Recreation Special Use Program Assessment

Red Rock Ranger District, Coconino National Forest

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View of the Red Cliffs Area

Recreation, Heritage & Wilderness Resources

USDA Forest Service

Red Rock Ranger District Recreation Special Use Program Assessment

Recreation Special Use Program Assessment 1
Red Rock Ranger District Recreation Special Use Program Assessment 2
Chapter 1: Background of Recreation Special Uses on the Red Rock Ranger District 1
Introduction 1
Program Overview of Recreation Special Uses on the RRRD 2
Roads with Permitted Use 8
Previous Environmental Planning Efforts related to Recreation Special Uses on the RRRD... 11
Chapter 2: Assessment Components 16
Products to be determined in the Assessment 16
Methods of Determining Recreation Carrying Capacity 16
Types of Recreation Visitor Capacity 18
Landscape Method 20
Direction Associated with Commercial Services on National Forest System Lands 24
National Direction for Commercial Services on National Forest System Lands 24
Forest Direction Associated with Commercial Services on the Coconino National Forest .. 24
Chapter 3: Needs Assessment for Recreation Activities 27
Commercial Recreation Activity Categories 27
Activities not Considered in this Analysis 30
Recreation Trends 31
Actual Use of Authorized Outfitter-Guide Companies for 2002-2006 49
Forest Service Policy Regarding Needs Assessment 53
Needs Criteria 53
Demand for new or additional Recreation Use 54
Activities with a Demonstrated Need 55
Chapter 4: Landscape Capacity Analysis 58
RUU Capacity Analysis: Landscape Model 59
Steps for determining the capacity of an RUU 59
Summary of Landscape Method Capacity Figures 66
Recreation Use Units with Total (Commercial and noncommercial) Use Greater than Capacity: 70
Recreation Use Units with Available Capacity for New or Additional Commercial Services 71
Chapter 5: Activity Suitability/RUU 71
Chapter 6 Literature Cited 74
Literature Reviewed 76
Appendix A- Maps supporting the Assessment 1
Appendix B- Road Condition Survey 1
Appendix C- Recreation Special Use Program 1
Appendix E- Actual Use 1
Appendix F- Natural Resources Description of each RUU 1

Appendix F- Natural Resources Description of each RUU
Apache Maid Recreation Use Unit ... 3
Beaver Creek Recreation Use Unit ... 7
Beaverhead Recreation Use Unit ... 11
Broken Arrow Recreation Use Unit ... 16
Casner Recreation Use Unit ... 18
Cathedral Recreation Use Unit ... 21
Cedar Flat Recreation Use Unit ... 24
Dry Creek Recreation Use Unit ... 27
Fossil Creek Road Recreation Use Unit ... 30
Kachina Recreation Use Unit ... 34
Middle Verde Recreation Use Unit ... 41
Montezuma Recreation Use Unit ... 44
Oak Creek Canyon Recreation Use Unit ... 51
Red Cliffs Recreation Use Unit ... 55
Research Natural Areas Recreation Use Unit ... 58
Savannah/ House Mountain Recreation Use Unit ... 60
Schnebly Rim Recreation Use Unit ... 63
Sedona Recreation Use Unit ... 65
Skeleton Bone Recreation Use Unit ... 69
Soldier Pass Recreation Use Unit ... 73
Thirteen Mile Rock Recreation Use Unit ... 75
Towel Recreation Use Unit ... 77
Upper Loop Recreation Use Unit ... 80
Verde Wild and Scenic River Recreation Use Unit ... 82
Village of Creek (VOC) Recreation Use Unit ... 85
Wickiup Recreation Use Unit ... 89
Windmill Recreation Use Unit ... 92
Fossil Spring Wilderness Recreation Use Unit ... 96
West Clear Creek Wilderness Recreation Use Unit ... 99
Wet Beaver Wilderness Recreation Use Unit ... 102
Sycamore Canyon Wilderness Recreation Use Unit ... 104
Munds Mountain Wilderness Recreation Use Unit ... 107
Red Rock Secret Mountain Wilderness Recreation Use Unit ... 109
Appendix G- Land Status and Forest Plan Direction for each RUU ... 1
Forest Plan Management Area Direction Pertinent to the RUUs ... 6
Appendix H- Details of Application of the Landscape Method for each RUU ... 1
Apache Maid ... 2
Beaver Creek ... 4
Beaverhead ... 6
Broken Arrow ... 8
Casner ... 10
Cathedral ... 12
Cedar Flat ... 14
Dry Creek ... 16
Fossil Creek Road ... 17
Kachina ... 19
Lower Schnebly ... 21
Middle Verde ... 23
Montezuma ... 24
Mud Tanks ... 26

Oak Creek Canyon 28
Red Cliff 30
Savannah/House Mountain 32
Schnebly Rim 34
Sedona 35
Skeleton Bone 37
Soldier Pass 39
Thirteen Mile Rock 41
Towel 43
Upper Loop 44
Village of Oak Creek 46
Wickiup 48
Windmill 50
Appendix I: Total Use Calculations for each Recreation Use Unit—January, 2008 Bill Stafford 1
Parties or Vehicles per Hour, per Day or per Year 3
The Development of Total use for each RUU is displayed below. 3
SUMMARY OF Total Use DATA 19

List of Figures

Figure 1. Total Percentage of these areas of Concern for Broken Arrow 13
Figure 2. Total Percentages of these Areas of Concern for Soldier Pass 14
Figure 3. Total Percentages of these Areas of Concern for the General Area category 14
Figure 4. Percentages of all Areas of Concern 15
Figure 5. Landscape Method Process 23
Figure 6. Vicinity Map 26
Figure 7. Most Popular Activities for Dispersed Recreation 33
Figure 8. Why did Visitors take a Guided Tour? 33
Figure 9. Most Popular Dispersed Activities at Broken Arrow 29
Figure 10. Most Popular Activities Visitors who took Guided Tours at Broken Arrow 34
Figure 11. Most Popular Dispersed Activities for Schnebly Hill 29
Figure 12. Most Popular Activities for Guided Visitors at Schnebly Hill 34
Figure 13. Most Popular Dispersed Activities at Soldier Pass 30
Figure 14. Most Popular Activities for Guided Visitors at Soldier Pass 35
Figure 15. Most Popular Dispersed Activities at Vultee Arch Road 30
Figure 16. Most Popular Activities for Guided Visitors at Dry Creek Road 35
Figure 17. Most Popular Dispersed Activities at Palatki 36
Figure 18. Most Popular Dispersed Activities at Honanki 36
Figure 19. Most Popular Activities for Guided Visitors at Honanki 37
Figure 20. Most Popular Dispersed Activities at Bell Rock 33
Figure 21. Most Popular Dispersed Activities at Boynton Canyon 38
Figure 22. Most Popular Dispersed Activities at Back-O-Beyond 38
Figure 23. Desired Activity and Primary reason for Visit 39
Figure 24. Actual Activity Pursued 40
Figure 25. Recreation Activities in 2005 41
Figure 26. Visitor Participation in most popular Activities in 2001 42
Figure 27. Visitor Participation in most popular Activities in 2005 44
Figure 28. Top 15 Activities in the Southern Region 2002 46
Figure 29. Actual Annual Use vs. Authorized Annual Use Limit per Recreation Activity 50

Figure 30. Percent of Commercial Annual Actual Use by Activity 52
Figure 31. Amendment 12, Map 3..... 63

