at <http://www.usgs.nau.edu/swepic/asp/swemp/list.asp?status=Arizona>). The U.S. Department of Agriculture (USDA), Natural Resources Conservation Service, Plant Services Division, Arizona Noxious Weed report (USDA 2003) was also reviewed. A formal inventory for invasive plant species within the project area was conducted on April 9, 2004, by SWCA biologist Suzanne Rhodes. No invasive plant species were documented within the project area.

#### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

##### ***ALTERNATIVE A (NO ACTION)***

If the No Action alternative were implemented, continued use of OHVs in the project area would increase the risk of invasive plant introduction on site, however, the CNF follows BMPs for weed control (Appendix B) to minimize introduction. Cumulatively, development of other parcels within the vicinity of the project area, with proper implementation of BMPs, would not increase the potential for invasive plant introduction.

##### ***ALTERNATIVE B (PROPOSED ACTION)***

Although the sale of the parcel would not affect the risk of invasive plant introduction on site but development activities could result in potential species spread. To minimize this potential, however, the Town is willing to implement strategies to minimize invasion such as: (1) all earth moving and hauling equipment would be washed at the contractor's storage facility prior to arriving on site; and (2) any disturbed ground would be seeded using native species, if applicable. These measures are not required and would not be included as a deed restriction. It is undetermined whether OHVs would be authorized in the future park. If they were, the potential for introducing invasive species to the project area would be the same as under the No Action alternative.

In order to minimize the introduction of invasive species onsite, the Town has elected to follow the CNF's BMP (Appendix B). The Town is interested in taking actions regarding noxious weeds but implementation of these practices would not be a requirement of this sale or used as mitigation. Cumulative impacts under the Proposed Action alternative would be the same as described under the No Action alternative.

## **EFFECT ON THE ECONOMIC FACTORS OF THE SITE**

### ***ECONOMIC BASE***

#### **AFFECTED ENVIRONMENT**

Construction, ranching, farming, light industry, trade and service, a casino, and public administration serve as the Town's major employment sources (Town of Camp Verde, 2000). The County's major industries include retail trade, services, and public administration (Arizona Department of Commerce, 2002). The majority of land surrounding the project area is residential.

Neither the U.S. Census nor the Town had information regarding the resale values of homes based on their proximity to recreational facilities or parks. Tourism and the revenue generated from use of community parks have not been measured. There are numerous articles, however, that discuss the benefits of parks and recreational opportunities on community economies.

Open space and parks provide amenities, such as convenient educational and recreational opportunities, attractive views, and wildlife viewing opportunities; these benefits can be reflected in increased real property values and increased marketability for property located near open space and parks. Also, by conserving open space and parks rather than permitting intensive development, local agencies can reduce costs for public services, building schools, and other services that residential spaces require. Further, communities along park boundaries can provide visitor services, including special events, food, recreational equipment sales and rentals, lodging, and convenience items.

#### **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

##### ***ALTERNATIVE A (NO ACTION)***

Under this alternative, there would be no direct, indirect, and therefore cumulative impact to the Town's employment or household income characteristics.

##### ***ALTERNATIVE B (PROPOSED ACTION)***

Under the Proposed Action alternative, there would be no direct, indirect, and therefore no cumulative impact to the Town's employment or household income characteristics. There is no evidence to suggest that the community would react negatively (i.e. moving out of the neighborhood) to having a park in that neighborhood (public scoping identified a desire for a park).

### ***COST***

#### **AFFECTED ENVIRONMENT**

In 2000, the Town Council created a Special Projects Fund from sales tax revenues, with 40% of the fund going to the development and maintenance of community parks. In addition, the Town has secured some additional funding through grants from State Parks (LRSP Heritage Grant) for the development of community parks.

**DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

***ALTERNATIVE A (NO ACTION)***

Under this alternative, the Town would not develop a park within the project area. The Special Projects Fund would be used to fund other Town projects based on the recommendations of the Council and the State Parks funding secured for this project would not be granted. Cumulatively, the Town may suffer a loss of credibility its inability to spend grant money on the project, therefore may jeopardize future financing for projects or any other potential park sit that may be found later.

***ALTERNATIVE B (PROPOSED ACTION)***

Under this alternative, the Special Projects Fund and LRSP Heritage Grant money would be used to develop and maintain park facilities within the project area. Cumulative impacts would result in available Town funding being used for maintenance and administration of the site into the future, whether the park facilities are fully developed or not.

***ENVIRONMENTAL JUSTICE***

**AFFECTED ENVIRONMENT**

Non-white residents make up approximately 11%, 15%, and 8% of the total populations of the project area neighborhood, the Town, and Yavapai County, respectively (Table 5). Hispanic people make up a greater percentage of the project area neighborhood than that of the Town or County. As shown in Table 5, minority and Hispanic populations are not disproportionately represented in the project area neighborhood when compared to the Town or the County.

**Table 5.** Ethnic Characteristics

	<b>Census Tract 4, Census Block 16*</b>	<b>Town of Camp Verde</b>	<b>Yavapai County</b>
Total Population (2000)	1,892	9,451	167,517
White	1,677	8,038	153,933
Black or African American	7	33	655
American Indian or Alaska Native	34	691	2,686
Asian	3	21	851
Native Hawaiian and Other Pacific Islander	2	13	138
Some other race	119	444	5,990
More than one race	50	211	3,264
Percentage of Non-White Population	11%	15%	8%
Of Total Population, Percentage of Hispanic or Latino	14%	11%	10%

\*portion of Town where site is located

## **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

### ***ALTERNATIVE A (NO ACTION)***

The No Action alternative would not result in any direct, indirect, or cumulative impacts to minority or Hispanic populations in the vicinity of the project area.

### ***ALTERNATIVE B (PROPOSED ACTION)***

No direct, indirect, or cumulative impacts to minority or Hispanic populations in the vicinity of the project area would occur under this alternative.

## **EFFECT ON THE SOCIAL FACTORS OF THE SITE**

### ***PUBLIC ACCESS AND RECREATION ISSUES***

#### **AFFECTED ENVIRONMENT**

Residents and visitors currently can enjoy a variety of outdoor activities within the Camp Verde area, such as hiking, camping, horseback riding, OHV use, jeep tours, canoeing, kayaking, and fishing. The Town also has a public library, community swimming pool, soccer and baseball fields, parks, and picnic sites. Town goals include establishing facilities for a Yavapai College satellite center, a trade school, and a regional park (Town of Camp Verde 2000). Camp Verde also boasts that more than 18 miles of the Verde River is located within town limits (Town of Camp Verde 1998).

