

# Decision Memo

## Fossil Creek Interim Management

**USDA Forest Service**  
**Red Rock Ranger District, Coconino National Forest**  
**Payson Ranger District, Tonto National Forest**  
**Coconino and Gila County, Arizona**





Figure 1. Fossil Creek Wild and Scenic River Vicinity Map

## Background

Fossil Creek is located within the administrative boundaries of the Coconino and Tonto National Forest in central Arizona (figure 1) and the site of the first hydrologic power system in Arizona. In 1909 a dam that diverted the entire baseflow for hydropower generation was built across Fossil Creek. In 2005 Arizona Public Service removed the top 14 feet of the Fossil Springs dam and removed the diversion structure. These actions restored full flows to Fossil Creek.

On March 30, 2009, Congress designated (P.L. 111-11) approximately 17 miles of Fossil Creek as a Wild and Scenic River (WSR). Section 10(a) of the Wild and Scenic Rivers Act directs land managers to ensure WSR outstandingly remarkable values (ORVs) are protected and to the extent possible, enhanced. Fossil Creek river values (including outstandingly remarkable values (ORVs) that are at risk include water quality (a river value), recreation, geology (travertine formations), Yavapai Apache traditional and contemporary cultural values and biological. The biological ORVs reflect the river’s high diversity of fish and wildlife species including Arizona’s only pure warm water native fishery.

After full flows were returned to Fossil Creek (2005) public use dramatically increased. For example, visitor use in 2006 increased from 20,000 to 73,000 people by 2010 (Rotert 2012). In 2011 the Red Rock Ranger District (Coconino NF) and the Payson Ranger District (Tonto NF) responded to the continuous increase in visitor demand and resulting resource damage by implementing two National Environmental Policy Act (NEPA) decisions designed to address public health and safety concerns and protect resources. Actions included managing visitor use on weekends and holidays via a mobile entry booth, delineating parking areas and restoring overused areas (USDA FS 2011a, 2011b).

From 2011 to 2016 the Districts continued to develop the Fossil Creek Wild and Scenic River Comprehensive Management Plan (CRMP). The CRMP will provide the detailed management and monitoring direction that is needed to protect and enhance river values in the long term. The CRMP is expected to be final in 2017.

In September of 2015 the Districts proposed additional interim management actions for the purpose of protecting WSR river values and improving public safety. Monitoring of current visitation amounts and impacts has shown impacts to WSR river values that cannot be addressed under current management and infrastructure. Until the CRMP decision is made, the WSR corridor will continue to lack the infrastructure needed to accommodate high visitation numbers while protecting river values (including ORVs). There is a need to effectively manage daily visitation numbers, direct visitors to durable parking areas, manage camping, require visitors to use durable campsites (where adequate sanitation facilities are located) and reduce the potential for water quality impacts.

The protection of public safety is also an issue that must be addressed in the need for change. Search and rescue efforts occur throughout Fossil Creek but are concentrated in the Fossil Springs and waterfall areas. In July 2015, Gila County expressed concern about the volume of search and rescue calls and operations that are conducted in the area. Gila County data (Gila County 2015) indicates 55 incidents occurred throughout the Fossil Creek area in 2015. Of this total approximately 25 incidents were specific to visitors hiking to Fossil Springs. In addition to these incidents, the Gila County Sheriff's Office noted they have participated in 207 assists due to encountering other people who needed help while they responded to the original incident (Koller 2015). Throughout Fossil Creek and specifically for visitors using the Fossil Springs area, there is a need to enhance public safety, awareness and education. Please see the September 16, 2015 scoping letter for detailed information.