List of Tables

Table 1. Commercial Outfitter-Guide Companies with Authorizations for use on the RRRD 2
Table 2. Timeline History of Outfitter-Guide Companies who began operating between late 1970 through early 1980..... 5
Table 3. Timeline History of Outfitter-Guide Companies who began operating during the late 1980's and early 1990's..... 6
Table 4. Timeline History of Outfitter-Guide Companies given Temporary Authorized Use in response to the March 2005 Solicitation 7
Table 5. Maintenance Needed on Forest Roads authorized for Commercial Recreation Use..... 10
Table 6. Social Encounters 20
Table 7. Recreation Event Application Timeline 30
Table 8. Desired Activity and Primary Reasons for visiting the area 39
Table 9. Actual Activity Pursued 40
Table 10. Percent of crowding by visitor on the Coconino National Forest by site type (site visits) 43
Table 11. Percent of Site Visits by Crowding Rating by Site Type for Coconino National Forest (NVUM 2005 data) 45
Table 12. Primary Activities identified in the Research Review by Recreation Use Unit (RUU) 48
Table 13. Actual Annual Use for the Red Rock Ranger District's Recreation Special Use Program Activity Categories..... 51
Table 14. Demand for New or Additional Use..... 55
Table 15. Activities with a Demonstrated Need..... 56
Table 16. ROS User Guide Table 8..... 60
Table 17. RRRD Capacity Coefficients for Parties of 6 or Vehicles At One Time (P/V-AOT) per acre 62
Table 18. P/V-AOT Capacity Calculation Process 64
Table 19. Annual RUU Capacity and Commercial Percentages of Use..... 69
Table 20. Recreation Use Units with Total Use greater than Adjusted Annual Capacity. 70
Table 21. Recreation Use Units with Available Capacity 71
Table 22. Suitability/ RUU..... 73

Appendix A List of Maps

GIS Disclaimer Statement: The USDA Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. Using GIS products for purposes other than those for which they were intended may yield inaccurate or misleading results. The USDA Forest Service reserves the right to correct, update, modify, or replace GIS products without notification**.**

Map Number

1……Vicinity Map and Recreation Use Units
2……...Recreation Opportunity Spectrum Classes and Recreation Use Units
3…….. Recreation Use Units, Roads, Trails, and Most Desired Commercial Opportunity Area

4……...Management Areas and Recreation Use Units
5……...Level II and III Roads and Recreation Use Units
6……...Apache Maid Recreation Use Unit
7……...Beaver Creek Recreation Use Unit
8……. Beaverhead Recreation Use Unit
9……. Broken Arrow Recreation Use Unit
10…….Casner Recreation Use Unit
11…….Cathedral Recreation Use Unit
12…….Cedar Flat Recreation Use Unit
13…….Dry Creek Recreation Use Unit
14…….Fossil Creek Road Recreation Use Unit
15…….Kachina Recreation Use Unit
16…….Lower Schnebly Recreation Use Unit
17…….Middle Verde Recreation Use Unit
18…….Montezuma Recreation Use Unit
19…….Mud Tanks Recreation Use Unit
20…..…Oak Creek Canyon Recreation Use Unit
21…….Red Cliffs Recreation Use Unit
22…….Savannah House Mountain Recreation Use Unit
23…… Schnebly Rim Recreation Use Unit
24…….Sedona Recreation Use Unit
25…….Skeleton Bone Recreation Use Unit
26…….Soldier Pass Recreation Use Unit
27…….Thirteen Mile Rock Recreation Use Unit
28…….Towel Recreation Use Unit
29…….Upper Loop Recreation Use Unit
30…….VOC Recreation Use Unit
31…….Wickiup Recreation Use Unit
32…….Windmill Recreation Use Unit

Chapter 1: Background of Recreation Special Uses on the Red Rock Ranger District

Introduction

The unique character of the Red Rock Ranger District's (RRRD) landscape is attracting increasing numbers of people. Many of these visitors look to Outfitter-Guides to assist them in having a safe, enjoyable, and educational experience while recreating on National Forest system lands. Additionally, an ever increasing number of people living and working in adjacent communities are also using and enjoying the area. The National Forest's natural and cultural resources are getting unprecedented pressure and impact, sometimes eliminating, or at least diminishing solitude, natural quiet, and the natural landscapes. The red rock landscape around Sedona is currently the focus of the majority of commercial Outfitter-Guide services.

The Forest Service supports Outfitter-Guides because they offer opportunities that visitors might not otherwise enjoy. Outfitter-guides provide knowledge, skills, and equipment that enhance a visitor's experience or are required for safe participation in an activity. Outfitter-Guides can reach a greater number of people than Forest Service employees alone and can provide accurate information on a variety of topics including minimizing recreational impacts on the land or Leave No Trace ethics, and interpretive natural history information. Outfitter-Guides can also assist the Forest Service with monitoring resources, act as an extension of management presence, and, as a result, assist in the protection of natural and heritage resources.

As guided and unguided activities have increased on the District, local residents and neighborhoods have been increasingly aware of the growing participation in outdoor recreation. Tour and general public use often occurs near private lands and residential subdivisions and sometimes impacts these neighborhood areas. Additionally, impacts due to high use from both user groups and inadequate maintenance of roads, trails and infrastructure are evident in some of the landscapes on the District. Natural resource impacts include loss of vegetation due to trampling and soil compaction, un-planned roads, and rutting which affects water quality and causes soil erosion. Social impacts include reduced quality of experience, increased contact with other users, and increased noise and dust. The Coconino National Forest recognized and addressed these social concerns in the1989 Decision Notice for the Broken Arrow and Soldier Pass Road 4X4 Roads..

The Forest Service managed recreation special uses under 36 CFR 251(1998) requiring an authorization to conduct commercial use of the National Forests. Several lawsuits, including one filed by a Sedona Outfitter – Guide, challenged this regulation. Courts began to construe the regulation as an authorization for special uses was not required for use that occurred on National Forest Service road and trails, creating a gap in regulatory coverage. In an effort to fill that regulatory gap, the Sedona Ranger District issued special orders requiring special use permits. In response, a Sedona Outfitter-Guide filed a lawsuit challenging the orders. In March, 2001 a federal judge upheld that the Forest Service had the authority to regulate commercial use on the Forest, but ruled that the Forest Service's implementation procedures for the Sedona area were flawed. An "open-season" for commercial ventures followed, where anyone with a jeep, horse, ATV, mountain bike, hummer, etc. could offer guided trips on National Forest system roads and trails without a permit.

This led to a rapid rise in the amount of commercially guided recreation activities on the Coconino National Forest. The increase in commercially guided recreation activities caused the Forest Service,

some local residents, and the general public concern about increasing and uncontrolled environmental, social, and economic impacts. In response, the Forest Service developed a new regulation at 36 CFR 251.50 clarifying that all Outfitter-Guide activities on National Forest system lands whether on or off roads and trails, require authorization and permits.

During the last decade, the greater Sedona area with its tourism-based economy has marketed and attracted an ever-increasing number and diversity of commercial Outfitter-Guide interests. The Forest Service, however, has not increased existing authorizations or offered new ones until recently. Competition between permit holders and potential permit holders has become evident and has grown in intensity.

Program Overview of Recreation Special Uses on the RRRD

The Red Rock Ranger District administers several recreation-related priority and long-term temporary, and temporary special use authorizations to provide public services that further the mission of the Forest Service – "Caring for the Land and Serving People."

Types of Recreation Special Use Commercial Authorizations: *Priority, Long Term Temporary, Temporary*

The roads, trails, and streams authorized by priority and long-term temporary authorizations are historically used tour routes that form the basis for the RRRD Special Use Program. Table 1 illustrates the commercial Outfitter-Guide companies currently authorized for recreation special uses on the RRRD, and the type of permit they hold.

