



EA: R3-COR-09-002

United States

Department of
Agriculture

Forest
Service

Environmental Assessment

RESTORATION OF VEHICLE ACCESS TO HIGH CREEK ROAD



**Coronado National Forest
Safford Ranger District
Graham County, Arizona**

**Southwestern
Region**

SEPTEMBER 2009

**For More Information Contact:
Mr. Walter Keyes
Coronado National Forest
300 West Congress Street
Tucson, AZ 85701
(520) 388-8416**

ENVIRONMENTAL ASSESSMENT

RESTORATION OF VEHICLE ACCESS TO HIGH CREEK ROAD

SEPTEMBER 2009

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because of all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means of communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800) 79503272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Printed on recycled paper---September 2009

TABLE OF CONTENTS

SUMMARY	i
CHAPTER 1—INTRODUCTION	1
1.1 BACKGROUND	1
1.2 PURPOSE AND NEED	1
1.3 PROPOSED ACTION.....	3
1.4 DECISION FRAMEWORK.....	3
1.5 PUBLIC INVOLVEMENT	3
1.6 FOREST PLAN CONSISTENCY	4
1.7 EA CONTENT AND FORMAT	5
CHAPTER 2—ALTERNATIVES, INCLUDING THE PROPOSED ACTION.....	7
2.1 NO ACTION	7
2.2 PROPOSED ACTION.....	7
2.3 COMPARISON OF IMPACTS OF THE ALTERNATIVES.....	8
CHAPTER 3—ENVIRONMENTAL CONSEQUENCES.....	9
3.1 PROPOSED ACTION.....	9
3.1.1 Air Quality	9
3.1.2 Soils.....	10
3.1.3 Water Resources	11
3.1.4 Vegetation and Wildlife	12
3.1.5 Special-status Species.....	12
3.1.6 Heritage Resources	13
3.1.7 Visual Quality	14
3.1.8 Recreation	14
3.1.9 Community Resources.....	14
3.1.10 Cumulative Impacts	15
3.2 IMPACTS OF NO ACTION.....	15
CHAPTER 4—CONSULTATION AND COORDINATION	17
CHAPTER 5—LIST OF PREPARERS	19

SUMMARY

This pre-decisional environmental assessment (EA) was prepared by the U.S. Department of Agriculture, Forest Service, Coronado National Forest (Forest), in compliance with the National Environmental Policy Act (NEPA), to publicly disclose the results of an environmental impact analysis of a proposed Forest Service action. The proposed action is to restore public vehicular access to National Forest System (NFS) lands in the High Creek area, which is located on the eastern side of the Galiuro Mountains on the Safford Ranger District.

In 2003, two private landowners installed locked gates at the entry points of High Creek Road [National Forest System Road (NFSR) 150] to and through their lands within and outside the Forest boundary (see Figure S-1). Since then, High Creek Road west of and contiguous with the private land has been inaccessible to public vehicular traffic via an authorized NFSR. Forest users have since used an unauthorized road that extends south from NFSR 693A (Harrison Canyon Road) to join High Creek Road at a location about 1 mile west of the locked gate. This unauthorized road has poor structural support during wet periods, and its use has caused resource damage along its length.

To restore access to the High Creek area via an authorized NFSR that meets agency engineering standards, the Forest proposes to maintain and reconstruct a 0.9-mile segment of NFSR 693A, including the crossing across Harrison Canyon stream; construct a 0.7-mile segment of new road; reconstruct 0.2 miles of unauthorized road from the new segment of roadway to its junction with High Creek Road; and decommission about 0.6 miles of unauthorized road that is currently being used to access High Creek Road from NFSR 693A. All of these components of the proposed action are shown on Figure S-1. About 2.7 acres total would be disturbed. Upon completion of the proposed reconstructed and constructed roadway that connects NFSR 693A (Harrison Canyon Road) to NFSR 159 (High Creek Road), the proposed roadway will be designated as an NFSR.

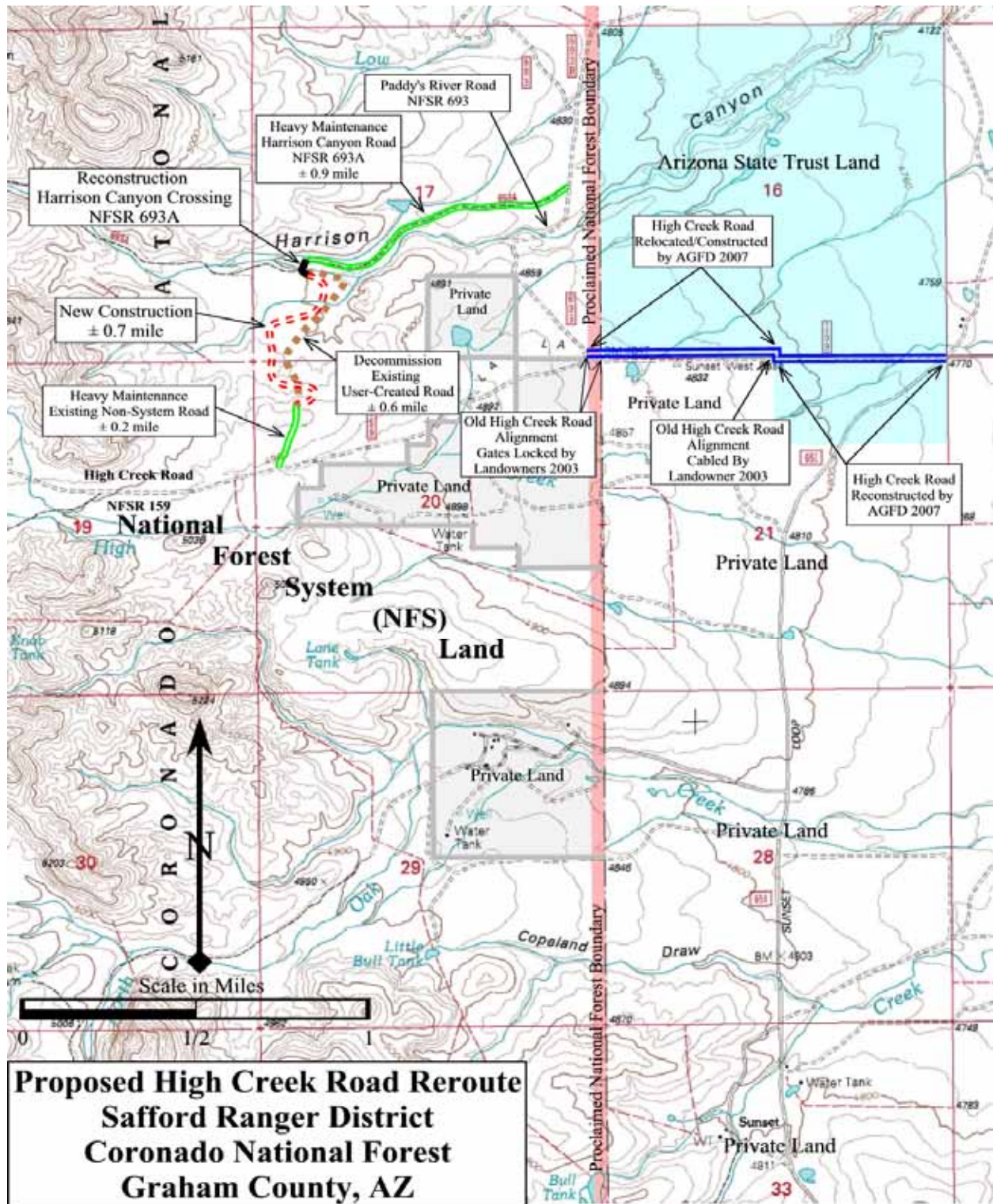
Alternatives evaluated in this EA include the proposed action and no action, the latter of which is required by Council on Environmental Quality regulations at 40 CFR 1502.14.