## Decision

In response to the purpose and need for action I have decided to implement several actions that support the use of a seasonal reservation system. The area subject to the reservation system is referred to as the permit area (figure 2) which is approximately 5,000 acres in size. While it encompasses a portion of the Fossil Creek Wild and Scenic River corridor, the permit area boundary includes areas where vehicle capacity control is considered essential to protect public health and safety and resources. The following interim actions will be in place through 2017 or until the Fossil Creek Wild and Scenic River Comprehensive River Management Plan (CRMP) is implemented:

- The existing entry stations located on FR 708 will be replaced with temporary entry booths and a 24-hour on-line reservation system. Forest Service personnel will provide visitor information and check reservations. The reservation season will be limited to

times when vehicle capacity control is needed, generally April 1<sup>st</sup> to October 1<sup>st</sup>. Vehicles traveling through on Forest Road (FR) 502 to Childs will not be subject to the reservation system. Tribal traditional cultural activities and uses are exempt from the reservation system.

- Approximately 148 designated parking spaces will be provided within the permit area. This equates to having approximately 740 Fossil Creek visitors per day within the permit area. In the interim, the number of parking spaces and locations will be adjusted if needed to protect river values. Parking locations include Fossil Springs Trailhead, Waterfall Trailhead, Irving, Tonto Bench, Fossil Creek Bridge, Homestead, Sally May, Purple Mountain and Mazatzal (figure 2). The Old Corral site will be closed year-round to vehicle entry to protect resources.
- Boulders, posts and fire hose or other materials will be used as needed to delineate parking areas and spaces. Gravel surfacing will be applied as needed. Parking will be permitted in areas designated off of the main road, with the exception of the Fossil Creek Bridge location where roadside parking will be designated.
- From approximately April 1<sup>st</sup> to October 1<sup>st</sup>, the permit area will be restricted to day use only and no camping will be allowed within the permit boundary. This is intended to eliminate the potential for conflict between day-use and overnight reservations. Outside of the reservation season (approximately April 1<sup>st</sup> to October 1<sup>st</sup>), camping will be allowed at specific locations including Homestead, Purple Mountain, Sally May and Mazatzal.
- Camping from Stehr Lake to Childs (via FR 508) and outside the permit boundary on FR 708, will continue to be available year-round and access to campsites via motor vehicle will continue to be displayed on the Coconino National Forest Motorized Vehicle Use Map (MVUM).
- Two gates and associated traffic spikes will be installed within the FR 708 road corridor (in the vicinity of the junction of FR 502 and FR 708 and in the vicinity of Fossil Springs Trailhead) to prevent after-hours entry (figure 2) but allow those with reservations to exit when the gate is closed. A third gate will be installed at the Homestead site to prevent vehicle access to the lower benches, while allowing pedestrian access. In the off season the lane with traffic spikes will be closed and an additional access lane will be delineated at the Strawberry mobile entry booth/gate to provide access.
- Signs will be installed along FR 708 and FR 502 (figure 2) and at parking areas as needed for public information and safety. Existing kiosks may be rearranged or installed in locations that will be most beneficial to visitors.
- Approximately 100 feet of wire and post fencing will be installed at the Waterfall Trailhead to reduce the potential for vegetation loss from new social trails.
- Fire and glass prohibitions which are currently in place will continue.
- Recreation permits may be available through an application process (separate than the reservation system) for large groups.