Table 1. Commercial Outfitter-Guide Companies with Authorizations for use on the RRRD

Company Codes	COMPANIES with PRIORITY AUTHORIZATIONS
PJT	Pink Jeep Tours, Inc (1)
AE	Pink Jeep Tours, Inc dba Ancient Expeditions
SAI	Pink Jeep Tours, Inc dba Sedona Adventures, Inc.
SRRJT	Sedona Red Rock Jeep Tours, Inc. (1) (2) (3)
	COMPANIES with LONG TERM TEMPORARY AUTHORIZATIONS
CWJ	Crossing Worlds Journeys (1)
CLC	Crystal Light Center (1)
FSPE	Free Soul Public Education (1)
EWT	GANESH 108 dba Earth Wisdom Tours (1)
GF	Gon' Fishen
HEI	Horsecents Entertainment Inc dba Trail Horse Adventures (2)
NVHA	Yavapai-Apache Nation dba Native Visions Horseback Adventures (2)
NLBE	Northern Light Balloon Expeditions, Sedona Balloon Flights, Inc.
RRBA	P-Marks Plus, Inc., Red Rock Balloon Adventures
RRWJT	Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (1) (3)
SNE	Sedona Nature Excursions (1)
SS	Spirit Steps, a subsidiary of Aquarian Concepts
	COMPANIES with TEMPORARY AUTHORIZATIONS (from 2005 Solicitation)
A360	360 Adventures, LLC
ACAT	Adventure Company at Tlaquepaque LLC
ADT	American Dream Tours Inc.
ADW	Bradshaw Bros LLC dba A Day In The West

CWALK	Country Walkers, Inc. of Grand Canyon Expeditions, LLC
ASJT	Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
NAJ	Destination Marketing Group, LLC dba Native American Journeys
GCATV	Grand Canyon ATV Adventures, Inc. dba Sedona ATV Adventures & FAT CAT ATV Tours (2)
LUTZ	Lutz Adventure Tours, LLC dba Arizona ATV Adventures
	COMPANIES with TEMPORARY AUTHORIZATIONS (from 2005 Solicitation)
MDIAMOND	M Diamond Trail Rides LLC
SMTBA	Sedona MTB Adventures LLC
SRM	Sedona Resort Management, Inc.
SSJ	Sedona Spirit Tours and Retreats, LLC dba Sedona Spirit Journeys
STE	Spirit Trails Expeditions
STROLLEY	Sedona Transportation & Tours LLC dba Sedona Trolley
SUNCA	Sun Country Adventures, LLC
HUMMER	Top Hat Expeditions dba Hummer Affair
VSCT	Vaughan's Southwest Custom Tours, Inc.

(1) Denotes company received an amendment for additional tour routes from the 2005 solicitation.
This category only applies to Priority and Long-Term Temporary Companies.

(2) Denotes company stopped operating during the 2002 – 2006 data collection window.
See Timeline History for detailed operating dates.

Priority Authorizations

Historically on the RRRD these types of permits have been authorized use for a minimum period of one year and not to exceed five years. Companies that hold a priority-use authorization have historically operated on the RRRD starting in the late 1970's and early 1980's. The assignment of service days may be classified as priority use if the permit holder has a two-year record of acceptable performance as a holder of a permit. Refer to Table 3 for a list of priority authorizations.

Forest Service Handbook 2709.11 provides the following definition and information regarding Priority Use and Eligibility for Priority Use.

> **Priority Use.** Authorization of use for a period not to exceed ten years. The amount of use is based on the holder's past use and performance and on land management plan allocations. Except as provided for in Title 36, Code of Federal Regulations, part 251, Subpart E (36 CFR part 251, subpart E), authorizations providing for priority use are subject to renewal (sec. 41.53f).
>
> **Conversion to Priority Use**. A holder authorized for at least two years may be eligible for assignment of priority use if it is in the best interest of the Forest Service and the use is compatible with forest land and resource management plans. Assignment of priority use shall be based on documented acceptable performance by the holder for two consecutive years. The amount of use authorized may be based on the previous two-year average authorized use, which was actually used. See section 41.53h, paragraph 2, for limitations on assignment of priority use.
>
> **1. Eligibility.** Previously authorized Outfitter-Guides who have made their services available to all members of the public and who have performed acceptably for the previous two consecutive years may be eligible for assignment of priority use.

Outfitter-Guides who provide services only to private or restricted clientele are not eligible for assignment of priority use. See section 41.53l for additional direction on semi-public outfitting and guiding.

Long-term Temporary Authorizations

A long-term temporary authorization is one that is issued and renewed for a period not to exceed one year. Authorizations in this category have been annually renewed since the early 1990s. Refer to Table 1 for a list of permittees in this category.

Temporary Authorizations

While phasing in implementation of the changes in the August 2004 Code of Federal Regulations, nineteen temporary permits were issued in July 2005. These permits will expire under their own terms and receive no further consideration for continued use on the Red Rock Ranger District. If interested in continuing their operations, these permit holders would need to compete for permits through a competitive bid process, initiated by the Forest Service's issuance of an Outfitter-Guide prospectus that may occur after a NEPA analysis is complete regarding recreation special uses on the RRRD.

Also in July 2005 several existing Outfitter-Guide permit holders applied for additional temporary use. This temporary use was authorized under Amendments to their existing permit. Similar to the July 2005 Temporary Permits, these Amendments for temporary use will expire under their own terms and receive no further consideration for continued use on the Red Rock Ranger District. These permit holders may opt to compete for additional use when the Forest Service issues an Outfitter-Guide prospectus.

A temporary authorization is issued for a minimum period of six-months and not to exceed one year. These permits may be re-issued if the requirements of the permits are met, and all other Forest direction is met. Each of these Permits read: "Issuance of this temporary permit does not imply or gaurantee that upon expiration of this permit that a future special use authorizaton will be granted for continuation of this use. The Forest Service is conducting an analysis that will determine the number of permits avialable for specific activities...using the competetive bid process. Although you may compete for a permit when the prospectus is issued, there is no gaurantee that you will receive a permit for the use covered under this temporary permit or for any other use."