Currently, the project area is primarily used for OHV activity. Other recreation uses, such as equestrian, aircraft use, walking, and wildlife viewing also occurs. OHV use has created impacts to vegetation and soils at the site, which impacts other users. The site is open to the general public, and as in other forest areas around the communities of the Verde Valley, has been used for illegal dumping of garbage. There are OHV trails in the area that do not connect to any community trails or Forest Service trails.

In addition, the Forest Service has stated that recreational pilots (ultra-light planes) can still utilize the runway on-site. The Forest Service does not have an estimate of how often planes land on-site, but both planes and motorized parachutes are known to use the site occasionally (Bonomo 2004). The old airstrip provides these users with a large open landing area in Town. This activity does not require permitting by either the Town or the Forest Service.

## **DIRECT, INDIRECT, AND CUMULATIVE EFFECTS**

### ***ALTERNATIVE A (NO ACTION)***

Under this alternative, the parcel would be managed under Forest Service policies, guidelines, and regulations with no direct, indirect, or cumulative impact to access or recreation within the project area.

### ***ALTERNATIVE B (PROPOSED ACTION)***

Under this alternative, the parcel would be sold to the Town, and a park would be developed. It has not yet been decided which uses would be allowed within the park, but OHV and equestrian uses

would be considered. The Town's Park and Recreation Department would determine all public access and recreational uses, and would incorporate public involvement opportunities into the design phase of the project prior to development.

If OHV use is allowed in the project area, the area in which it would be allowed would be smaller than the current area of use due to the other components of a community park that would be constructed; it is highly unlikely that the entire project area would be open to OHV use. There is also a possibility that OHV use would not be incorporated into the park design. In this case, OHV users may move to other areas to recreate. Community park development would likely result in increased administrative presence at the site and reduce illegal activities such as dumping. OHV and illegal activities could be displaced to other undeveloped property in the near vicinity. Cumulatively, other development in the area would likely lead to further displacement of these activities as well as change in National Forest off road policies that may prohibit off road travel.

OHV trails, including General Crook Trail, are located in the vicinity of the project area. In the event of OHV closure on the property, users would not need to travel more than a few miles to access other OHV trails. Indirect impacts include providing additional community recreational facilities.

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## **APPENDIX A**

### **Public Comment Summary**

## PUBLIC SCOPING COMMENT SUMMARY

Location in Document where Concern is Addressed if within the Scope of this Document	Document Code	Comment #	Comment
Public Access and Recreation Issues, Page 30	<b>L1</b>	1	We have been able to ride our horses...into said acreage. A park will necessarily be fenced, blocking access.
Economic Base, Page 28		2	The resale value of our properties would be greatly diminished when people know they will either ride the streets of the neighborhood or trailer to the arena.
Public Access and Recreation Issues, Page 30		3	It is unlikely that the arena would be available at the hours the neighborhood would want to use it.
Alternatives, Page 6		4	There are other more central locations for this park; there is open space along the bypass road and on Finnie Flat Road.
Visual Resources, Page 14; Noise, Page 20		5	Ballfield in the park means lights and noise into the late evening.
N/A		6	A park would bring strangers through the neighborhood, some of which may not be desirable.
N/A		7	Camp Verde doesn't have enough staff of deputies to oversee the park
Purpose and Need, Page 1	<b>L2</b>	8	Recreational space is in great need in the Town and a recreational space will be a great improvement over what is there now. The area is now devoid of vegetation due to current uses.
N/A	<b>L3</b>	9	How will this site be monitored to prevent abuse, illegal trash dumping, and vandalism after the project is finished?
Chapter 3 discusses Alternative B's impact, Page 14		10	How will the baseball/soccer and or football fields impact the environment?
Soils, Page 13; Vegetation, Page 22		11	What will the heavy-equipment that would be required to construct the park do to soil and vegetation?
Public Access and Recreation Issues, Page 30		12	Will there be an OHV recreational options at the park or will OHVs have to go somewhere else?
Water Resources, Page 19		13	Where will the water come from for this project?
N/A	<b>F1</b>	14	My request is that there be a minimum of 500-foot buffer between any residential properties and the park.
N/A		15	I support Camp Verde moving ahead with expanded recreational facilities for the community.
N/A	<b>F2</b>	16	I support it, sounds good.
Visual Resources, Page 14; Noise, Page 20	<b>F3</b>	17	Ballfields, lights, and noise should be located close to Highway 260, away from the residential areas on the other sides of the park site.
Visual Resources, Page 14; Noise, Page 20	<b>F5</b>	18	We are concerned about and lights or noise causing activities the park would generate, we value the quietness of our neighborhood.
Noise, Page 20; Air Quality, Page 21	<b>F6</b>	19	Keep the dust, noise, and traffic to a minimum.

Location in Document where Concern is Addressed if within the Scope of this Document	Document Code	Comment #	Comment
Visual Resources, Page 14	<b>F6</b>	20	Don't position bright lights facing west.
Water Resources, Page 19	<b>F7</b>	21	Concerns include use of groundwater for irrigation and ponds
N/A		22	Security for the neighborhood and Park
Visual Resources, Page 14		23	Concerns include light pollution of night skies
Noise, Page 20		24	Concerns include noise after dark
Public Access and Recreation Issues, Page 30		25	Concerns include access to the Park from Quarterhorse Lane
N/A		26	Safety for children's access across Hwy 260
Proposed Action, Page 7	<b>F8</b>	27	This project would benefit the community by providing sports and recreation areas.
Proposed Action, Page 7		28	The project would also provide property for a fire station.
Alternatives, Page 6	<b>F9</b>	29	The project area is an excellent site for a community park.
N/A		30	The USFS should efficiently facilitate this purchase with quick and reasonable appraisals based on the undeveloped nature of the site.
N/A	<b>F10</b>	31	We agree with the use of this property as it states in the Camp Verde Master Plan.
Public Access and Recreation Issues, Page 30		32	The property should not be used for dangerous livestock activity such as bullriding or motorcycle, ATV motor vehicle use as well as other activities that generate excessive noise.
N/A	<b>F11</b>	33	The site would be an asset to the town.
Noise, Page 20		34	The Park design will still provide the area with a quiet country living environment.
N/A		35	The Forest Service should sell this property to the Town for pennies on the dollar if not donate it because out tax dollars pay for the parcel now. Make the parcel affordable for the Town.
Purpose and Need, 1	<b>F12</b>	36	This project would make good use of this property. The property will provide much needed recreational opportunities.
Economics, Page 28		37	The project would have a wonderful economical impact for the Town. This park will draw tourism through its rodeos, tournaments, etc.
Visual Resources, Page 14		38	It will also provide a benefit to the aesthetics of the Town.
Purpose and Need, Page 1	<b>F13</b>	39	This is a great plan to obtain land for a park because our Town and adjoining-populated areas are growing so fast that our present parks are not adequate for our future growth.
Public Access and Recreation Issues, Page 30	<b>F14</b>	40	We support this plan; we need more fields and especially an equestrian arena.
Alternatives, Page 6		41	The project area is a perfect location for a park.
Public Access and Recreation Issues, Page 30	<b>F15</b>	42	An equine trail should be added that would not be utilized by quads and dirt bikes. For safety, horse and dirt bike paths should be separate.