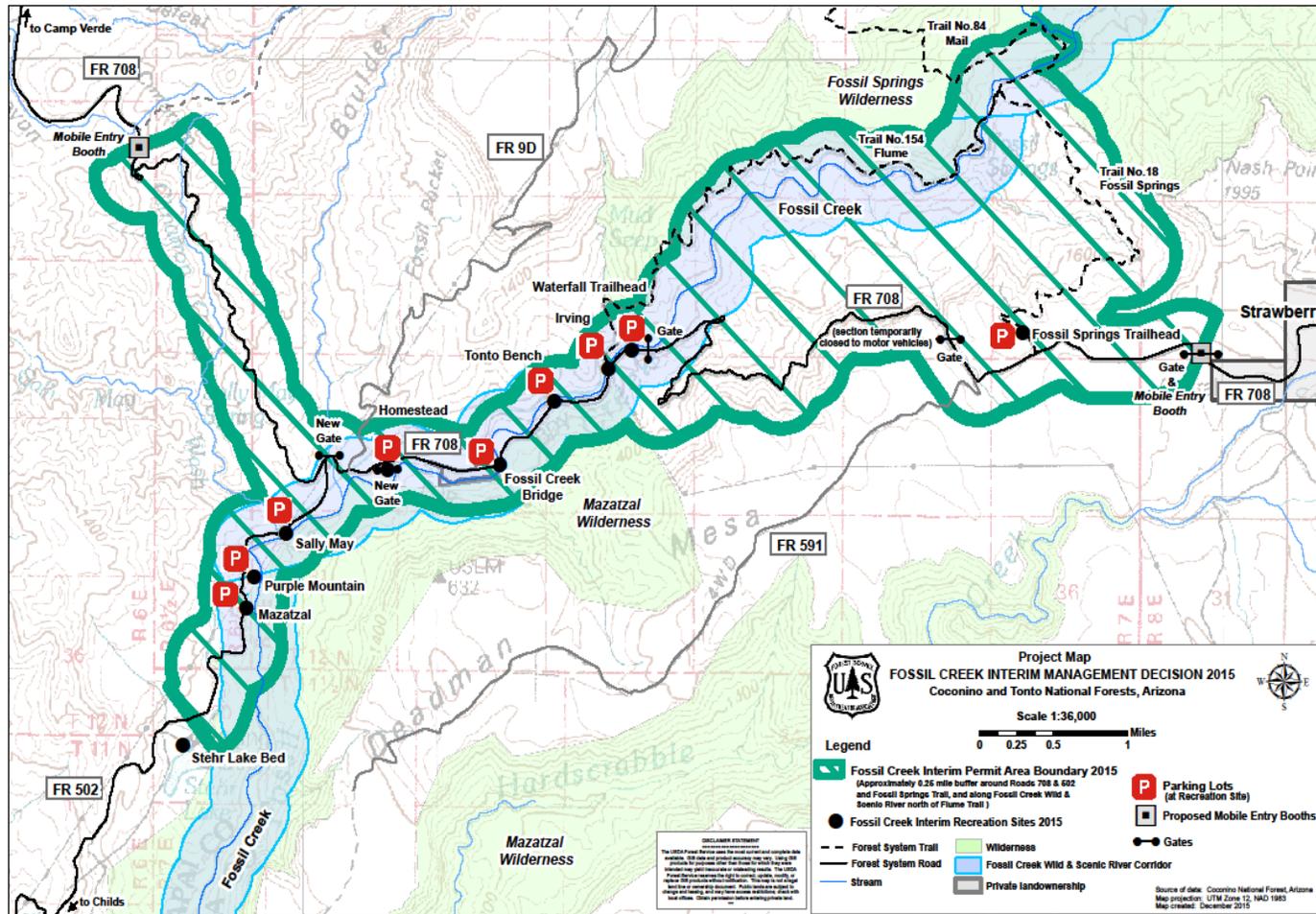


Figure 2. Fossil Creek Interim Management Permit Area Boundary and Parking Lot Locations

The following soil and water best management practices, cultural resources design features and monitoring requirements are integral to this decision:

**Table 1. Fossil Creek Interim Management Best Management Practices and Design Features**

Resource No.	Best Management Practice or Design Feature	Objective
<b>Soil and Watershed (SW)</b>		
SW1	For all ground disturbing activities implement and monitor Best Management Practices prior to project implementation. Installation of gates, signs and fences to correct vehicular and traffic should result in decrease traffic, detachment and transport of soil, reduced sediment delivery into connected streamcourses and protection of water quality downstream. Assure that excavated soil material is placed outside of streamcourse high water marks or floodplains and drainage bottoms.	To minimize impacts to soil and water resources from project implementation, to minimize non-point source pollution, to adhere to the Clean Water Act, and to adhere to the intergovernmental agreement between Region 3 of the Forest Service and the Arizona Department of Environmental Quality.
SW2	Use gravel or other suitable measures to harden and avoid or minimize damage to parking area surfaces that experience heavy use or are used during wet periods.	To minimize impacts to water resources from project implementation, to minimize non-point source pollution into Fossil Creek.
<b>Cultural Resources (CR)</b>		
CR1	No delineated parking area can be expanded within site boundaries.	Protect cultural resources