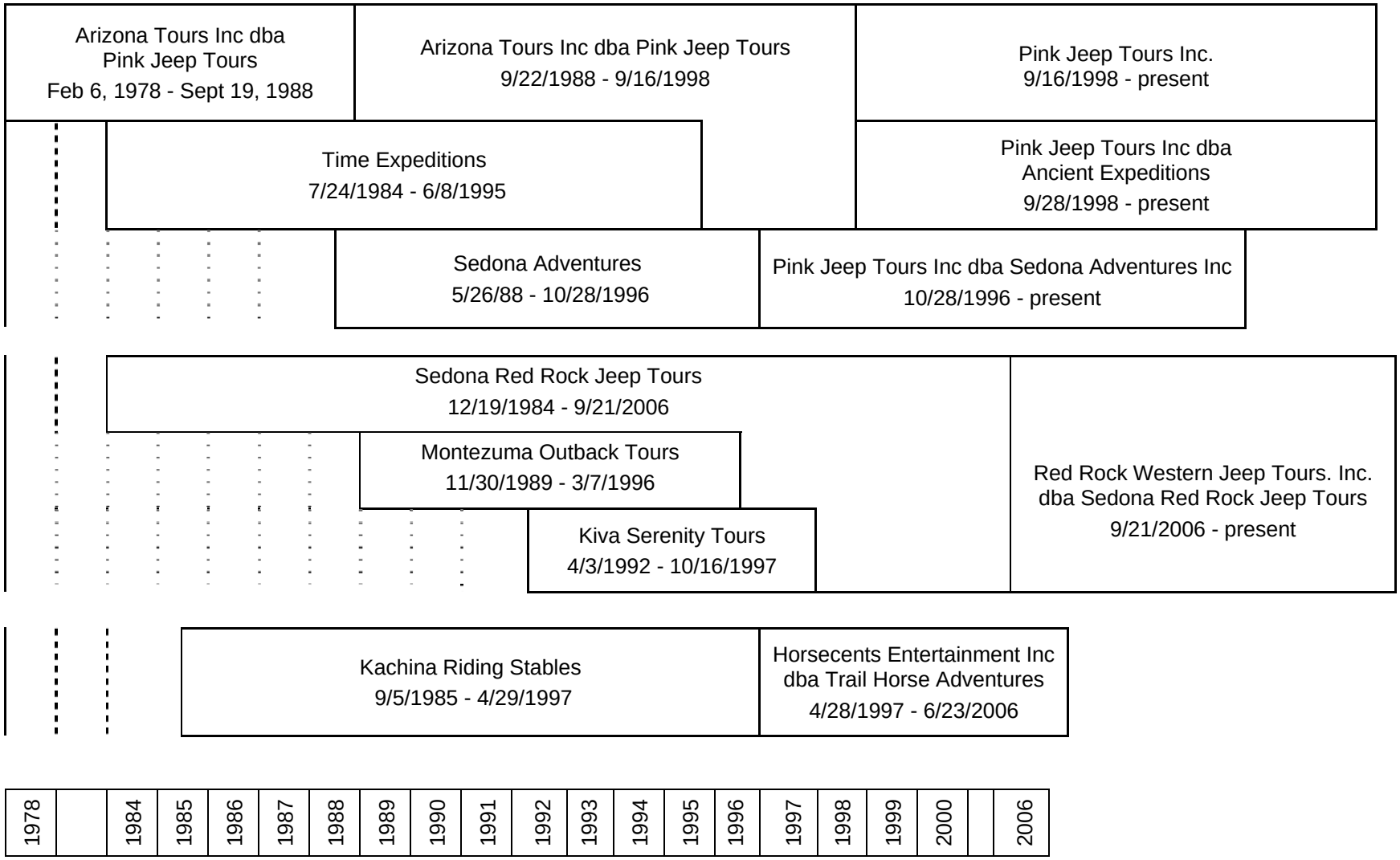
Forest Service Handbook 2709.11 provides the following definition of Temporry Use- An amount of use assigned the holder of a permit with a period of one season or less.

History of Outfitter-Guide Recreation Special Uses Operations

Table 2 lists the "Timeline History of Outfitter-Guide Companies who began operating between late 1970 through early 1980," and Table 3 represents the "Timeline History of Outfitter-Guide Companies who began operating during the late 1980's and early 1990's." These timeline history charts depict the following important components of the RRRD Recreation Special Use Program:

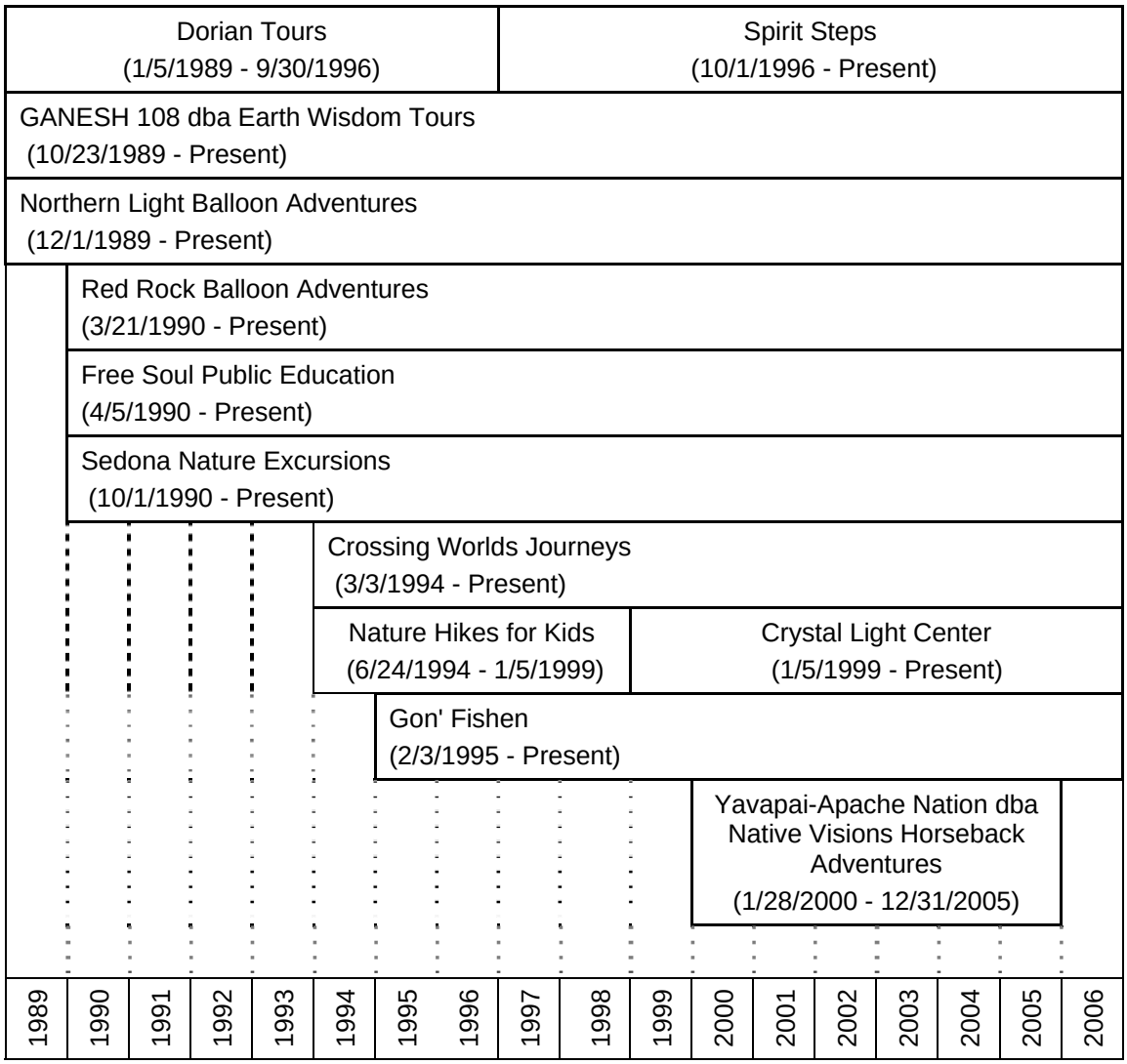
- Companies that represent the priority and long-term temporary authorizations.
- The history of when a company started and stopped operating.
- The history of which companies purchased other companies' business.

Table 2. Timeline History of Outfitter-Guide Companies who began operating between late 1970 through early 1980



Note: Some companies sold their business to new companies, therefore the new companies applied for a permit, and then authorized to use the same roads/ and trails as the previous company in the new permit.

Table 3. Timeline History of Outfitter-Guide Companies who began operating during the late 1980's and early 1990's



According to Forest Service Policy, when a company sells its business to another company, its authorization for commercial use of Forest Roads and trails is terminated. (FSH2709.11 Chapter 40 Section 41.53f Paragraph 4a(4). The company who purchased the other company's business can then apply for obtaining the same set of roads and trails that the previous company was authorized to use. An example of this is when Sedona Red Rock Jeep Tours, Inc. (SRRJT) sold their business to Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (RRWJT). SRRJT had a priority use authorization to use a certain set of roads and trails for their tour routes. When RRWJT purchased the SRRJT's business, SRRJT priority use authorization was terminated by the Forest Service. RRWJT applied for and obtained an authorization to use the same set of roads and trails as SRRJT. Because these particular roads and trails were historically used for commercial use on the RRRD, RRWJT obtained a Long-Term Temporary commercial authorization to continue using these same roads and trails as SRRJT.