Using the best available commercial and scientific information, Forest resource specialists evaluated the potential for the proposed action to affect the environment. The following discussion reports their findings.

IMPACTS OF THE PROPOSED ACTION

Air Quality

Implementation of the proposed action would result in sporadic, localized, short-term particulate emissions from disturbed soils and sporadic, localized, short-term particulate and gaseous emissions from operation of construction vehicles and equipment. Best Management Practices in Arizona Administrative Code R-18-2-604 through 607 and Arizona Administrative Code R-18-2-804, as well as those specified in Forest Service Manuals and Directives will be followed to minimize particulate emissions.



1
 2 **Figure S-1. Location of High Creek Road access restoration project on the Safford Ranger District, Coronado National Forest, showing areas of new construction, reconstruction,**
 3 **maintenance and decommissioning.**
 4

1 **Soils**

2 Implementation of the proposed action has the potential to cause soil erosion. Best Management
3 Practices will be implemented during construction to minimize erosion.
4

5 **Water Resources**

6 The potential for soil erosion and sediment runoff to the Harrison Creek and High Creek
7 watersheds will be minimized by the use of Best Management Practices for erosion control.
8

9 **Vegetation and Wildlife**

10 About 1.2 acres of typical grassland and scrub vegetation would be cleared for new road
11 construction. Vegetation in this location consists of perennial native and non-native grasses,
12 forbs, shrubs, cholla, and a few oak and manzanita less than 9 inches diameter at breast height.
13 None of these are special-status species, and their loss would not affect the character of the
14 ecosystem. Displaced common wildlife species in the area would use similar habitat nearby
15 during construction.
16

17 **Special-Status Species**

18 There are no Federally listed species and designated critical habitat in the project area. Three
19 Forest Service, Region 3, sensitive species occur in the project area: Gould’s wild turkey
20 (*Meleagris gallopavo mexicana*), tiger beetle (*Amblycheila baroni*), and common blackhawk
21 (*Buteogallus anthracinus*). While the project “may incidentally impact individuals, it would not
22 adversely affect populations of these species and result in a trend toward Federal listing”.
23

24 **Heritage Resources**

25 Three recorded heritage sites and one isolated occurrence in the project area would be protected
26 by requirements for their avoidance during construction. With this condition, the Forest
27 Archaeologist found that the proposed action would result in “no historic properties affected”.
28

29 **Visual Quality**

30 The new road would slightly alter the visual character of the project area. The project area is
31 located in Management Area 4. The visual quality objective applicable to this area, as specified
32 in the Forest Plan, is “modification”, which allows evidence of human actions. Thus, the project
33 would be compatible with the VQO and Forest Plan.
34

35 **Recreation**

36 The proposed action would benefit recreational use of the Forest by restoring public vehicle
37 access to the High Creek area.
38
39
40

1 **Community Resources**

2 Improved access to the High Creek area would not disproportionately affect low income or
3 minority populations. Restoration of emergency and administrative vehicle access to the same
4 area would be beneficial to public and agency health and safety.

5 **Cumulative Impacts**

6 Past, present, and future use of the project area is recreational, consisting of hiking, hunting,
7 horseback riding, off-highway vehicle use, and camping. These type of activities would be
8 expected to continue and possibly increase after the project is completed . Implementation of the
9 proposed action would have local, short-term minimal impacts on ambient air quality, which in
10 combination with past, present, and future uses, would have no adverse cumulative impacts on
11 the project area.

CHAPTER 1—INTRODUCTION

1.1 BACKGROUND

This pre-decisional environmental assessment (EA) was prepared by the U.S. Department of Agriculture, Forest Service, Coronado National Forest (Forest), in compliance with the National Environmental Policy Act (NEPA), to publicly disclose the results of an environmental impact analysis of a proposed Forest Service action. The proposed action to reroute National Forest System Road (NFSR) 159 (High Creek Road) will restore public vehicular access to National Forest System (NFS) lands in the High Creek area, which is located on the eastern side of the Galiuro Mountains on the Safford Ranger District (Figure 1-1).

High Creek Road crosses private, Arizona state trust, and NFS lands. Beginning in the early 1900s, it served as the primary public and Forest Service-administrative vehicular access route to the High Creek area of the Forest. Until access was closed by private landowners, it provided direct vehicle access to areas of widely dispersed recreation activities, including the trailhead for Forest Trail 290, a popular hiking and equestrian trail into the Galiuro Wilderness Area.