**Monitoring**

Water quality monitoring will occur within the Fossil Creek permit boundary to ensure the (temporary) recreational capacity identified in this decision will not result in regular or long-term impairments to water quality or be a threat to health and safety. Measurement sampling will be done monthly during the high use season and will increase in frequency as needed. If monitoring is showing a trend towards the water quality exceeding state standards the following actions will be implemented as needed:

- Increase management control using gravelling, boulders, and by increasing ranger presence if needed to encourage compliance with waste management compliance issues.
- Change placement of existing sanitation facilities.
- Conduct targeted education and outreach to improve awareness on the fecal coliform issues and how responsible recreation can help.
- Use additional boulders to discourage recreational impacts.
- Implement temporary or seasonal site closures based on the specific resource issue.

## Decision Rationale

This decision will enhance public safety and the protection of WSR resource values by managing parking and removing the potential for blocked roadways that could hinder emergency vehicle access. My decision addresses the high volume of search and rescue operations that are becoming routine occurrences by providing visitors safety (trip preparedness) and educational materials, particularly for the Fossil Springs area. The suite of actions authorized by this decision will protect resources by managing the area for day-use during the high use season and designating parking in suitable locations where adequate sanitation facilities are located. Areas where resource damage cannot be mitigated while recreation use continues (Old Corral) will be closed. Water quality monitoring will continue to ensure water quality will not be a threat to health and safety. I considered concerns raised during scoping that access for hunting and fishing activities would be diminished. I addressed questions raised from tribes regarding how the reservation system would affect tribal activities. The reservation season will be limited to times when vehicle capacity control is needed, generally April 1<sup>st</sup> to October 1st. Vehicles traveling through on FR 502 to Childs will not be subject to the reservation system. Tribal traditional cultural activities and uses are exempt from the reservation system.

## Public Involvement

This proposal was listed on the Coconino National Forest's Schedule of Proposed Actions (SOPA) on October 1, 2015. In August of 2015 flyers were posted in Fossil Creek advising visitors that management changes were going to be proposed. The flyer provided information on how to be added to the Fossil Creek mailing list. On September 21, 2015 a news release asking for public comment on the proposal was distributed to media and a scoping proposal was sent via email (359 emails) and/or hard copy (253 letters) to approximately 612 interested individuals, organizations, State and Federal agencies and local government including the City of Sedona, Camp Verde and Payson, Yavapai County and the Gila County Board of Supervisors. On September 21, 2015 the scoping letter with supporting documents was posted to the project's website (<http://www.fs.usda.gov/project/?project=47751>) and interested parties were encouraged to submit electronic comments directly into the website. Thirty-six comments were received during the 30-day comment period. Most comments were supportive and cited the volume of use and the amount of trash they observed. A few commenters stated that any restriction in public access was not warranted. Some commenters asked for additional information on how the reservation system would work. Scoping comments and the Forest Service response to these comments is posted on the project's website. A reservation system question and answer document (which provides more information on the system) will be posted to the website with the decision.

During the scoping period the district ranger conducted about 5 interviews with local media and spoke with Congressman Paul Gosar's staff about the project on November 5, 2015. The district ranger met with the Gila County Board of Supervisors and Yavapai County representatives including the Pine-Strawberry Fire Department that conducts search and rescue operations. These agencies voiced support of the interim measures and reservation system. On December 4, 2015 the district ranger met with Arizona Department of Game and Fish and resolved final concerns related to hunting and fishing access. The decision clarifies the reservation season and clarifies what areas would remain unaffected by the reservation system. See the project record for all public involvement documentation.