History of Temporary Authorizations on the RRRD

From March 2001 to August 12, 2004, Outfitter-Guides were not required to have a special use authorization for travel on forest development roads and forest development trails in the Sedona Area. During this "open season," there was a substantial increase in the Outfitter-Guide business in and around Sedona, particularly in vehicle tours on National Forest system roads prior to the revision of regulation 36 CFR 251.50. This regulation clarified that all Outfitter-Guide activities on National Forest system lands, whether on or off roads and trails, are required to obtain authorizations in the form of a permit. In March 2005 the Red Rock Ranger District began enforcing 36 CFR 251.50 requiring all Outfitter-Guides to have a special use permit to operate on National Forest system lands in conjunction with issuance of 6-month temporary authorizations to those applicants that met the terms and conditions set forth in the March 11, 2005 solicitation letter. This same solicitation emphasized that obtaining one of these 6-month special use "Temporary Authorizations" did not imply or guarantee future priority authorizations would be granted. Issuance of the temporary authorizations provided the Forest Service the ability to control potential adverse environmental and social impacts in high use areas, to have specific and manageable limits on use, and allow for the testing of temporary allocation of Outfitter-Guide services and activities in areas where capacity may be available. Table 6 illustrates the timeline history of companies granted temporary recreation special use Outfitter-Guide permit authorizations.

Table 4. Timeline History of Outfitter-Guide Companies given Temporary Authorized Use in response to the March 2005 Solicitation

7/20/2005 - Present	Adventure Company at Tlaquepaque LLC
7/27/2005 - Present	Bradshaw Bros LLC dba A Day In The West
7/27/2005 - Present	Grand Canyon ATV Adventures Inc dba Sedona ATV Adventures and FAT CAT ATV Tours
7/28/2005 - 7/31/2006	Sedona Spirit Tours and Retreats dba Sedona Spirit Journeys
7/29/2005 - Present	Destination Marketing Group dba Arizona Safari Jeep Tours
7/29/2005 - Present	Destination Marketing Group dba Native American Journeys
7/29/2005 - Present	Lutz Adventure Tours dba Arizona ATV Adventures
7/29/2005 - Present	Sedona Resort Management
7/29/2005 - Present	Sedona Transportation and Tours LLC dba Sedona Trolley
7/29/2005 - Present	Top Hat Expeditions Inc dba Hummer Affair
8/3/2005 - Present	American Dream Tours
8/4/2005 - Present	Vaughan's Southwest Custom Tours Inc
8/5/2005 - Present	Sedona Spirit Trail Expeditions
8/9/2005 - Present	M Diamond Trail Rides LLC
8/10/2005 - Present	Sedona Mountain Bike Adventures LLC
8/11/2005 - Present	Sun Country Adventures LLC
8/26/2005 - Present	360 Adventures
12/21/2005 - Present	Country Walkers

Note: The companies shown in this table represent the Temporary Companies

Roads with Permitted Use

The Outfitter-Guide companies displayed above all rely on the use of Forest Service System roads to provide guided recreation activities. Forest Service System roads are a critical physical resource regarding Forest visitors seeking quality recreation experiences. The following describes the various maintenance levels of Forest roads, along with a summary of the 2007 road condition surveys. The road condition surveys were performed to determine the existing condition of the roads used by Outfitter-Guides, and to see if maintenance is necessary to continue the use of a given road in order to continue to allow use for recreation activities.

Road Maintenance Levels

Forest roads are a critical component of the physical resources necessary for the Forest to provide recreation opportunities. This section displays the existing condition of the road physical resources, and whether or not the roads can handle existing or additional recreation use.

Forest roads which are authorized for commercial use by various Outfitter-Guide permits are displayed in Appendix C. Various activities occur along the roads depending upon individual Outfitter-Guide Company's authorized tours. The maintenance level of the roads is considered when authorizing commercial use on Forest roads. The upkeep and maintenance of Forest roads by Outfitter-Guides can be written into the prospectus as evaluation criteria. A bid premium could also be added into the prospectus to collect additional funds to take care of road maintenance. The following maintenance level descriptions are from the Forest Service Transportation System Maintenance Handbook (FSH 7709.58).

Maintenance Level 2: Assigned to Forest Service roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur at this level. Appropriate traffic management strategies are either (1) discourage or prohibit passenger cars or (2) accept or discourage high clearance vehicles.

Maintenance Level 3: Assigned to Forest Service roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed material. Appropriate traffic management strategies are either "encourage" or "accept." "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users.

Maintenance Level 4: Assigned to Forest Service roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated. The most appropriate traffic management strategy is "encourage." However, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times.

Maintenance Level 5: Assigned to roads that provide a high degree of user comfort and convenience. Normally, roads are double-lane, paved facilities. Some may be aggregate surfaced and dust abated. The appropriate traffic management strategy is "encourage."

Road Condition Surveys

The road condition surveys were conducted by the Coconino National Forest Engineers in 2007 to determine the location of needed road maintenance and off-road rehabilitation work for roads on the Red Rock Ranger District that are commonly used by commercial tours. This was done so permit holders and the Forest Service will be informed of required work "up front" and not be confronted with unexpected and costly surprises during the term of the permit or prior to re-issuance of a recreation special use permit. Road condition surveys also allow managers to evaluate the effects of the permitted use on the existing condition of soil, water, vegetation and road infrastructure before issuing a permit. It also answers the question of whether additional use, or for that matter, any use be allowed on these roads without upfront investments in maintenance.

This survey was primarily designed for roads managed by the Forest Service for resource protection only and not for customer comfort. The majority of roads surveyed were level 2 roads. Road maintenance and resource rehabilitation activities on level 2 roads are intended to prevent soil erosion, vegetation damage and damage to cultural resources and wildlife habitat. They are also intended to prevent the widening of roads or trails to protect the scenic quality of the area and provide safety and convenience features such as "pullouts," staging areas and scenic viewing areas. This will prevent damage to the area from user-created staging areas and pullouts everywhere causing an ever expanding resource impacts along our Forest Roads. Level 3 roads were also included in the survey because they are also affected by use from both commercial tours and non-commercial users and they are part of the overall maintenance and resource protection cost of operation.

The survey was intended to provide an estimate of the number, cost, location and type of work which could be staked or "flagged" in the field either immediately or at a later date by a Forest Service employee, contractor or Outfitter-Guide permit holder or their agents. The recommended road maintenance work resulting from the survey should be shown to the Outfitter-Guides, so they can provide input to the recommendations. Using this process, the Forest would not pursue road maintenance work that interferes or conflicts with the experience the Outfitter-Guides are providing to their customers. This includes purposely not manicuring rough sections of four wheel drive roads to provide more challenging sections of road. It should also include cooperatively designating scenic pullouts at locations where the guides have indicated they want to view certain features or provide an interpretive message, as long as no detrimental effects to other resources would occur.

Refer to Appendix J for an outline of the survey process, and the project record for the complete data table. The following table illustrates the Forest roads which are authorized for commercial use by various Outfitter-Guide permits that need maintenance to be performed in order to accommodate the permitted use.