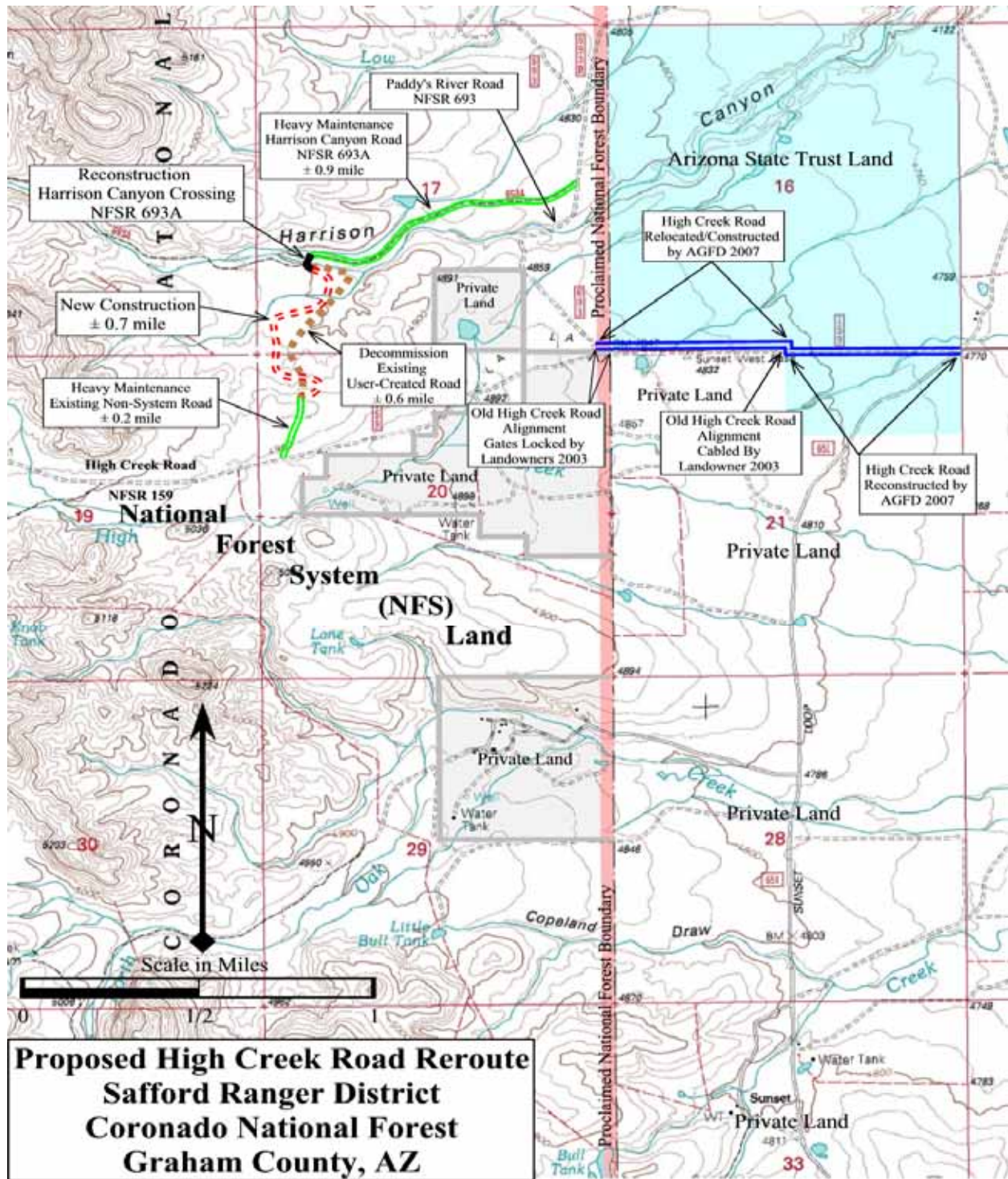
Unfortunately, there is no documented legal access (written title) for any portion of High Creek Road that crosses private land either within or outside the proclaimed¹ National Forest boundary. Without it, the public does not have direct access to the High Creek area and must use an unauthorized (non-NFS) road that leads from Harrison Canyon Road (NFSR 693A) south to a junction with High Creek Road. Lack of direct access also impedes Forest Service fire and other crews from prompt responses to emergency situations.

In 2006, after several unsuccessful attempts by both the Arizona Game and Fish Department (AGFD) and the Forest Service to negotiate with the landowners for legal public access to High Creek Road, the AGFD was granted a right-of-way by the Arizona State Land Department to relocate about ½ mile of High Creek Road that lies outside the Forest boundary (i.e., on private land) to state land as well as reconstruct an additional ½ mile across state land (Figure 1-1). In 2007, the AGFD completed the relocation project, which restored public and administrative vehicle access from the east (Sunset Loop Road) to Paddy’s River Road (NFSR 693). However, it did not resolve the access issue resulting from the closure of High Creek Road where it enters private land within the Forest boundary.

1.2 PURPOSE AND NEED

The purpose of the proposed action is to re-establish an authorized NFSR that meets Forest Service engineering standards between High Creek Road and Paddy’s River Road, bypassing private land. This action will satisfy the agency’s need to provide permanent legal access to public, agency, and other vehicles en route to the High Creek area and Galiuro Wilderness.

¹ Boundary was defined by Presidential proclamation.



2
3 **Figure 1-1. Location of High Creek Road access restoration project on the Safford Ranger District, Coronado National Forest, showing areas of new construction, reconstruction,**
4 **maintenance and decommissioning.**
5

1 **1.3 PROPOSED ACTION**

2 To restore access to the High Creek area via an authorized NFSR that meets agency engineering
3 standards, the Forest proposes to maintain and reconstruct a 0.9-mile segment of NFSR 693A
4 including the road stream-crossing across Harrison Canyon; construct a new 0.7-mile segment of
5 road; reconstruct 0.2 miles of unauthorized road from the new segment of roadway to its junction
6 with the High Creek Road; and decommission about 0.6 miles of unauthorized road that is
7 currently being used to access High Creek Road from NFSR 693A. All of these components of
8 the proposed action are shown on Figure 1-1.