## Tribal Consultation

On September 21, 2015 scoping letters were sent to the Tonto Apache Tribe, Zuni Pueblo, Salt River Pima-Maricopa Indian Community, Hopi Tribe, Yavapai-Prescott Tribe, Fort McDowell Yavapai Nation, San Carlos Apache Tribe, White Mountain Apache Tribe, the Navajo Nation, and the Yavapai-Apache Nation. On October 6, 2015 an informal meeting with held with the Yavapai-Apache Nation to discuss the proposed reservation system. The Hopi Tribe and the San Carlos Apache Tribe responded in writing and verbal comments were received from the Yavapai Apache Nation. No issues were raised but questions on the reservation system were addressed. In response to comments the decision clarifies that traditional cultural activities and uses are not subject to the reservation system.

## Exclusion from Further National Environmental Policy Act Analysis

This action is categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA). The applicable category is 36 CFR 220.6(d)(1), “Orders issued pursuant to 36 CFR part 261 - Prohibitions to provide short-term resource protection or to protect public health and safety”. This category of action is applicable because this decision, which will be implemented for approximately 2 years, will enhance public safety by managing parking and removing the potential for blocked roadways that could hinder emergency vehicle access. The actions will address the volume of search and rescue operations that occur in the Fossil Springs area by providing visitors safety (trip preparedness) educational materials. The actions will protect resources by managing the area for day-use during the high use season and designating parking in suitable locations where adequate sanitation facilities are located.

Although extraordinary circumstances are present, the effects to extraordinary circumstances would not reach the level of significance, and thus the analysis supports that the degree of effect does not warrant further analysis and documentation in an EA or EIS for the following reasons:

**Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or Forest Service sensitive species** – Table 2 in Appendix 1 summarizes the status of threatened and endangered species, designated critical habitat, species proposed for Federal listing, proposed critical habitat and Forest Service sensitive species. The biological assessment (Agyagos 2015) found the proposed action will have no effect on any threatened, endangered, or sensitive species nor designated or proposed critical habitat. This determination was based on the fact that the project will not alter or impact habitat conditions, nor will they create a disturbance to the threatened and endangered species of concern listed above, but also to all species on the District's 2013 threatened, endangered and sensitive species list (Biological Assessment, p. 10). There will be no change in habitat or population trend for any Coconino and Tonto NF Sensitive Species or Management Indicator Species (2016 MIS Report).

**Flood plains, wetlands, or municipal watersheds** – There are floodplains and wetlands within the decision area but no municipal watersheds or drinking water source areas. The soil and watershed report (Sena 2015) states the amount of soil ground disturbance that would occur from actions is negligible (estimated at about 100 square feet). Soil and water BMP's will be implemented to prevent any non-point source pollution into Fossil Creek by safely removing and depositing excavated soil outside of the high water mark or floodplain.

Compliance with Executive Order 11988 (Floodplains) requires that agencies restore and preserve the natural and beneficial values served by floodplains; evaluate potential effects on floodplains; consider alternatives to avoid adverse effects in floodplains; and minimize potential harm to floodplain function. The decision is compliant with Executive Order 11988 (Floodplains) because the project will not have any potential effect on floodplains. The decision is compliant with Executive Order 11190 (Wetlands) because there will be no anticipated unacceptable effects to wetland areas, riparian areas or perennial streams in the project area (Soil and Watershed Specialist Report, pp. 5-6).