Table 5. Maintenance Needed on Forest Roads authorized for Commercial Recreation Use

rte no	drainage	signs	structures	surfacing	miles	totals
00120A	$20,098	$2,223	$611	$3,577	3.857	$26,514
00152A	$6,080	$136	$109	$419	2.85	$6,744
00152E	$1,859	$240	$0	$103	0.7	$2,202
00153A	$15,371	$158	$1,130	$103,322	6.504	$119,981
00179F	$4,646	$136	$109	$426	1.9	$5,317
00213F	$5,079	$543	$109	$2,091	2.5	$7,821
00525A	$2,906	$136	$109	$2,075	3.5	$5,226
00525D	$192	$305	$0	$42,413	1.311	$42,911
00647	$996	$258	$109	$235	1.6	$1,598
00761A	$1,086	$404	$0	$808	5.5	$2,298
00761B	$4,522	$255	$188	$20,553	4.136	$25,518
09201E	$9,903	$76	$0	$981	1.6	$10,960
09500L	$1,770	$244	$0	$73	0.5	$2,087
09500N	$7,829	$158	$0	$180	1.224	$8,167
09513	$5,729	$156	$109	$254	13.7	$6,248
09524	$1,316	$875	$0	$1,740	11.843	$3,931
09525	$312	$280	$0	$187	1.276	$779
09536	$3,078	$36	$0	$367	2.5	$3,481
09549	$2,752	$506	$109	$637	3.274	$4,004
09549B	$26,109	$6,830	$0	$586	2.118	$33,525
09551	$4,859	$994	$0	$0	3.94	$0
09559	$0	$340	$0	$58	1.3	$398
09587	$1,079	$0	$0	$67	0.455	$1,146
09600	$1,030	$330	$0	$50	1.4	$1,410
09845	$7,364	$160	$0	$676	4.6	$8,200
09851B	$936	$0	$0	$41	0.279	$977
09904	$2,069	$122	$0	$138	0.94	$2,329
09917	$447	$244	$0	$43	0.295	$734
09952	$16,622	$467	$327	$793	5.4	$18,209
09952B	$3,873	$226	$0	$919	1.178	$5,017
09960	$372	$272	$0	$162	1.1	$806
09960A	$4,639	$312	$0	$905	0.8	$5,855

Source: Road Condition Survey Spreadsheet- sedon_wk_items_cost.xls in the project record filed under Road Condition Surveys.

Previous Environmental Planning Efforts related to Recreation Special Uses on the RRRD

The "Tour Jeep Study for Broken Arrow and Soldier Pass Roads" Environmental Assessment and Decision Notice dated December 30, 1989 (USDA Forest Service, 1989), was prepared "for management of commercial jeep tour operations…to resolve resource conflicts and to produce a balanced program of commercial and non-commercial uses of National Forest lands in the two areas." Capacity decisions were reached based on public involvement and a Jeep Study Advisory Committee "to establish the Recreation Opportunity Spectrum (ROS) objectives and the Visual Quality Objectives and manage in accordance with them; to establish Limits of Acceptable Change and manage to achieve them; and to monitor activities for compliance with prescribed standards". The Tour Jeep Decision Notice allowed 5,400 commercial jeep trips annually on the Broken Arrow route with a maximum of 12 jeeps at one time. It allowed 2,100 jeep trips annually on Soldiers Pass route with a maximum of 10 jeeps at one time.

A Notice of Intent (NOI) to prepare an EIS to develop an Outfitter-Guide Management Plan for the Red Rock Ranger District was published in the Federal Register on January 26, 2006. An executive summary of this proposed action was also sent with a letter to interested parties. The comment period was January 26, 2006 to February 27, 2006. In addition, as part of the public involvement process the agency held an open house public meeting on February 9, 2006. News releases announcing the project proposal and open house meeting were also sent to media resources in northern Arizona. After this public involvement effort, the Forest Service determined that additional information and analysis was needed in the Needs and Capacity Assessment before work on the National Environmental Policy Act (NEPA) planning could be performed. A notice was posted in the Federal Register updating information regarding the NOI on May 9, 2007, providing information that the Forest was completing this Assessment of the Recreation Special Use Program. Subsequently, the interdisciplinary team began to work on the Red Rock Ranger District Recreation Special Use Program Assessment to incorporate the additional information as follows:

- Information displaying the historic and future recreation trends in the area to assist in determining the types of guided recreation activities the public needs.
- An actual use review was performed to enable the Forest to illustrate the amount of use that the Outfitter-Guides are actually performing.
- Landscape Capacity of the Assessment Area to determine how much use can occur in specific areas of the Red Rock Ranger District.
- Suitability analysis to determine what recreation activities with a demonstrated need are suitable in recreation use units[1] with available capacity.

A summary of the content analysis of the scoping comments received on the proposed action for the 2006 Outfitter-Guide Management Plan EIS is provided below.

[1] Recreation Use Units are geographically based planning units on the district. Further description is provided in Chapter 2.

Content Analysis of Public Comments to the Proposed Action of the 2006 Outfitter-Guide Management Plan

This content analysis is a synthesis of approximately 100 letters written to the Forest Service in response to the 2006 public scoping efforts for the Red Rock Outfitter-Guide Program EIS. These letters are available in the project record for the Red Rock Recreation Special Use Program Assessment.

Findings:

The content analysis of the scoping efforts indicated that the primary geographic area of concern was the Broken Arrow Recreation Use Unit, followed by Soldier Pass RUU. There was limited concern for the following Recreation Use Units: Cathedral, Upper Loop, Dry Creek, Schnebly Hill, Kachina, Windmill, Red Cliffs, and the Wet Beaver Creek Wilderness Area. Concerns in these areas are mostly from current Outfitter-Guides, with the exception of two comments from the State of Arizona Game and Fish. There is also a General Area category for comments that were not tied to a specific location. These findings provide additional information

The types of concerns identified in the scoping comments are grouped into these categories:

- Capacity/ Demand
- Experience
- Recreation Opportunity Spectrum (ROS) Class
- Recreation Activities
- Safety
- Resource Damage
- Permit Administration
- Prospectus

The following are examples of concerns for each category:

Capacity/Demand

New offerings at 114 (units/day) in already inundated Sedona is not needed. Keep the great outdoors great! Only increase the potential new offerings (units/day) by only 12.

Experience

- An abundance of commercial tours can degrade the quality of outdoor experience for the public and tour companies a like.
- Keep the ROS class as Semi-Primitive Motorized in Broken Arrow.

Recreation Activities

- Any attempt to regulate ballooning using the same standards as Jeeps is unrealistic.
- Hummers should be banned on all trails except Schnebly Hill.

Safety

- Need to provide a safe passage for mountain bikers between Broken Arrow and Schnebly Hill Road (Marg's draw) on Highway 179. This is the only connection and is not safe.

Resource Damage

- Uprooting of plants, and dust covering plants is occurring at Broken Arrow.
- Above all the environment must be protected. This not only encompasses the forest environment, but also the urban interface environment and the urban environment as well.

Permit Administration

- Consider a 10 percent allocation instead of the 20 percent allocation due to pronghorn management.
- There are already enforcement problems with existing permits, i.e. Outfitter-Guides not in compliance and non-permitted tours. If more permits are issued, won't it be more difficult to monitor and enforce the permits?

Prospectus

- No one company should be able to bid on more than 51% of the use of one road. Any one company that has 51% of a road would be responsible for the maintenance of the road.
- How does a new Outfitter-Guide applicant get a prospectus? When will they be available?

The following 4 graphs illustrate the level of concern for the categories in specific RUUs.