Location in Document where Concern is Addressed if within the Scope of this Document	Document Code	Comment #	Comment
Purpose and Need, Page 1	<b>F16</b>	43	We strongly support the purchase and see the need for additional park and recreational facilities in our community.
Soil, Page 13; Vegetation, Page 22; Public Access and Recreation Issues, Page 30		44	Current uses are destroying soil and vegetation with motorcycles and off-highway vehicles and shouldn't be considered recreation.
Chapter 3 discusses Alternative B's impact on the resources, Page 14		45	Creating the park would protect the environment from these uses.
Public Access and Recreation Issues, Page 30	<b>F17</b>	46	We agree with the proposal if no off-highway vehicle use would be utilized within the park.
Public Access and Recreation Issues, Page 30	<b>F18</b>	47	If the park is built it will displace off-road vehicles and ultra light planes. Off-road vehicles will destroy other areas within the Town.
Cost, Page 28		48	Park development will cost tax dollars to build, insure, and maintain.
Purpose and Need, Page 1		49	We have enough parks at this time.
Alternatives, Page 6	<b>F19</b>	50	I would prefer a park to go on that parcel rather than a subdivision or golf course.
Water Resources, Page 19		51	I agree with using reclaimed water.
N/A	<b>F20</b>	52	We look forward to this area being used for recreational purposes and the community would benefit from this project.
Public Access and Recreation Issues, Page 30	<b>F21</b>	53	Making this park will not stop abuse, dumping, vandalism; it will only relocate it and the Town does not have the resources to prevent it.
Economics, Page 28		54	How can the Town afford to acquire and maintain such a facility at this time when our police, library, and fire departments are in need?
Cost, Page 28		55	What is the project budget of this park?
Water Resources, Page 19		56	What are the water needs of this facility?
Economic Base, Page 28		57	What will the development do to the community's taxes?
Public Access and Recreation Issues, Page 30	<b>F22</b>	58	This project would put to good use a piece of land to entertain a large group of young people.
N/A	<b>E1</b>	59	Sell this property to the Town of Camp Verde at the very best price as possible.
N/A	<b>E2</b>	60	Sell this property to the Town of Camp Verde.
N/A	<b>E3</b>	61	[We] don't like a lot going on as places or park – have been started but are not done and will not pass health inspection.

N/A=did not provide comment relevant to Purpose and Need, Out of Scope of this analysis

## **APPENDIX B**

### **Northern Arizona Integrated Weed Management Practices**

# NORTHERN ARIZONA

## Integrated Weed Management Practices

### Introduction

Integrated weed management "is a system for the planning and implementation of a program, using an interdisciplinary approach, to select a method for containing or controlling an undesirable plant species or group of species using all available methods" (Food, Agriculture, Conservation, and Trade Act of 1990). Together these strategies and techniques are economically and environmentally more effective than any single option. All control methods are available and will be prescribed on a species/infestation specific basis. Elements of Integrated Management included in this plan are:

- Exclusion, Prevention and Early Detection
- Education/Awareness
- Inventory, Mapping and Monitoring
- Control (including physical, biological, cultural and chemical methods)
- Coordination and Cooperation

Preventing the introduction and spread of noxious weeds is one objective of Integrated Weed Management Programs on National Forest System lands throughout the United States. This Guide to Integrated Weed Management Practices provides a comprehensive directory for use in planning and wildland resource management activities and operations. This Guide will help managers and cooperators identify weed management practices that mitigate identified risks of weed introduction and spread for a project or program.

### Supporting Direction

This Guide to Integrated Weed Management Practices supports implementation of the February 3, 1999 Executive Order on Invasive Species. Federal agencies are expected to follow the direction in the Executive Order 13112.

Development of weed management practices is supported by Forest Service noxious weed policy and strategy. Forest Service policy identifies prevention of the introduction and establishment of noxious weed infestations as an agency objective. This policy directs the Forest Service to: (1) determine the factors that favor establishment and spread of noxious weeds, (2) analyze weed risks in resource management projects, and (3) design management practices to reduce these risks. The Forest Service Noxious Weed Strategy identifies development of practices for prevention and mitigation during ground-disturbing activities as a long-term emphasis item. The February 1999 Executive Order on Invasive Species requires Federal agencies to use relevant programs and authorities to prevent the introduction of invasive species and not authorize or carry out actions that are likely to cause the introduction or spread of invasive species unless the agency has determined, and made public, documentation that shows that the benefits of such actions clearly outweigh the potential harm, and all feasible and prudent measures to minimize risk of harm will need to be taken in conjunction with the actions.

This Guide uses the term “*weed*” to include the National Invasive Species Council definition of all plants exotic to the relevant ecosystem that have the potential to cause economic or ecological harm. The term “*noxious weed*” has legal definitions by Forest Service policy:

**“ . . .plants designated as noxious weeds by the Secretary of Agriculture or by the responsible State official. Noxious weeds generally possess one or more of the following characteristics: aggressive and difficult to manage, poisonous, toxic, parasitic, a carrier or host of serious insects or disease, and being native or new to or not common to the United States or parts thereof.” (FSM 2080.5)**

For the Coconino, Kaibab, and Prescott National Forests use the Arizona State-defined noxious weed list (R3-4-244 & 245) as well as the region/forest designated weed list. The listed weed species are the priority for implementing weed management in cooperation with neighbors and partners as specified in CFR- 222.8.