9 Upon completion of the proposed reconstructed and constructed roadway that connects NFSR
10 693A (Harrison Canyon Road) to NFSR 159 (High Creek Road), the proposed roadway will be
11 designated as an NFSR.

12 All access to the project area would be on existing roads.

13 **1.4 DECISION FRAMEWORK**

14 Based in part on the findings of the impacts analysis disclosed in this EA, the Safford District
15 Ranger will make a decision on the following:

- 16 • Whether or not to approve the implementation of the proposed action;
- 17 • What, if any, mitigation measures will be implemented to protect resources in the project
18 area; and
- 19 • Whether or not the project is consistent with the direction in the governing Coronado
20 National Forest Land and Resource Management Plan (Forest Plan; 1986, as amended).

21
22 **1.5 PUBLIC INVOLVEMENT**

23 The project has been listed continuously on a Schedule of Proposed Actions (SOPA) on the
24 Forest’s public website (www.fs.fed.us/r3/coronado) since April 2009. On April 27, 2009, a
25 Scoping Notice, advising the public about the proposed action was distributed to a list of
26 interested parties and stakeholders in the project area (Project Record, Item #3). Government-to-
27 government scoping letters were also sent to 12 native American Tribes having traditional ties to
28 the project area (Project Record, Item #33).

29
30 Twenty-three (23) comment letters or electronic mail messages were received in response to
31 scoping (Project Record, Items # 11-30, 32). Most of the comments expressed advocacy for the
32 project. One letter expressed concern about protection of heritage resources in the project area
33 during construction. This letter was reviewed by Forest archaeologists, who addressed heritage
34 issues in the analysis in Chapter 3 of this EA. Another comment letter expressed concern about
35 impacts to wildlife during construction. This letter was reviewed by the District Biologist, who
36 incorporated mitigation into the project design to protect potentially affected species. One
37 comment was received from the Hopi Tribe, who concurred that, with adherence to heritage-site
38 avoidance recommendations, no historic properties will be affected by this proposal (Project
39 Record, Item #34).

40
41 This pre-decisional EA will be distributed to interested parties and stakeholders for a 30-day
42 public review and comment period prior to a decision being made (36 CFR 215.6). The 30-day

1 comment period begins on the first day after publication of a legal notice in the newspaper of
2 record, which for this proposal, is the *Eastern Arizona Courier*, Safford, Arizona.

3
4 After the comment period has closed, Forest resource specialists will review all comments that
5 are received and will advise the decision-maker, in this case, the District Ranger, whether or not
6 any additional environmental analysis and/or changes to the proposed action are necessary.

7
8 After the District Ranger is satisfied that the analysis is complete, she will sign a Decision
9 Notice, with Finding of No Significant Impact (DN/FONSI). Legal notice of the decision will be
10 published in the newspaper of record to begin a public appeal period. Only those persons who
11 submitted comments on the pre-decisional EA will be eligible to appeal the decision.
12 Information on the appeal process is found at 36 CFR 215.11 through 215.16.

14 **1.6 FOREST PLAN CONSISTENCY**

15 The National Forest Management Act (16 USC §§ 1600-1614, August 17, 1974) requires that all
16 proposed actions be reviewed for consistency with the governing Forest Land and Resource
17 Management Plan (Forest Plan). The Coronado Forest Plan provides Forest-wide standards and
18 guidelines as well as specific direction applicable to Forest Management Area 4, in which the
19 project area is located (pp. 62-66).

20
21 The proposed action and analysis is tiered to the Coronado Forest Plan of August 4, 1986, as
22 amended and changed; and the final Environmental Impact Statement of July 1986. These
23 documents discuss alternative long-term land uses and the environmental, economic, and social
24 effects of implementing these land uses. The Forest planning process, which began in 1977 and
25 included a great deal of public input, identified *access* as a major issue (p. 6).

26
27 The Forest Plan provides Forest-wide standards and guidelines as well as specific direction
28 applicable to Forest Management Area 4, in which the project area is located. These are as
29 follows:

30 “...*insure (sic) public access to the various parts of the Forest (p. 44); develop the minimum*
31 *transportation system to adequately meet management, protection and utilization needs, but in*
32 *locations that will minimize damage and maximize the values of all resources (p. 44); design*
33 *and construct new roads needed for resource development and management to standards*
34 *identified in the transportation planning for the concerned area (p. 44); bring existing roads and*
35 *trails that are to be retained on the system to a maintainable standard which is suitable for the*
36 *planned use and provide for safety and resource protection; and close, drain, and re-vegetate*
37 *existing roads that are determined to be unneeded for further use (p. 65).*

38
39 A review of the proposed action relative to the standards and guidelines resulted in a
40 determination that it is consistent with the Forest Plan, and the stated management emphasis for
41 Management Area 4, and that no amendments to the Plan are necessary prior to implementation
42 of the action.

1 **1.7 EA CONTENT AND FORMAT**

2 The Forest Service prepared this EA to comply with the environmental review requirements of
3 the NEPA of 1969 (Public Law 19-90). The EA reflects the content requirements established in
4 the President’s Council on Environmental Quality (CEQ) Regulations Implementing the
5 Procedural Provisions of NEPA (40 CFR Parts 1500 to 1508) and in Forest Service NEPA
6 regulations at 36 CFR 220. The document is organized as follows:

- 7 • *Summary*. This stand-alone section defines the proposed action and alternatives, reports the
8 findings of impacts analyses, and identifies mitigation measures.
- 9 • *Chapter 1. Introduction*. This section discusses the background of the project, explains the
10 purpose of and need for Federal agency action, and describes the action proposed to satisfy
11 the stated purpose and need. Also in this section is a summary of public participation in the
12 NEPA review process.
- 13 • *Chapter 2. Proposed Action and Alternatives*. This section provides a detailed description of
14 the proposed action, reasonably foreseeable alternatives to the proposal, and mitigation
15 measures. It concludes with a summary table of the environmental consequences of
16 implementing each alternative.
- 17 • *Chapter 3. Environmental Consequences*. This section provides detailed analyses of the
18 potential environmental impacts of implementing the proposed action and alternatives. The
19 affected environment, which defines baseline conditions against which changes would be
20 measured, is described first, followed by the effects of both the proposed action and
21 alternatives.
- 22 • *Chapter 4. Consultation and Coordination*. This section lists parties consulted during
23 preparation of the EA.
- 24 • *Chapter 5. List of Preparers*. This section acknowledges the contributions and affiliations of
25 those who prepared the impacts analysis reported in the EA.