Figure 1. Total Percentage of these areas of Concern for Broken Arrow

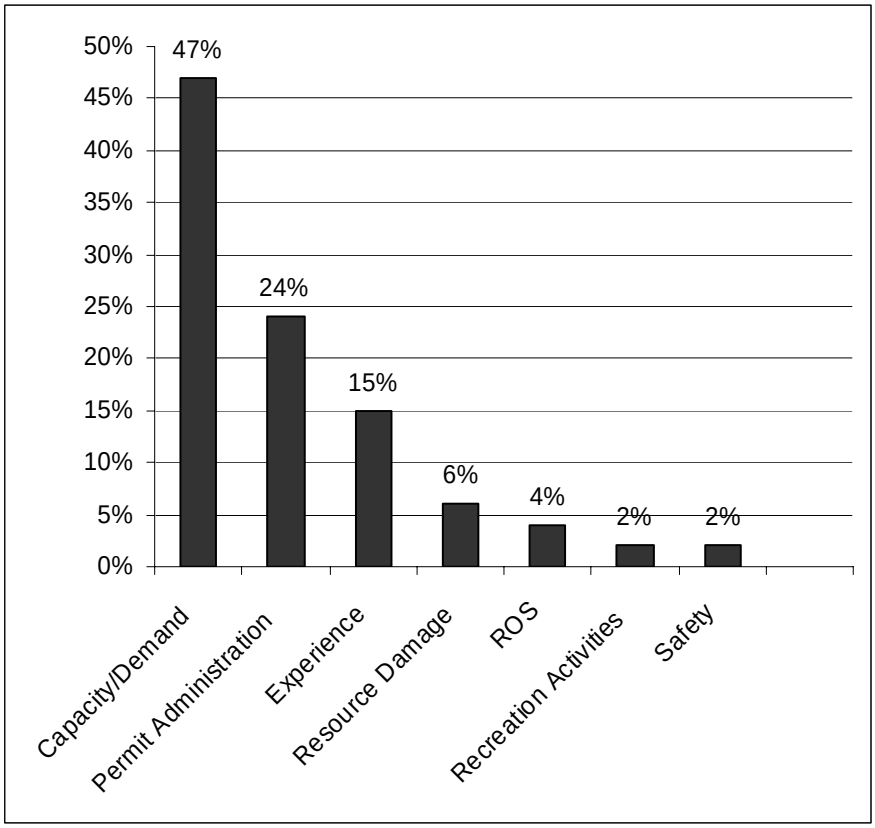


Figure 2. Total Percentages of these Areas of Concern for Soldier Pass

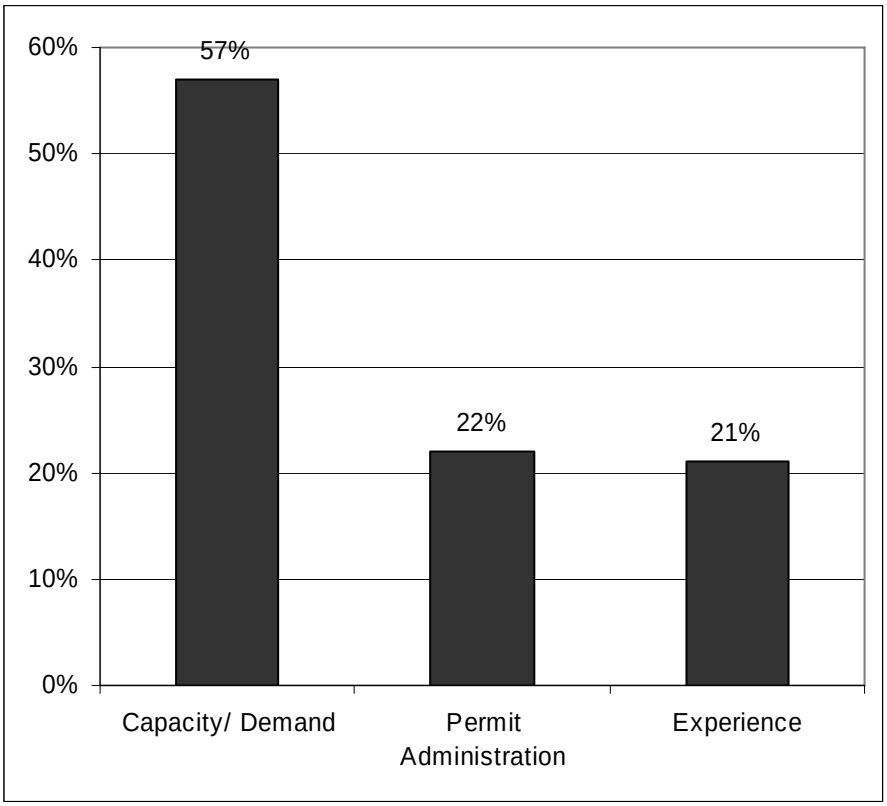
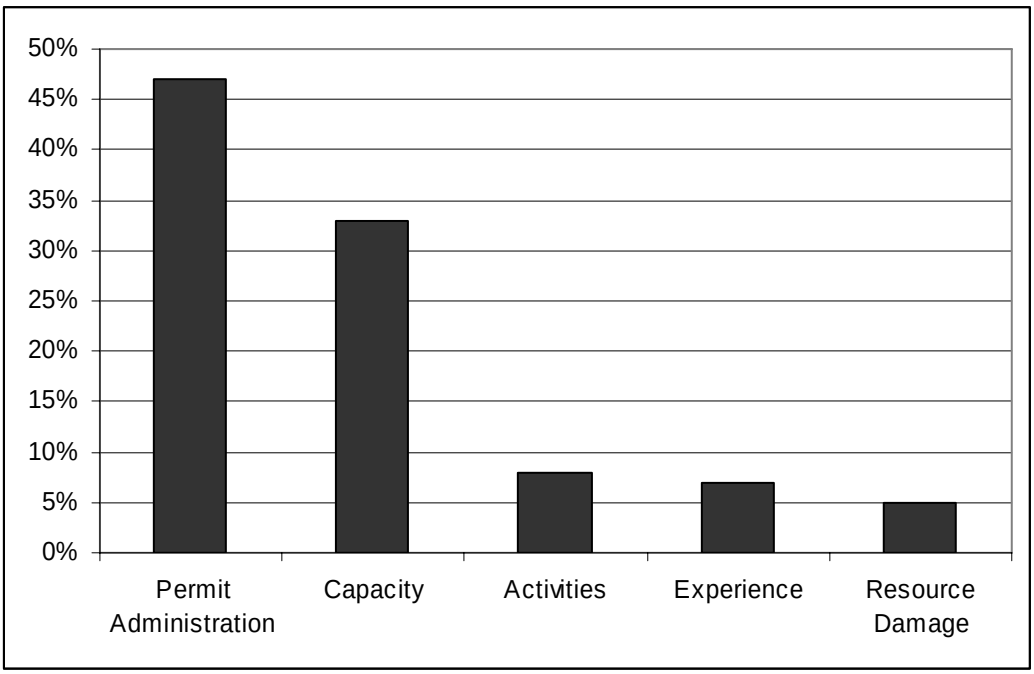
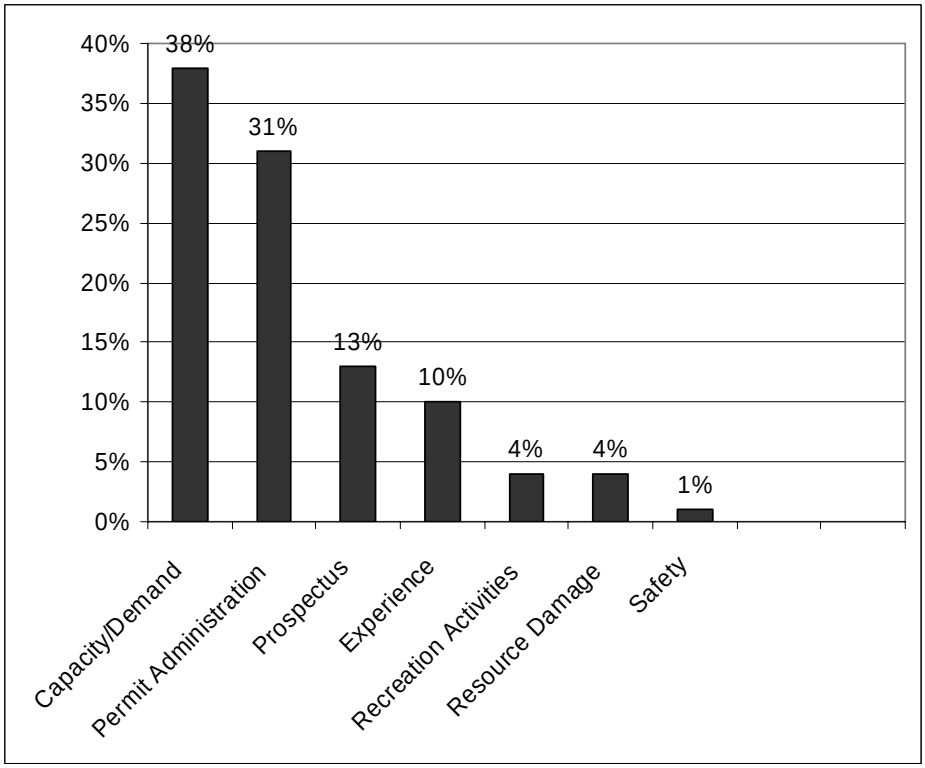