## **General Integrated Weed Management Practices for ALL Site-disturbing Projects and Maintenance Programs**

<b>Objective</b>	<b>Best Known Practice</b>
<p><b>1) Incorporate weed prevention and control into project layout, design, alternative evaluation, and project decisions.</b></p>	<p>1.1) Environmental analysis for projects and maintenance programs will need to assess weed risks, analyze potential treatment of high-risk sites for weed establishment and spread, and identify prevention practices. Determine prevention and maintenance needs, including the use of herbicides if needed, at the onset of project planning.</p> <p>1.2) Coordinate with other agencies and adjacent landowners to prevent and control weeds. (CFR222.8)</p>
<p><b>2) Avoid or remove sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds</b></p>	<p>2.1) Before ground-disturbing activities begin, inventory and prioritize treatment of invasive weeds in project operating areas and along access routes, or within reasonably expected potential invasion vicinity. Do a risk assessment accordingly; control weeds as necessary.</p> <p>2.2) After completing “Practice 2.1” above, reduce risk of spreading and creating weed infestations. Plan operating areas and access routes to avoid heavy infestation areas, plan closure of access routes at finish of project, and/or begin project operations in un-infested areas before operating in weed-infested areas. Locate and use weed-free project staging areas. Avoid or minimize all types of travel through weed-infested areas, or restrict to those periods when spread of seed or propagules are least likely.</p> <p><b>Equipment Wash Station – Centralized wash station areas will be developed in several locations throughout the CNF. They must have a filter system , for example at least 6 inches of large cinder or gravel spread over an area 10’x 30’. Filter cloth may be used for temporary stations. The area will be a perched drainage to allow excess moisture to drain after being filtered. And must be at least 200 yards from a natural drainage to avoid contamination. All wash station locations must be monitored annually and all weed materials removed as soon as possible.</b></p> <p>2.3) Remove mud, dirt, and plant parts from project equipment before moving it into a project area. Determine the need for, and when appropriate, identify sites where equipment can be cleaned. Clean all equipment before entering National Forest System lands; a Forest Officer, in coordination with the Unit Invasive Species Coordinator, needs to approve use of on-Forest cleaning sites in</p>

<p><b>2) Avoid or remove sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds. (cont.)</b></p>	<p>advance. This practice does not apply to service vehicles traveling frequently in and out of the project area that will remain on a clean roadway. Seeds and plant parts need to be collected when practical and incinerated.</p> <p>2.4) If operating in areas infested with weeds, clean all equipment, before leaving the project site. To minimize time spent cleaning equipment time all work in infested areas last and concurrently, designate a “contaminated” parking lot where project vehicles working in the infested area may be parked for the duration of the project. This area should be monitored in follow-up mitigation and should be near a “clean” vehicle/equipment lot. Identify sites where equipment and vehicles can be cleaned before leaving site at end of project. Seeds and plant parts need to be collected when practical and incinerated.</p> <p>2.5) Workers need to inspect, remove, and properly dispose of weed seed and plant parts found on their clothing and equipment after being trained to recognize the priority species in the area. Proper disposal means bagging the seeds and plant parts and incinerating them.</p> <p>2.6) Coordinate project activities between resources and between agencies (such as City, County, ADOT, ASLD) with any nearby weed treatments, including herbicide applications, to maximize cost effectiveness of weed treatments.</p>
<p><b>3) Prevent the introduction and spread of weeds caused by moving infested sand, gravel, borrow, and fill material in Forest Service, contractor and cooperator operations.</b></p>	<p>3.1) Inspect material sources on site annually, and ensure that they are weed-free before use and transport. Treat weed-infested sources for eradication, and strip, stockpile, and treat contaminated material before using pit materials.</p> <p>3.2) Inspect and document the areas where materials are used (including those from treated weed-infested sources) annually for at least three years after project completion to ensure that any weeds transported to the site are promptly detected and controlled.</p> <p>3.3) Maintain stockpiled, un-infested material in a weed-free condition.</p> <p>3.4) Work with the responsible transportation agencies to adopt these practices for maintenance of roads that cross National Forest System lands.</p>
<p><b>4) Avoid creating soil conditions that promote weed</b></p>	<p>4.1) Minimize soil disturbance to the extent practical, consistent with project objectives.</p>

<p><b>germination and establishment</b></p>	<p>4.2) In those vegetation types that have relatively closed canopies as a natural condition, retain shade to the maximum extent possible to suppress weeds and prevent their establishment and growth in and around project activity.</p>
<p><b>5) Where project disturbance creates bare ground, establish vegetation to minimize favorable conditions for weeds</b>  <b>5(cont.) Where project disturbance creates bare ground, establish vegetation to minimize favorable conditions for weeds</b></p>	<p>5.1) Treat disturbed soil (except surfaced projects) in a manner that optimizes native plant establishment for that specific site. Define for each project what constitutes disturbed soil and objectives for plant cover revegetation.</p> <p>5.2) Revegetation may include topsoil replacement, native seedbank promotion, planting, seeding, fertilization, and/or weed-seed-free mulching as necessary. Use local native material where appropriate and feasible (or specifically identify why not used). Always use certified weed-free and weed-seed-free hay or straw. Always use certified materials in areas closed by administrative order; refer to Appendix 3 for a sample closure order. Where practical, stockpile weed-seed-free topsoil from the project area and replace it on disturbed areas (e.g. road embankments, staging areas, wash stations, or landings).</p> <p>5.3) Use local seeding guidelines to determine detailed procedures and appropriate mixes. To avoid weed-contamination, a certified seed laboratory needs to test each lot against the all-State noxious weed list to Association of Seed Technologists and Analysts (AOSTA) standards, and provide documentation of the seed inspection test. Seed lots labeled as certified weed-seed-free at time of sale may still contain some weed seed contamination.</p> <p>5.4) Monitor and document all limited term ground-disturbing operations near noxious weed infested areas for at least five growing seasons, or the documented seed viability for the species of concern following completion of the project. For on-going projects, continue to monitor until reasonable certainty is obtained that no weeds have occurred. Provide for follow-up treatments based on inspection results.</p> <p>5.5) Evaluate options, including closure, to minimize future infestations on sites where desired vegetation needs to be established.</p>

<p><b>6) Improve effectiveness of prevention practices through weed awareness and education.</b></p>	<p>6.1) Provide information, training and appropriate weed identification materials to people potentially involved in weed introduction, establishment, and spread on National Forest System lands, including agency managers, employees, forest workers, permit holders, and recreational visitors. Educate them to an appropriate level in weed identification, biology, impacts, and effective prevention measures. Educate resource level managers to allow them to incorporate weed prevention practices in their planning of projects and daily activities.</p> <p>6.2) Provide proficient weed management expertise at each administrative unit. Expertise means that necessary skills are available and corporate knowledge is maintained.</p> <p>6.3) Develop incentive programs encouraging weed awareness, detection, reporting, and for locating new invaders.</p>
<p><b>7) Set the example; maintain weed-free administrative sites.</b></p>	<p>7.1) Treat weeds at administrative sites and use weed prevention practices to maintain sites in a weed-free condition.</p>