26
27 The pre-decisional EA and Administrative Record for the NEPA review are available for public
28 review at the Safford Ranger District Office, 711 14th Avenue Safford, Arizona (928) 428-4150.
29 These documents can be reviewed Monday through Friday between the hours of 8:30 a.m. and
30 4:00 p.m., excluding Federal holidays.
31

1
2
3
4

CHAPTER 2—ALTERNATIVES, INCLUDING THE PROPOSED ACTION

2.1 NO ACTION

No action is included as an alternative to the proposed action, in accordance with the requirements of CEQ regulations [40 CFR Part 1502.14(d)]. It provides a baseline against which the impacts of the proposed action may be compared. If no action is taken, High Creek Road would not be connected with Harrison Canyon Road, and there would continue to be no documented, permanent legal access to the High Creek area of the Forest. Public use of an unauthorized road to access the High Creek area would be expected to continue.

2.2 PROPOSED ACTION

To restore access to the High Creek area, the Forest proposes the following activities, all of which would be undertaken entirely on NFS land. The project would affect a total of about 3.4 acres over a distance of 2.7 miles. The following actions are depicted on Figure 1-1:

- Both general and heavy road maintenance (blading and drainage work, respectively) on Harrison Canyon Road (NFSR 693A) from Paddy’s River Road (NFSR 693) to the Harrison Canyon stream crossing (± 0.9 miles over 1.3 acres); and at the beginning and terminus of a pre-existing unauthorized road that runs from Harrison Canyon Road to a junction with High Creek Road (NFSR 159) west of private land (± 150 feet on 0.04 acres and ± 0.21 miles on 0.26 acres, respectively);
- Reconstruction of Harrison Canyon Road where it crosses Harrison Canyon drainage (± 0.03 acres);
- Construction of a new segment of authorized road (± 0.7 mile on 1.0 acres) to connect Harrison Canyon Road to High Creek Road;
- Decommissioning of a portion of the non-NFS road from Harrison Canyon Road to High Creek Road that is structurally unsound during wet periods (± 0.56 mile on 0.8 acres); and
- Upon completion of the proposed reconstructed and constructed roadway that connects NFSR 693A (Harrison Canyon Road) to NFSR 159 (High Creek Road), the proposed roadway will be designated a NFSR.

The newly constructed road would be unsurfaced (native material) and configured to meet Forest Service Maintenance Level 2 standard, which is applicable to a high-clearance-vehicle road. No import of surface materials would be necessary. Native vegetation (e.g., small manzanita, oak) would be removed from approximately 1.2 acres to construct the new road. Equipment and heavy machinery that would be used during the proposed project include a grader, loader, dozer, dump truck, and water truck (for compaction and dust abatement). All access to the project area would be on existing roads. To avoid potential impacts to the Mexican spotted owl (*Strix occidentalis lucida*), all work will be completed outside of its breeding season, which extends from March 1 to August 31.

1 The project would take about two weeks to complete and is scheduled to be implemented in
 2 2009. Maintenance of the newly created segment of NFSR will be on an “as-needed” or
 3 emergency basis to re-establish the surface and road drainages.

4 **2.3 COMPARISON OF IMPACTS OF THE ALTERNATIVES**

5 Potential impacts of the two alternatives evaluated in this EA are compared in Table 2-1.
 6
 7

Table 2.1: Comparison of the impacts of no action and the proposed action.

Resource	No Action	Proposed Action
AIR QUALITY	No potential for degradation of ambient air quality beyond fugitive dust emissions from public vehicular travel to High Creek area on unauthorized road.	Localized, sporadic, temporary fugitive dust emissions of particulates from soil disturbance and particulate and gaseous exhaust emissions from vehicles and construction machinery. No violation of National Ambient Air Quality Standards.
SOILS	Use of unauthorized road would continue to cause localized erosion.	The top layer of soils would be disturbed. No loss in soil productivity beyond the roadway. Best Management Practices will be required for erosion control.
WATER RESOURCES	Use of unauthorized road to access High Creek area would continue to cause resource damage during wet periods.	No adverse impacts to water resources with proper erosion control. The project area does not lie within riparian areas, floodplains, wetlands or municipal watersheds.
VEGETATION AND WILDLIFE	No change in current conditions.	Vegetation and wildlife are typical of the area. Loss of 1.2 acres of vegetation would have negligible impacts on the ecosystem. Wildlife temporarily displaced by the project would use similar adjacent habitat.
SPECIAL-STATUS SPECIES	No change in current conditions.	No Federally listed species and habitat occur in the project area. Individuals of three Forest Service, Region 3, sensitive species may be incidentally impacted, but there would be no effects on populations and no trend toward Federal listing.
VISUAL QUALITY	No change in current conditions.	The visual quality objective in the Forest Plan applicable to Management Area 4 is “modification”. The proposed addition of a new segment of road to the area is compatible with this VQO.
HERITAGE RESOURCES	No change in current conditions..	Four recorded sites in the project area would be avoided during construction to protect their integrity. A determination of “no historic properties affected” was made.
CUMULATIVE IMPACTS	No change in current conditions.	Short-term air quality impacts from the proposed action would not result in adverse cumulative impacts in combination with other sources of air pollutants in the area.

CHAPTER 3—ENVIRONMENTAL CONSEQUENCES

Generally, this chapter of an EA describes the characteristics of natural and human resources in an area potentially affected by a proposed action to provide a baseline or benchmark against which changes (i.e., impacts) resulting from the alternatives can be measured. Following the description of the affected environment, the potential for direct, indirect, and cumulative impacts to each affected resource is discussed.