**Congressionally designated areas such as wilderness, wilderness study areas, or national recreation areas** – The Fossil Springs and Mazatzal Wilderness are present and can be accessed from the project (Fossil Creek permit) area. The recreation report states that for Wilderness users, risk and primitive, unconfined recreation is part of the attraction of visiting these places. Backpackers will continue to be able to access the more remote areas of the wild and scenic river corridor, designated wildernesses and national forest system lands outside of the permit area during the reservation season, but could backpack camp within the permit area during the off season (p. 34). This decision would limit any changes to Wilderness character of the Fossil Springs and Mazatzal Wilderness that affect recreation values and Wilderness character. The parking area delineation and permit system activities included in the proposed action will result in no change in the Fossil Springs and Mazatzal Wilderness that would affect wilderness values.

**Inventoried roadless areas or potential wilderness areas** – There is one potential wilderness area (Davey’s) located adjacent to the project area. Davey’s is proposed for designation in the current (February 2016) version of the draft revised Coconino NF forest plan. No actions authorized by this decision will occur within this area. There will be no effect to the potential wilderness designation or any inventoried roadless area.

**Research natural areas** – No research natural areas are within or adjacent to the Fossil Creek permit area. There will be no effect to research natural areas.

**American Indians and Alaska Native religious or cultural sites** – All project activity locations have been surveyed 100 percent and multiple cultural sites are present in the decision area. However, the cultural resources clearance report (Bone 2015) states limited activities associated with continuing to allow the public to park in specific locations will not adversely affect sites. No delineated parking area expansion will be allowed within site boundaries. There will be no adverse effect to any cultural resources from the project. No issues were raised by tribes but questions on the reservation system were addressed. In response to comments the decision clarifies that traditional cultural activities and uses are not subject to the reservation system (also see “Tribal Consultation “section). The State Historic Preservation Office concurred with the Fossil Creek interim management proposals on December 14, 2015.

**Archaeological sites, or historic properties or areas** – All project activity locations have been surveyed 100 percent and multiple cultural sites are present in the decision area. However, the cultural resources clearance report (Bone 2015) states limited activities associated with continuing to allow the public to park in specific locations will not adversely affect sites. No delineated parking area expansion will be allowed within site boundaries. There will be no adverse effect to any cultural resources from the project. Concurrences from the Arizona State Historical Preservation Office (SHPO) was received on December 14, 2015. A second clearance report for an entry gate on the Tonto NF was signed by the

Coconino NF Forest Supervisor on January 13, 2016. No concurrence was needed per the Programmatic Agreement and/or SHPO letter of Oct. 10, 2000. Also see previous section “American Indians and Alaska Native religious or cultural sites” for tribal-related environmental documentation.

## Findings Required by Other Laws and Regulations

This decision is consistent with the Coconino and Tonto National Forest Plan, as amended (USDA FS 1985, 1987). On the Coconino NF, the management areas within the project area includes MA 1 (Fossil Springs and Mazatzal Wilderness), MA 2 (Verde Wild and Scenic River), MA 7 (Pinyon Juniper woodlands less than 40 percent slopes), MA 10 (Grasslands and Sparse Pinyon Juniper above the Rim), MA 11 (Verde Valley), MA 12 (Riparian) and MA 17 (Fossil Springs Botanical Area). On the Tonto NF, the management areas within the project area include 4A (Mazatzal Wilderness on the Payson Ranger District), 4E (Proposed Fossil Springs Natural Area), 4F (Payson Ranger District General Management Area) and 1B (Mazatzal Wilderness that is on the Cave Creek Ranger District). The need for additional management measures is consistent with the Tonto National Forest Plan and the Coconino National Forest Plan direction for WSRs. The ORVs for scenic, fish, wildlife, and historic and cultural values are to be maintained while also protecting the river’s free flowing character (USDA FS 1985, 1987). See the project record for complete forest plan direction related to management of the Fossil Creek WSR and the forest plan consistency evaluation.