## Integrated Weed Management Practices for Fire Management Projects and Maintenance Programs

Objective	Best Known Practice
<b>FIRE MANAGEMENT</b>	
	<b><i>Pre-incident - Training and Planning</i></b>
<b>FM-1) Improve effectiveness of prevention practices through weed awareness and education for Incident Management Teams.</b>	<p>1.1) Increase weed awareness, weed identification and weed prevention in all fire training.</p> <p>1.2) Include weed risk factors and weed prevention practices in Resource Advisor duties on all Incident Management Teams and Burn Rehabilitation Teams.</p> <p>1.3) Assign a local weed specialist or include in Resource Advisor duties to the Incident Management Team when wildfire or control operations occur in or near a noxious weed area.</p> <p>1.4) Resource Advisors need to provide briefings that identify operational practices to reduce weed spread, (for example: avoiding known weed infestation areas when locating fire lines). Include this information in shift briefings.</p> <p>1.5) Provide weed identification aids to Field Observers.</p>
	<b><i>Wildfires – General</i></b> - All wildfire weed prevention goals apply except in instances where human life or property is at risk.
<b>FM-2) Avoid or remove sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds.</b>	<p>2.1) Ensure that all outside (rental, other agency or unit) equipment is free of weed seed and propagules before it is accepted by the contracting officers representative.</p> <p>2.2) Maintain a network of airports, helibases, camps, and staging areas in a weed-free condition. Coordinate with local weed specialists to locate and treat practice jump areas to make them weed-free.</p> <p>2.3) Monitor and treat weeds that establish at equipment cleaning sites after fire incidents.</p> <p>2.4) If safety precautions allow, inspect and clean all fire equipment (boots, shovels, tents, rigs, tankers, water buckets, etc..) prior to moving from weed infested lands or lakes to areas that are not infested. If not possible before-hand, then power wash all equipment in a designated/mapped/monitored wash site (4-6" of cinder/gravel with controlled drainage)</p>

<b>FM-3) Avoid creating soil conditions that promote weed establishment.</b>	3.1) Use appropriate suppression tactics to reduce suppression-induced disturbances to soil and vegetation while minimizing seedbed creation due to disturbance from fire effects.
<b><i>Prescribed Fire</i></b>	
<b>FM-4) Manage fire as an aid in control of weeds to prevent new weed infestations and the spread of existing weeds.</b>	<p>4.1) Pre-inventory project area and evaluate weeds present with regard to the effects on the weed spread relative to the fire prescription. Remove weeds (live plants and seed sources) before project initiation.</p> <p>4.2) Plan to avoid or remove existing sources of weed seed and propagules. Avoid ignition and burning in areas at high risk for weed establishment or spread due to burn after effects. Treat weeds that establish or spread because of unplanned burning of weed infestations.</p> <p>4.3) Burn non-infested areas first before entering weed infested sections of the burn. Clean all equipment when project is completed. <b>Or treat and burn all infested areas first to remove seed source then clean equipment and proceed to un-infested areas.</b></p>
<b>FM-5) Avoid creating soil conditions that promote weed germination and establishment.</b>	<p>5.1) Time burns to promote native species and to hinder weed species germination.</p> <p>5.2) Consult weed species-specific information and consider effects of current local conditions on species growth.</p>
<b><i>Fire Rehabilitation</i></b>	
<b>FM-6) Incorporate weed management into project layout and design.</b>	6.1) Evaluate weed status and risks in Burned Area Emergency Rehabilitation plans. When appropriate, apply for Burned Area Emergency Rehabilitation and restoration funding to inventory, control, and monitor weeds. If the presence of weed seed is suspected, request BAER funds to inspect and document for spring emergence.
<b>FM-7) Encourage vegetation establishment as appropriate to the site objectives.</b>	<p>7.1) To minimize weed spread, treat weeds in burned areas as part of the Burned Area Emergency Rehabilitation plan. For adjacent known infestations that will likely spread, remove the potential contaminating seed source and encourage competitive species.</p> <p>7.2) Inspect and document weed establishment at fire access roads, cleaning sites, all disturbed staging areas, and within burned areas; control infestations to prevent spread within burned areas.</p>

	<p>7.3) Seed and straw mulch to be used for burn rehabilitation (for wattles, straw bales, dams, etc.) all need to be inspected and certified free of weed seed and propagules.</p> <p>7.4) Regulate human, pack animal, and livestock entry into burned areas at risk for weed invasion until desirable site vegetation has recovered sufficiently to resist weed invasion.</p>
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**Integrated Weed Management Practices for  
Lands Stewardship Projects and Maintenance Programs**

<b>Objective</b>	<b>Best Known Practice</b>
<b>VEGETATION MANAGEMENT</b>	
	<b><i>Timber Harvest Operations &amp; Stewardship Contracting</i></b>
<b>VM-1) Avoid or remove sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds.</b>	<p>1.1) Treat weeds on contracted projects, emphasizing treatment of weed infestations on existing landings, skid trails, and helibases before activities commence.</p> <p>1.2) Train contract administrators to identify noxious weeds and select lower risk sites for landings and skid trails.</p> <p>1.3) Encourage operators to maintain weed-free mill yards, equipment parking, and staging areas.</p> <p>1.4) Use standard timber sale contract clauses such as WO-C/CT 6.36 to ensure appropriate equipment cleaning.</p>
<b>VM-2) Retain native vegetation in and around project activity and minimize soil disturbance.</b>	<p>2.1) Minimize soil disturbance to no more than needed to meet project objectives. Logging practices to reduce soil disturbance include, but are not limited to:</p> <ul style="list-style-type: none"> <li>▪ Over-snow logging</li> <li>▪ Skyline or helicopter logging</li> <li>▪ Reuse landings, skid trails and helibases when they are weed free</li> </ul> <p>2.2) Minimize period from end of logging to site preparation, re-vegetation, and contract closure.</p>
	<b><i>Post Vegetation Management Operations</i></b>
<b>VM-3) Retain native vegetation in and around project activity and minimize soil disturbance.</b>	<p>3.1) Minimize soil disturbance to no more than that needed to meet vegetation management objectives. Prevention practices to reduce soil disturbance include, but are not limited to:</p> <p>Minimizing heat transfer to soil in burning by:</p> <ul style="list-style-type: none"> <li>• Treating fuels in place (broadcast burning) instead of piling</li> <li>• Using small, tall steep piles</li> <li>• Minimizing fire-line construction</li> <li>• “preference for” forwarding, rather than using skidders carrying logs, rather than skidding</li> <li>• Using hand fellers instead of machines</li> <li>• Using hand piling rather than machine piling</li> </ul>