Because the project area is not located in a Wilderness, Wilderness Study Area, National Recreation Area, Inventoried Roadless Area, or Research Natural Area (Project Record, Item #36), there is no potential for impacts to these resources, and they are not discussed in the analysis that follows.

The potential exists for the proposed action to affect air quality, soils, water resources; aquatic and terrestrial biota, including special status species; recreation; visual resources; heritage resources; and health and safety. Therefore, the focus of the discussion that follows is on these resources.

Finally, the impacts of the proposed action are considered in combination with the known or potential impacts of other past, present, and future actions in the area of potential effect to determine the likelihood of cumulative adverse impacts. Actions whose impacts were considered additively with the proposed action include recreational use of the Forest, including off-road vehicle travel; past and future firewood harvests; grazing; and randomly occurring wildland fire.

3.1 PROPOSED ACTION

3.1.1 Air Quality

Regulatory Framework

To conserve and protect the ambient air quality of the United States, provisions of the Clean Air Act (CAA) directed the U.S. Environmental Protection Agency (EPA) to establish the National Ambient Air Quality Standards (NAAQS) for air pollutants that affected human health and welfare. The CAA also directed the EPA to establish criteria to protect and maintain clean air in natural areas such as natural wilderness areas, national parks and forests.

Subsequently, the EPA established NAAQS for primary air pollutants that are known to adversely affect human health. These are: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), sulfur dioxide (SO₂), and particulate matter (PM). Threshold concentrations of these pollutants were established, and networks of ambient air pollutant monitoring stations record data on air quality across the United States. Enforcement actions are taken by the EPA and various states to remediate violations of NAAQS and improve air quality.

1 **Affected Environment**

2
3 The project area is not within either a Class I Air Quality or an NAAQS non-attainment area, as
4 reported by the Arizona Department of Environmental Quality (ADEQ)² (Project Record, Item
5 #10).
6

7 **Direct and Indirect Impacts**

8
9 Potential sources of direct impacts to air quality from construction activities include the fugitive
10 dust released to the air during ground disturbance and vehicle travel, especially on dirt roads, and
11 gaseous and particulate (PM) emissions from operation of heavy machinery and equipment. A
12 potential source of indirect impacts to air quality is wind erosion of soils disturbed during
13 construction.
14

15 The project’s direct impacts on ambient air quality would be sporadic, localized and temporary,
16 and dependent on weather conditions. PM emissions from ground disturbance would be
17 minimized by the regular application of water or other dust retardant from a sprayer truck. Best
18 Management Practices in Arizona Administrative Code R-18-2-604 through 607 and Arizona
19 Administrative Code R-18-2-804, as well as those specified in Forest Service Manuals and
20 Directives will be followed to minimize particulate emissions³. A specific BMP that applies to
21 the project is that no work will be done when winds are greater than 25 mph at a point 6 feet
22 above the ground. A measurable increase in ambient concentrations during the project of PM is
23 not foreseen, and there would be no violation of the NAAQS for PM.
24

25 Sporadic releases of vehicle and heavy equipment exhaust would add discountable quantities of
26 CO, Pb, NO₂, SO₂, hydrocarbons, and PM to the atmosphere in the immediate area of operation.
27 These emissions would be quickly dispersed and diluted, so there would be no measurable
28 change in ambient air quality and no violation of NAAQS.
29

30 **3.1.2 Soils**

Affected Environment

Soils along the proposed construction and reconstruction route are very deep, cobbly, sandy
loams⁴ found on slopes ranging from 0 to 5 percent; none of these soil types are considered to be
prime or unique farmland. “Prime” farmland is defined as land that has the best combination of
physical and chemical characteristics for producing food and other agricultural crops. “Unique
farmland is land other than prime farmland that is used for production of specific high-value
food and fiber crops, as determined by the U.S. Secretary of Agriculture. Thus, impacts to soil
productivity are not an issue in the project area.

² <http://www.azdeq.gov/environ/air/plan/notmeet.html>

³ Guide to Agricultural PM10 Best Management Practices", <http://www.azdeq.gov/environ/air/plan/download>

⁴ Aridic Haplustalfs, Typic Haplustalfs, Aridic Ustochrepts, and Typic Ustochrepts (Forest Service, Region 3, General Ecosystem Survey)

1 **Direct and Indirect Impacts**

2 Potential sources of direct impacts to soils are disturbance during grading, movement of soil
3 during contouring, and compaction by heavy machinery. Because all but 0.7 mile of the project
4 area consists of existing roads, grading and contouring would have no measurable impact on
5 soils.

6
7 Compaction of the soil on the reconstructed road and the newly constructed road is necessary to
8 achieve the desired road base. Except for the 0.7 mile of new road construction, the roads in the
9 project area are already compacted to some extent. Grading and other heavy equipment activity
10 would affect only the top layer of soils for a short period of time.

11
12 Soils in the project area have moderate or severe erosion potential; therefore, construction crews
13 would be required to implement Best Management Practices [Forest Service Handbook (FSH)
14 2509.22.40] to avoid and/or minimize erosion (Project Record, Item #10).

15

16 **3.1.3 Water Resources**

17 **Affected Environment**

18 The project area is located on the divide between Harrison Creek in the Upper Aravaipa Creek
19 watershed to the north and High Creek in the Upper Ash Creek watershed to the south (see
20 Figure 1-1). Neither Harrison Creek nor High Creek is eligible to be listed as a Wild and Scenic
21 River under the Wild and Scenic Rivers Act of 1968 (16 U.S.C. 1271). The project area does not
22 lie within any riparian areas, wetlands, municipal watersheds or floodplains mapped by the
23 Federal Emergency Management Agency. The crossing of Harrison Canyon stream is
24 floodprone, but it is not mapped as a floodplain (Project Record, Item #10).

25

26 **Direct and Indirect Impacts**

27 A potential source of direct impact to the Harrison Creek and High Creek watersheds is sediment
28 contained in runoff from areas where soil has eroded. Excess quantities of sediment deposited in
29 the creeks create turbidity that can adversely affect respiration in aquatic biota.