### *Clean Water Act*

Public Law 92-500, as amended in 1977 (Public Law 95-217) and 1987 (Public Law 100-4) (also known as the Federal Clean Water Act provides the structure for regulating pollutant discharges to waters of the United States. In Arizona, the designated agency for enforcement of the Clean Water Act is the Arizona Department of Environmental Quality (Soil and Watershed Specialist Report, p. 1). Soil and water best management practices will be implemented as described previously in table 1 to prevent any non-point source pollution into Fossil Creek by safely removing and depositing excavated soil outside of the high water mark or floodplain. Water quality monitoring will be used to inform any management actions that are needed to maintain water quality standards (Soil and Watershed Specialist Report, p. 4).

### *Outstanding Arizona Water Designation*

Fossil Creek was designated as an Outstanding Arizona Water on June 30, 2010. The designation triggers implementation of tier 3 anti-degradation protection. This decision will protect the designation because recreation impacts that can affect water quality will be managed in a sustainable manner (Soil and Watershed Specialist Report, p. 5).

### *Executive Order 12898 - Environmental Justice*

Identification of environmental justice communities relied on comments received during public involvement. The duration of the reservation system (April through October, 2017) and scope of this decision (approximately 5,000 acres) was considered. While some commenters indicated no restrictions on public access should be proposed for the Fossil Creek area, there was no indication that there were environmental justice-related concerns.



## Administrative Review Opportunities

This decision is not subject to administrative review opportunities.

## Implementation Date

This decision will be implemented immediately.

## Contact

For additional information concerning this decision, contact Charlotte Minor, Fossil Creek CRMP Team Leader, Coconino National Forest, 1824 S. Thompson Street, Flagstaff, Arizona, 86001, (928) 527-3474.

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Nicole N. Branton  
District Ranger

Date

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## Appendix 1. Threatened, Endangered, Proposed and Sensitive Species List for the Red Rock Ranger District Coconino National Forest, Fossil Creek Interim Management Project

Table 2. Fossil Creek Interim Project Threatened, Endangered, Proposed and Sensitive Species List

Species Name	Species Status			No Suitable Habitat	Suitable Habitat Present	Suitable Habitat Occupied
	Federal	State	Forest Service			
<b>Mammals</b>						
Western Red Bat, <i>Lasiurus blossevillii</i>	--	1B	Sen			X
Spotted Bat, <i>Euderma maculatum</i>	--	1B	Sen		X	
Allen's lappet-browed Bat, <i>Idionycteris phyllotis</i>	--	1B	Sen			X
Pale Townsend's Big-eared Bat, <i>Corynorhinus townsendii pallescens</i>	--	1B	Sen			X
<b>Birds</b>						
Southwestern willow flycatcher, <i>Empidonax traillii extimus</i>	E	1A	--		X	
Mexican Spotted Owl, <i>Strix occidentalis lucida</i>	T	1A	--	X		
Yuma Clapper Rail, <i>Rallus longirostris yumanensis</i>	E	1A	--	X		
Western Yellow-billed Cuckoo, <i>Coccyzus americanus occidentalis</i>	T	1A	Sen		X	
Bald Eagle, <i>Haliaeetus leucocephalus</i>	--	1A	Sen		X	
American Peregrine Falcon, <i>Falco peregrinus anatum</i>	--	1A	Sen			X
Northern Goshawk, <i>Accipiter gentilis</i>	--	1B	Sen	X		
Burrowing Owl, <i>Athene cucularia</i>	--	1B	Sen	X		
<b>Reptiles and Amphibians</b>						
Chiricahua Leopard Frog, <i>Rana chiricauhuensis</i>	T	1A	--	X		
Narrow-headed Gartersnake, <i>Thamnophis rufipunctatus</i>	T	1A	Sen		X	
Northern Mexican Gartersnake, <i>Thamnophis eques megalops</i>	T	1A	Sen		X	
Lowland Leopard Frog, <i>Rana yavapaiensis</i>	--	1A	Sen			X
Northern Leopard Frog, <i>Rana pipiens</i>	--	1A	Sen	X		