	<ul style="list-style-type: none"> <li>• Avoiding decking logs in the woods</li> <li>• Using low PSI (impact) equipment (big tires)</li> </ul>
<p><b>VM-4) Encourage native vegetation on bare ground.</b></p>	<p>4.1) Recognize the need for prompt growth of native vegetation, long-term restoration and weed suppression where forested vegetation management has created openings.</p> <p>4.2) Allow natural seedbank to provide vegetation if possible, next preference is for native seed grown from local collections. All seed must be certified weed seed free for all species on the forest noxious weed list.</p>
<p><b><i>RANGE MANAGEMENT</i></b></p>	<p><b><i>Grazing</i></b></p>
<p><b>RM-1) Consider noxious weed prevention and control practices in the management of grazing allotments.</b></p>	<p>1.1) Include weed prevention practices, inspection and reporting direction, and provisions for inspection of livestock concentration areas in allotment management plans and annual operating instructions for active grazing allotments.</p> <p>1.2) For each grazing allotment containing existing weed infestations, include prevention practices focused on preventing weed spread and cooperative management of weeds in the annual operating instructions. Prevention practices may include, but are not limited to:</p> <ul style="list-style-type: none"> <li>▪ Maintaining healthy vegetation</li> <li>▪ Preventing weed seed transportation</li> <li>▪ Minimize potential ground disturbance - Altering season of use or Exclusion</li> <li>▪ Weed control methods</li> <li>▪ Revegetation</li> <li>▪ Inspection and Monitoring</li> <li>▪ Reporting</li> <li>▪ Education</li> </ul>
<p><b>RM-2) Minimize transport of weed seed into and within allotments.</b></p>	<p>2.1) If livestock are potentially a contributing factor to seed spread, schedule units with existing weed infestations to be treated prior to seed-set before allowing livestock on those units. Schedule these infested units to be the last in the rotation.</p> <p>2.2) If livestock were transported from a weed-infested area, corral livestock with weed free feed, and annually inspect and treat allotment entry units for new weed infestations.</p> <p>2.3) Designate pastures as unsuitable range to livestock grazing when infested to the degree that livestock grazing will continue to either exacerbate the condition on site or contribute to weed seed spread.</p>

<p><b>RM-3) Maintain healthy, desirable vegetation that is resistant to weed establishment.</b></p>	<p>3.1) Through the allotment management plan or annual operating instructions, manage the timing, intensity (utilization), duration, and frequency of livestock activities associated with harvest of forage and browse resources to maintain the vigor of desirable plant species and retain live plant cover and litter.</p> <p>3.2) Manage livestock grazing on restoration areas to ensure that vegetation is well established. This may involve exclusion for a period of time consistent with site objectives and conditions. Consider practices to minimize wildlife grazing on the areas if needed.</p>
<p><b>RM-4) Minimize ground disturbance.</b></p>	<p>4.1) Include weed prevention practices that reduce ground disturbance in allotment management plans and annual operating instructions. Consider for example: changes in the timing, intensity, duration, or frequency of livestock use; location and changes in salt grounds; restoration or protection of watering sites; and restoration of yarding/loafing areas, corrals, and other areas of concentrated livestock use.</p> <p>4.2) Inspect known areas of concentrated livestock use for weed invasion. Inventory and manage new infestations.</p>
<p><b>RM-5) Promote weed awareness and prevention efforts among range permittees.</b></p>	<p>5.1) Use education programs or annual operating instructions to increase weed awareness and prevent weed spread associated with permittees' livestock management practices.</p> <p>5.2) To aid in their participation in allotment weed control programs encourage permittees to become certified pesticide use applicators.</p>
<p><b><i>WATERSHED MANAGEMENT</i></b></p>	
<p><b>WM-1) Avoid or remove sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds.</b></p>	<p>1.1) Inspect and document for early detection of noxious weed establishment and spread in riparian areas and wetlands. Eradicate new infestations before they become established.</p> <p>1.2) Address noxious weed risks in watershed restoration projects and water quality management plans.</p> <p>1.3) Pay particular attention to practices listed under "General Weed Prevention Practices for Site-disturbing Projects and Maintenance Programs" and "Aquatic Weed Mngt. Practices".</p>

<b><i>Wildlife, and Fisheries</i></b>	
<b>WM-2) Avoid creating soil conditions that promote weed germination and establishment.</b>	<p>1.1) Periodically inspect for weeds and document those areas where wildlife concentrate in the winter and spring resulting in overuse or soil scarification.</p> <p>1.2) Use weed-free materials at big game baiting stations.</p> <p>1.3) For wildlife openings and habitat improvement projects, follow the practices outlined in General Weed Prevention Practices and in Vegetation Management.</p>

**Integrated Weed Management Practices for  
Engineering/Roads/Minerals Projects and Maintenance Programs**

<b>Objective</b>	<b>Best Known Practice</b>
<b>ENGINEERING/ ROADS/ MINERALS</b>	<b>Project Planning</b>
<p><b>ERM-1) Incorporate weed prevention into project layout, design, alternative evaluation, and decisions.</b></p>	<p>1.1) Include weed surveys at the project planning stage as outlined in the General Weed Management Practices.</p> <p>1.2) For timber sale purchaser road maintenance and decommissioning, use standard timber sale contract clauses such as WO-C/CT 6.36 to ensure appropriate equipment cleaning.</p> <p>1.3) For road new and reconstruction conducted as part of public works (construction) contracts and service contracts include contract language for equipment cleaning such as is in WO-C/CT 6.36.</p> <p>1.4) Include weed prevention measures, including project inspection and documentation, in minerals operation and reclamation plans.</p>
	<b>Project Implementation</b>
<p><b>ERM-2) Prevent conditions favoring weed establishment, minimize bare soil conditions and promote vegetation on bare ground.</b></p>	<p>2.1) Ensure that all outside (rental, other agency or unit) equipment brought onto the forest is free of weed seed and propagules before it is accepted by the contracting officers representative.</p> <p>2.2) Schedule and coordinate all earth moving or soil disturbing activities (such as pulling of noxious weed-infested roadsides or ditches) in consultation with the local weed specialist. Do not blade or pull roadsides and ditches that are infested with noxious weeds unless doing so is required for public safety or protection of the roadway. If the ditch must be pulled, ensure the weeds remain on-site. Blade from least infested to most infested areas. When it is necessary to blade noxious weed-infested roadsides or ditches, schedule activity when seeds or propagules are least likely to be viable and to be spread. Minimize soil surface disturbance and contain bladed material on the infested site.</p>