30

31 During the construction period, adherence to Best Management Practices will be required to
32 control erosion and minimize the potential for sediment runoff to surface waters [Forest Service
33 Manual (FSM) 7720⁵, Forest Service Handbook (FSH) 7709.56, Chapter 4, and FSH 7709.57].

34

⁵<http://www.fs.fed.us/im/directives/fsh/6609.15/6609.15,21.18-21.21.txt>

3.1.4 Vegetation and Wildlife

Affected Environment

Vegetation in the project area includes desert grasslands that extend upward through piñon, juniper and oak zone into mixed conifers and aspens near the tops of the ridges. The area supports black bear, deer, javelina, mountain lion, bobcat, pronghorn, coyote and other common mammals. Special-status species that use the area are discussed below in Section 3.1.5.

Vegetation within the 0.7-mile length of undisturbed land where the new segment of NFSR 693A would be constructed consists of scattered oak and manzanita, shrubs, perennial native and non-native grasses and forbs; and cholla (Project Record, Item #9). Some of this vegetation would be cleared to create the footprint of the new road.

Direct and Indirect Impacts

A source of potential impact to vegetation would be the removal trees and shrubs to accommodate 0.7-mile of new road. Plant species that would be removed are common in the project area, and their loss would have a negligible impact on the character of the vegetation community. No trees larger than 9-inches diameter at breast height would be removed.

Common wildlife in the project area would use habitat in nearby areas that would support them during their displacement for the short duration of the project.

3.1.5 Special-status Species

Affected Environment

The Safford District Biologist reported that no species listed by the U.S. Fish and Wildlife Service as threatened or endangered under the Endangered Species Act; species proposed for Federal listing; and designated critical habitat occur or forage in the project area (Project Record, Item #6). To avoid the potential for impacts to the threatened Mexican spotted owl (*Strix occidentalis lucida*), all work will be completed outside of its breeding season, which extends from March 1 to August 31.

The project area supports individuals and habitat of three Region 3, Forest Service sensitive species: Gould's wild turkey (*Meleagris gallopavo mexicana*), tiger beetle (*Amblycheila baroni*), and common blackhawk (*Buteogallus anthracinus*) (Project Record, Item #6).

Direct and Indirect Impacts

There would be no effect on species or habitat protected under the Endangered Species Act, because none occur in the project area. The District Biologist found that construction activities "may incidentally impact individuals of three Forest Service sensitive species that occur in the

1 project area, but are not likely to affect populations of the species and cause a trend toward
2 Federal listing “(Project Record, Item #6).

3

4 3.1.6 Heritage Resources

5

6 **Affected Environment**

7 Heritage resources include archaeological and historical sites and properties important to
8 maintaining the traditional beliefs and lifeways of local social groups (“traditional cultural
9 properties”). An archaeological survey of 42 acres was completed in the project area with the
10 objective of inspecting a selection of known sites and surveying areas of proposed ground
11 disturbance. Results of the Heritage Resources Investigation include two newly recorded sites
12 (AR03-05-04-307 and -308); two previously recorded sites (AR03-05-04-164 and -166); and one
13 isolated occurrence (Project Record, Item #32).

14 Native American sites that pre-date European contact include one Classic period habitation with
15 upright slab cimientos, two artifact scatters, and one isolated occurrence. To date, no specific
16 Traditional Cultural Properties have been identified in the area. The one European-American site
17 consists of a small corrugated metal and wood cabin with associated rock alignments and
18 artifacts.

19 Two of the heritage resources documented within the project area have been determined eligible
20 for the National Register of Historic Places. The two undetermined sites and isolated occurrence
21 will be treated as eligible for management purposes.

22 **Direct and Indirect Impacts**

23 Road construction activities have the potential to adversely affect heritage resource sites by
24 directly damaging artifacts or archaeological features and altering their spatial relationships.
25 Additionally, damage to artifacts and features can result from the indirect impacts of road
26 construction activities, such as increased water run-off and erosion. These impacts can
27 compromise various aspects of the integrity of historic properties and diminish their research and
28 interpretive potential.

29 The following avoidance measures are recommended to protect heritage resources:

- 30 • The proposed footprint of the 0.7-mile length of new road shall not be modified.
- 31 • Road construction, reconstruction, and decommissioning activities and future road
32 maintenance shall not occur within recorded site boundaries.
- 33 • Heavy road maintenance activities shall be coordinated with the Forest Archaeologist to
34 avoid both direct and indirect impacts to heritage resources.

35

36 Conditional upon this required avoidance and mitigation, the Forest Archaeologist determined
37 that there would be “No Historic Properties Affected” by the proposed action (Project Record,
38 Item #31). The Heritage Resources Investigation was submitted to representatives of the 12
39 Native American Tribes with traditional ties to southeastern Arizona. One response was

1 received from the Hopi Tribe, who concurred that provided site avoidance recommendations are
2 followed; no historic properties will be affected by this proposal.

3 **3.1.7 Visual Quality**

4 The present visual character of the project area is marked by rolling topography, oak savannah,
5 and grasslands. The project area is located in Management Areas 4 and 7. The Visual Quality
6 Objective (VQO) in the Forest Plan that applies to these MAs is “modification”, which means
7 that management activities may dominate the characteristic landscape but must utilize naturally
8 established form, line, color, and texture. Because the proposed action is compatible with the
9 VQO and road design will be similar to other roads in the area, no adverse impacts on visual
10 quality would result. (Project Record, Item #36).

11 **3.1.8 Recreation**

12 Recreation in the proposed project area is diverse and includes dispersed camping, hiking,
13 hunting, horseback riding and off-highway vehicle activities. The High Creek Trailhead is
14 located in close proximity to the project area. The area is defined in the Forest’s Recreation
15 Opportunity Spectrum (ROS) as “semi-primitive motorized”, which encompasses all of the
16 activities listed above. The proposed action would have beneficial impact on recreation in the
17 area because it will provide permanent legal access to public vehicle traffic on an authorized and
18 maintained NFS road (Project Record, Item #36).

20 **3.1.9 Community Resources**

21 **Local Land Use and Economy**

22 Land use on the Forest in the High Creek area is primarily recreational in nature. The total area
23 of disturbance from the proposed reroute would be about 3.4 acres over 2.7 miles. The new road
24 would increase the inventory of Forest roads by less than 0.001%.