<b>Fish</b>						
Colorado Pikeminnow, <i>Ptychocheilus lucius</i>	E	1A	--	X		
Razorback sucker, <i>Xyrauchen texanus</i>	E	1A	--	X		
Loach Minnow, <i>Tiaroga cobitis</i>	E	1A	--			X
Spikedace, <i>Meda fulgida</i>	E	1A	--			X
Gila Chub, <i>Gila intermedia</i>	E	1A	--	X		
Gila Trout, <i>Oncorhynchus gilae gilae</i>	T	1A	--	X		
Gila Topminnow, <i>Poeciliopsis occidentalis</i>	E	1A	--			X
Headwater Chub, <i>Gila nigra</i>	P	1A	Sen			X
Roundtail Chub, <i>Gila robusta</i>	P	1A	Sen			X
Sonora Sucker, <i>Catostomus insignis</i>	--	1B	Sen			X
Desert Sucker, <i>Catostomus clarki</i>	--	1B	Sen			X
<b>Invertebrates</b>						
A Mayfly, <i>Moribaetis mimbresaurus</i>	--	--	Sen	X		
A Caddisfly, <i>Lepidostoma knulli</i>	--	--	Sen	X		
Balmorhea Saddle-case Caddisfly, <i>Protophila balmorhea</i>	--	--	Sen	X		
A Caddisfly, <i>Wormaldia planae</i>	--	--	Sen			X
<b>Snails</b>						
	--	1A	Sen			X
<b>Fossil Springsnail, <i>Pyrgulopsis simplex</i></b>						
Page Springsnail, <i>Pyrgulopsis morrisoni</i>	--	1A	Sen	X		



<b>Clams</b>						
California Floater, <i>Anodonta californiensis</i>	--	1A	Sen		X	
<b>Plants</b>						
Arizona Cliffrose, <i>Purshia subintegra</i>	T	--	--	X		
Tonto Basin Agave, <i>Agave delamateri</i>	--	--	Sen		X	
Phillips' Agave, <i>Agave phillipsiana</i>	--	--	Sen		X	
Sacred Mountain Agave, <i>Agave verdensis</i>	--	--	Sen		X	
Page Springs Agave, <i>Agave yavapaiensis</i>	--	--	Sen	X		
Mt. Dellenbaugh Sandwort, <i>Arenaria aberrans</i>	--	--	Sen	X		
Rusby's Milkvetch, <i>Astragalus rusbyi</i>	--	--	Sen	X		
Cochise Sedge, <i>Carex ultra</i>	--	--	Sen			X
Arizona Bugbane, <i>Cimicifuga arizonica</i>	--	--	Sen	X		
Metcalf's Tick-trefoil, <i>Desmodium metcalfei</i>	--	--	Sen			X
Rock Fleabane, <i>Erigeron saxatilis</i>	--	--	Sen		X	
Heathleaf Wild Buckwheat, <i>Eriogonum ericifolium var. ericifolium</i>	--	--	Sen	X		
Ripley Wild Buckwheat, <i>Eriogonum ripleyi</i>	--	--	Sen	X		
Flagstaff Pennyroyal, <i>Hedeoma diffusum</i>	--	--	Sen	X		
Eastwood Alum Root, <i>Heuchera eastwoodiae</i>	--	--	Sen		X	
Verde Breadroot, <i>Pediomelum verdiensis</i>	--	--	Sen		X	
Lyngholm's Brakefern, <i>Pellaea lyngholmii</i>	--	--	Sen	X		
Arizona Phlox, <i>Phlox amabilis</i>	--	--	Sen	X		
Alcove Bog Orchid, <i>Platanthera zothecina</i>	--	--	Sen	X		
Hualapai Milkwort, <i>Polygala rusbyi</i>	--	--	Sen	X		
Erter's Rose, <i>Rosa woodsii var. erterae</i>	--	--	Sen	X		
Mearns Sage, <i>Salvia dorrii spp. mearnsii</i>	--	--	Sen	X		