<b><i>Decommissioning and Maintenance</i></b>	
<b>ERM-3) Minimize roadside sources of weed seed that could be transported to other areas.</b>	<p>3.1) Retain bonds until reclamation requirements are completed, including weed treatments, based on inspection and documentation. Require follow-up monitoring based on seed viability in soil of known and potential weed species.</p> <p>3.2) Periodically inspect system roads and rights-of-way for invasion of noxious weeds. Train road maintenance staff to recognize weeds and report locations to the local weed specialist. Inventory weed infestations and schedule them for treatment.</p> <p>3.3) Avoid acquiring water for dust abatement from weed-infested areas.</p> <p>3.4) For timber sale purchaser road maintenance and decommissioning, use contract clauses for equipment cleaning such as WO-C/CT 6.36.</p> <p>3.5) For road maintenance and decommissioning conducted as part of public works (construction) contracts and service contracts include contract language for equipment cleaning such as is in WO-C/CT 6.36.</p> <p>3.6) Treat weeds in road decommissioning and reclamation projects before roads are made impassable. Re-inspect and plan follow-up monitoring and treatment based on initial inspection and documentation.</p>

**Integrated Weed Management Practices for  
Public Services and Aquatic Projects**

<b>Objective</b>	<b>Best Known Practice</b>
	<i>Recreation, Wilderness, and Special Management Areas</i>
<p><b>PS-1) Avoid or remove sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds..</b></p>	<p>1.1) On designated public lands, issue closure orders that specify the use of weed free or weed-seed-free feed, hay, straw, and mulch. Refer to 36 CFR 251.50. Cooperate with State, County, Tribal governments, and other agencies to develop and support publicly available weed-free materials.</p> <p>1.2) Where they exist, post and enforce weed-free feed orders. (FSM 2081.03)</p> <p>1.3) Encourage backcountry pack and saddle stock users to feed stock only weed-free feed for several days before travel on National Forest System lands.</p> <p>1.4) Inspect, brush, and clean animals, especially hooves and legs before entering public land. Inspect and clean tack and equipment.</p> <p>1.5) Tie or hold stock in ways that minimize soil disturbance and avoid loss of desirable native vegetation.</p> <p>1.6) Annually inspect all campgrounds, trailheads, and recreation areas that are open to public vehicle use for weeds; document and treat new infestations.</p> <p>1.7) Maintain trailheads, boat launches, outfitter and public camps, picnic areas, airstrips, roads leading to trailheads, and other areas of concentrated public use in a weed-free condition. Consider high use recreation areas as high priority for weed eradication.</p> <p>1.8) Consider seasonal or full time closure of campgrounds, picnic areas, and other recreation use areas until weeds are reduced to levels that minimize potentials for spread.</p> <p>1.9) In areas susceptible to weed infestation, limit vehicles to designated maintained travel routes. Inspect and document inspections on travel ways for weeds and treat as necessary.</p>

<p><b>PS-2) Promote weed prevention practices through public awareness and education.</b></p>	<p>2.1) Educate public land users to identify common invasive weeds and to avoid recreating in infested areas. If weeds are encountered public should inspect and clean motorized and mechanized trail vehicles of weeds and their seeds.</p> <p>2.2) Post weed awareness messages and prevention practices at strategic locations such as trailheads, roads, boat launches, and forest portals.</p> <p>2.3) In weed-infested areas, post weed awareness messages and prevention practices at roadsides.</p>
<p><b><i>Lands and Special Uses</i></b></p>	
<p><b>PS-3) Avoid or remove sources of weed seed and propagules to prevent new weed infestations and the spread of existing weeds.</b></p>	<p>3.1) Consider weed status of lands when making land acquisition or disposal decisions.</p> <p>3.2) Conduct weed inventories of all lands considered for acquisition.</p> <p>3.3) Land acquisition decisions may require weed control as a condition of sale or exchange.</p> <p>3.4) Include a weed prevention and control provision in all special-use permits, authorizations, or other grants involving ground-disturbing activities. (Reference to sample provision R1-D4 in Appendix 2). Include this provision in existing ground-disturbing authorizations that are being amended for other reasons; consider including this provision by amending existing ground-disturbing authorizations as necessary.</p> <p>3.5) Require weed prevention and control in operating and maintenance plans when authorized activities present a high risk for weed infestation or the location of the activity is vulnerable to weed introduction or spread.</p>
<p><b><i>AQUATIC MANAGEMENT</i></b></p>	
<p><b>AM-1) To prevent new weed infestations and the spread of existing weeds, avoid or remove sources of weed seed and propagules.</b></p>	<p>1.1) Provide outreach to Arizona Game and Fish Department, counties, and other agencies concerning the unique prevention measures and control practices associated with aquatic weeds.</p> <p>1.2) Rinse and inspect boats (including rafts), trailers, and other boating equipment and remove any visible plants, animals, or mud before leaving any waters or boat launching facilities. Drain water from motor, live well, bilge, and transom wells while on</p>

	<p>land before leaving the vicinity. Wash and dry boats, tackle, downriggers, anchors, nets, floors of boats, props, axles, trailers, and other boating equipment to kill weeds not visible at the boat launch. Clean with high-pressure or hot (90 degrees) water, or dry boat and equipment for at least 5 days</p> <p>1.3) Maintain a 100 feet buffer of aquatic weed-free clearance around boat launches and docks.</p> <p>1.4) Promptly post sites if aquatic invasives are found. Confine infestation. Where prevention is infeasible or ineffective, close facility until infestation is contained.</p> <p>1.5) Wash and dry tackle, downriggers, float tubes, waders, and other equipment to remove or kill harmful species not visible at the boat launch.</p> <p>1.6) Avoid moving weed plants from one body of water to another.</p> <p>1.7) Avoid running personal watercraft through aquatic plants near boat access locations. Instead, push or winch watercraft onto the trailer without running the engine. After the watercraft is out of the water, start the engine for 5-10 seconds to blow out any excess water and vegetation. After engine has stopped, pull weeds out of the steering nozzle. Inspect trailer and any other sporting equipment for weed fragments and remove them before leaving the access area. Wash or dry watercraft before transporting to another body of water.</p> <p>1.8) Waterfowl hunters may use elliptical, bulb-shaped, or strap anchors on decoys, because these types of anchors avoid collecting submersed and floating aquatic plants. Inspect waders and hip boots, removing any aquatic plants, and where possible, rinse mud from them before leaving the water. Remove aquatic plants, animals, and mud attached to decoy lines and anchors.</p> <p>1.9) Construct new boat launches and ramps at deep-water sites. Restrict motorized boats in lakes near areas that are infested with weeds. Move sediment to upland or quarantine areas when cleaning around culverts, canals, or irrigation sites. Clean equipment before moving to new sites. Inspect and clean equipment before moving from one project area to another.</p>
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**FOREST SERVICE TIMBER SALE  
CONTRACT CLAUSES**