25 While the High Creek area is popular with hikers and campers, its increased use would have no
26 measurable effects on the local economy.

27 **Environmental Justice**

28 Environmental justice is the fair treatment and meaningful involvement of all people regardless
29 of race, color, national origin, or income with respect to the development, implementation and
30 enforcement of environmental laws, regulations and policies. In 1994, President Clinton signed
31 Executive Order 12898, which directed all Federal agencies to evaluate their proposed actions to
32 determine the potential for disproportionate adverse impacts to minority and low-income
33 populations. The project area is located in a remote, sparsely populated area of the Galiuro
34 Mountains, and there are no low-income and minority populations that could be affected.

36 **Health and Safety**

37 Restoration of emergency and administrative vehicle access to the High Creek area would be
38 beneficial to public and agency health and safety.

39

1 **3.1.10 Cumulative Impacts**

2 Past, present, and future sources of air pollutants in the environmental potentially affected by the
3 proposed action include PM emissions from soil erosion, PM and exhaust from operation of
4 vehicles on Forest and private roads, recreational use of off-highway vehicles, smoke from
5 wildland fire and prescribed fire, and soil erosion related to livestock use. Because of the short-
6 term duration of the project, additive impacts to ambient air quality with those of the proposed
7 action would not be measurable and would not result in violations of NAAQS.

8 The proposed action would have negligible effects on soils, water resources, vegetation, wildlife
9 and visual quality. When these effects are considered in combination with the impacts of the
10 ongoing and future activities in the same area over time, adverse cumulative impacts would not
11 occur.
12

13 **3.2 IMPACTS OF NO ACTION**

14 If no action is taken, no ground-disturbing activities would occur along the route proposed for
15 construction, reconstruction, and decommissioning. There would be no temporary, localized
16 emissions of particulate matter and gaseous exhaust from construction vehicles; no soils in the
17 area disturbed; and no vegetation removed. Heritage resources in the area would remain
18 undisturbed. The visual quality of the area would be unchanged. Public vehicular use of an
19 unauthorized road to access the High Creek area of the Forest would continue. If the Forest
20 closes this unauthorized road, it is probable that other unauthorized, user-created roads would be
21 created by public land users searching for other routes into the High Creek area. This misuse of
22 Forest land could exacerbate resource damage.
23

1
2
3

CHAPTER 4—CONSULTATION AND COORDINATION

The Forest Service contacted and/or consulted with the following parties while preparing this EA.

Federal

U.S. Department of Homeland Security, Border Patrol
U.S. Department of the Interior, Bureau of Land Management
U.S. Department of the Interior, National Parks Service

- Chiricahua National Monument
- Tumacacori National Monument

U.S. Department of the Interior, Fish and Wildlife Service
U.S. Congress

- Senator John Kolbe

State of Arizona

Arizona Game and Fish Department
Department of Environmental Quality, Air Quality Planning
Governor's Office

Local

Benson Library
Graham County Cooperative Extension Service
Graham County Manager
Pima County Administrator's Office
Pima County Board of Supervisors
Santa Cruz County Commissioner
Santa Cruz County Planning
Tucson Metropolis Chamber of Commerce
Wilcox Chamber of Commerce

Native American Tribes

Ak-Chin Indian Community
Ft. Sill Apache Tribe
Gila River Indian Community
Hopi Cultural Preservation Office
Mescalero Apache Tribe
Pascua Yaqui Tribe
Pueblo of Zuni
Salt River Pima-Maricopa Indian Community

- 1 San Carlos Apache Tribe
- 2 Tohono O’odham Nation
- 3 White Mountain Apache Tribe
- 4 Yavapai-Apache Nation

5

6 **Others**

- 7 American Museum of Natural History
- 8 Appleton-Whitetail Research Ranch
- 9 Arizona Desert Bighorn Sheep Society
- 10 Arizona Site Stewards
- 11 Arizona Wildlife Federation
- 12 Center for Biological Diversity
- 13 Columbine Cabin Association
- 14 Graham County Cattle Growers Association
- 15 Green Valley Hiking Club
- 16 Huachuca Hiking Club
- 17 Kaibab Industries Inc. (dba Flying Diamond Ranch)
- 18 Klondyke Outfitters & Guides
- 19 Mt. Graham Cabin Owners
- 20 National Wild Turkey Federation
- 21 Natural Resource Conservation Service
- 22 Sabino Canyon Tours, Inc.
- 23 Scientists for the Preservation of Mt. Graham
- 24 Sierra Vista Economic Development Foundation
- 25 Sky Island Alliance
- 26 Sonoran Institute
- 27 Sonoran Science Solutions Inc.
- 28 Southeastern Arizona Horseman’s Association
- 29 Southern Arizona Hiking Club
- 30 Southwest Gas Corporation
- 31 Stewart Observatory (Mt. Graham International Observatory)
- 32 The Nature Conservancy
- 33 Trail Riders of Southern Arizona
- 34 Tucson 4 Wheelers
- 35 Tucson Rough Riders
- 36 Turkey Flat HOA
- 37 United 4-Wheel Drive Association
- 38 University of Arizona
- 39 Walking Wind, Inc.
- 40 Westland Resources, Inc.
- 41 Wild Earth Guardians

42

43

44

CHAPTER 5—LIST OF PREPARERS

The following Coronado National Forest resource specialists contributed to the content of this EA.

Andrea Campbell	Forest NEPA Coordinator, Supervisor's Office
Rachel Carroll	Interdisciplinary Team Leader, Supervisor's Office
Bob Lefevre	Forestry and Watershed Program Manager, Supervisor's Office
George McKay	Lands and Boundary Manager, Supervisor's Office
Walter Keyes	Civil Engineer, Supervisor's Office
Anne Casey	Safford District Wildlife Biologist
Christopher LeBlanc	Forest Archaeologist, Supervisor's Office
Debby Kriegel	Landscape Architect, Supervisor's Office
MiMi Battin	Geographic Information System Technician
Toni Strauss	Safford District Ranger