**WO-C6.36**

C6.36 – EQUIPMENT CLEANING. (7/00) Unless the entire Sale Area is already infected with noxious weeds, Purchaser shall ensure that prior to moving on to the Sale Area all off-road equipment, which last operated in areas known by Forest Service to be infected with noxious weeds, is free of soil, seeds, vegetative matter, or other debris that could contain or hold seeds. Purchaser shall certify in writing that off-road equipment is free of noxious weeds prior to each start-up of timber sale operations and for subsequent moves of equipment to Sale Area. Measures taken to ensure that off-road equipment is free of noxious weeds will be identified. "Off-road equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles. A current list of noxious weeds of concern to Forest Service is available at the Forest Supervisor's Office.

The Purchaser must clean off-road equipment prior to moving between cutting units on this timber sale that are known to be infested with noxious weeds and other units, if any, that are free of such weeds. Sale Area Map shows areas, known by Forest Service prior to timber sale advertisement, that are free of specific noxious weeds species of concern.

Purchaser shall employ whatever cleaning methods are necessary to ensure that off-road equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools are not required.

Purchaser shall notify Forest Service at least 5 working days prior to moving each piece of off-road equipment on to the Sale Area, unless otherwise agreed. Notification will include identifying the location of the equipment's most recent operations. If the prior location of the off-road equipment cannot be identified, Forest Service may assume that it was infested with noxious weed seeds. Upon request of Forest Service, Purchaser must arrange for Forest Service to inspect each piece of off-road equipment prior to it being placed in service.

If purchaser desires to clean off-road equipment on National Forest System land, such as at the end of a project or prior to moving to a new unit that is free of noxious weeds, Purchaser and Forest Service shall agree on methods of cleaning, locations for the cleaning, and control of off-site impacts, if any.

New infestations of noxious weeds, of concern to Forest Service and identified by either Purchaser or Forest Service, on the Sale Area or on the haul route, shall be promptly reported to the other party. Purchaser and Forest Service shall agree on treatment methods to reduce or stop the spread of noxious weeds when new infestations are found.

INSTRUCTIONS: Include in all new contracts.

The Forest Service must identify, on the sale area map, units that are free of specific noxious weed species of concern.

The prospectus for the sale must notify prospective purchasers that maps of these known locations are available from the local Forest Supervisor's Office or Ranger District Station. A list of noxious weeds of concern to the Forest Service (normally included in the Noxious Weed Program Guide) must be available for the purchaser's inspection. The current National Forest Noxious Weed Program Guide, noxious weed atlas, or other data sources, as needed, will be used to determine locations of known infestations.

Significant changes in the status of noxious weed infestations on the sale may require contract modifications to deal with changed conditions. An example might be where new noxious weed infestations are discovered after contract award, which require costly additional methods to prevent the spread of such infestations.

**WO-CT6.36**

CT6.36 – EQUIPMENT CLEANING. (7/00) Unless the entire Sale Area is already infected with noxious weeds, Purchaser shall ensure that prior to moving on to the Sale Area all off-road equipment, which last operated in areas known by Forest Service to be infected with noxious weeds, is free of soil, seeds, vegetative matter, or other debris that could contain or hold seeds. Purchaser shall certify in writing that off-road equipment is free of noxious weeds prior to each start-up of timber sale operations and for subsequent moves of equipment to Sale Area. Measures taken to ensure that off-road equipment is free of noxious weeds will be identified. "Off-road equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles. A current list of noxious weeds of concern to Forest Service is available at the Forest Supervisor's Office.

The Purchaser must clean off-road equipment prior to moving between cutting units on this timber sale that are known to be infested with noxious weeds and other units, if any, that are free of such weeds. Sale Area Map shows areas, known by Forest Service prior to timber sale advertisement, that are free of specific noxious weeds species of concern.

Purchaser shall employ whatever cleaning methods are necessary to ensure that off-road equipment is free of noxious weeds. Equipment shall be considered free of soil, seeds, and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools are not required.

Purchaser shall notify Forest Service at least 5 working days prior to moving each piece of off-road equipment on to the Sale Area, unless otherwise agreed. Notification will include identifying the location of the equipment's most recent operations. If the prior location of the off-road equipment cannot be identified, Forest Service may assume that it was infested with noxious weed seeds. Upon request of Forest Service, Purchaser must arrange for Forest Service to inspect each piece of off-road equipment prior to it being placed in

service.

If purchaser desires to clean off-road equipment on National Forest System Land, such as at the end of a project or prior to moving to a new unit that is free of noxious weeds, Purchaser and Forest Service shall agree on methods of cleaning, locations for the cleaning, and control of off-site impacts, if any.

New infestations of noxious weeds, of concern to Forest Service and identified by either Purchaser or Forest Service, on the Sale Area or on the haul route, shall be promptly reported to the other party. Purchaser and Forest Service shall agree on treatment methods to reduce or stop the spread of noxious weeds when new infestations are found.

INSTRUCTIONS: Include in all new contracts.

The Forest Service must identify, on the sale area map, units that are free of specific noxious weeds species of concern.

The prospectus for the sale must notify prospective purchasers that maps of these known locations are available from the local Forest Supervisor's Office or Ranger District Station. A list of noxious weeds of concern to the Forest Service (normally included in the Noxious Weed Program Guide) must be available for the purchaser's inspection. The current National Forest Noxious Weed Program Guide, noxious weed atlas, or other data sources, as needed, will be used to determine locations of known infestation.

Significant changes in the status of noxious weed infestations on the sale may require contract modifications to deal with changed conditions. An example might be where new noxious weed infestations are discovered after contract award, which require costly additional methods to prevent the spread of such infestations.