Figure 3. Total Percentages of these Areas of Concern for the General Area category



Conclusion of Public Collaboration

Figure 4. Percentages of all Areas of Concern



The chart above displays the percentages of concerns for the various concern categories. The public is mostly concerned with demand and capacity for recreation activities. Permit administration for current permits, and future permit administration including development and application of a prospectus for Outfitter-Guide permits, and types of activities that will be permitted in the future. There were questions and concerns on how a prospectus for solicitation of new recreation special use permits process would work. Some members of the public were concerned about the quality of the recreation experience, what types of recreation activities may or may not be allowed, resource damage caused by recreation use, and public safety. This information is used in the assessment as existing information regarding public concerns and preferences.

Chapter 2: Assessment Components

Products to be determined in the Assessment

This assessment utilizes several tools to screen and prioritize activities, identify areas of concern, and estimate sustainable levels of recreational use per Recreation Use Unit (RUU). The RUUs are geographically-based units generally characterized by homogeneous natural and cultural features, similar public opportunities and activities, and a common transportation network. Each chapter of the assessment is designed to analyze a separate aspect of the current recreation special use program. Each chapter provides summaries of important findings. This assessment will:

1. Describe the current structure of the Red Rock Ranger District Recreation Special Uses Program:
    - Types of activities offered
    - Number of commercially guided and non-commercial forest visitors participating
    - Condition of Forest roads where Outfitter-Guides currently operate and what needs to be done to correct serious road maintenance problems?
2. Describe the types of activities needed to accomplish National Forest goals and objectives, and the level of supply of each specific Outfitter-Guide activity needed to meet current and projected future visitor use levels.
3. Determine the total recreation visitation capacity per RUU and which units are approaching capacity or over capacity.
4. Determine the appropriate amount of commercial vehicles per day, and the rationale for the determination.

Methods of Determining Recreation Carrying Capacity

Limiting the amount of recreation use has been a challenge for public land managers for decades. There have been a variety of approaches to establish figures for visitor capacity, along with approaches that do not establish figures, but set up resource monitoring systems with thresholds that identify when there is too much use. During the 2002 Federal Interagency Taskforce Visitor Capacity on Public Lands Workshop the following concept was developed: “A visitor capacity is a complex decision that is based upon sound professional judgment, defined as a decision that has given full and fair consideration to all appropriate information, and is based upon principled and reasoned analysis, the best available science and expertise, and is in compliance with applicable laws.”(Haas, 2002)

Recent research by the Forest Service Pacific Northwest Research Station reviewed the past and current attempts used to limit recreation use on public lands. Key concepts from the *Recreation Tourism Initiative: An Assessment of Frameworks Useful for Public Land Recreation Planning, 2007* applicable to this analysis are illustrated below.

A limited number of frameworks exist to assist public land recreation managers to address 21st century public land recreation management issues. In general, there are four genres of recreation planning frameworks available:

- Recreation Carrying Capacity
- Recreation Opportunity Spectrum (ROS)
- Limits of Acceptable Change (LAC), including visitor experience and resource protection
- Benefits-Based Management

These frameworks represent an evolution in not only how recreation issues on public lands are addressed, but also in how they are framed. A growing number of recreation issues confronting public land managers occur within a context of complexity, change, and uncertainty, and declining organizational capacity. These conditions accelerate the need for frameworks to assist managers in working through these challenges. Relatively few effective, field-tested frameworks exist for this array of issues, suggesting that (1) managers may have difficulty finding a suitable framework and (2) there is need to develop frameworks for future issues and situations.

During the 1970s research was conducted regarding recreation carrying capacities. These efforts led to the notion that the objective or desired condition of an area was a critical element in determining carrying capacity. This concept led to the theory that carrying capacity is more a function of social values than an innate characteristic of the landscape, findings developed by Lucas in the early 1960s. Finally, the realization that carrying capacity is a function of social values, and that any amount of recreation use leads to some level of impact (even if it cannot be measured with the extant technology) means that degradation cannot be prevented if recreational use is allowed. Put another way, degradation is an inevitable result of recreational use. Recreation carrying capacity has become to be defined as the amount of recreational use allowable by an area's management objectives. No one has developed a generic process, framework, or set of steps that could be used in developing a carrying capacity. A recent report by a Department of Interior task force and related published articles (e.g. Haas 2004) have stimulated new interest in recreation carrying capacity and have strongly argued that establishing capacities (visitor capacities) can resolve many of the complex issues confronting public land managers. Some of this work has reverted to earlier definitions of recreational carrying capacity, for example, Haas (2002) defined visitor capacity as "the prescribed number of visitors at one time that will be accommodated." Although this recent definition does not refer to degradation of resources or values, the lack of reference to such determinations further confuses the notion of capacity. Frissell and Stankey (1972) suggested that carrying capacity is the "amount of change in an area" that is permitted by an area's management objectives. There is little scientific evidence for the existence of a numerical capacity: no process for developing a numerical estimate based on scientific relationships between cause and effect has ever been established. However the ROS system has been widely adopted around the world by various agencies in a wide variety of settings. Versions of it have been developed for tourism (Butler and Waldbrook 1991, Dawson 2001), water (Haas et al. 2004), hiking (Robson and Eagles 2002), mountain biking (Cessford 1995), urban settings, private lands (More et al. 2003), and even interpretation (Wearing and Archer 2003). The ROS is the most widely recognized recreation management concept around the world and probably the most single influential concept in recreation management and planning for public lands and protected areas. Only a few scientific articles have been written critical of ROS (e.g. Hamill 1984, and Patterson et al. 1998). (USDA, Forest Service, GTR-705, 2007)

The National Park Service uses the Visitor Experience and Resource Protection (VERP) system to establish recreation carrying capacity. This process defines recreation opportunities by developing indicators and standards of quality for resources, social and managerial components of recreation experiences. Similar to the ROS approach, "VERP advocates analysis of a range of visitor experience and resource conditions and recommends that such an analysis include a strong regional component by noting that 'a range of recreational opportunities in a region is desirable to

satisfy the diversity of recreation tastes;' (National Park Service 1997, 49). (Warzecha, et. al., 2001)."

The *Social Science Research Review*, (2001) displays that "Environmental psychology and recreation research conclude that a person experiences a setting through a combination of its physical, social, and managerial characteristics. Thus, concurrent consideration of the management program during the planning process is equally important and might sometimes be determinant in capacity decisions." Along that same line of thought, in Limes' *Principles of Recreational Carrying Capacity*, he identified constraints to determining recreation carrying capacity. "There are certain constraints in doing this, of course---budgetary, administrative, legal, and the capabilities of the physical environment." These additional constraints affect the amount of time and effort that the Forest can put into this assessment.

The Coconino Land and Resource Management Plan (LRMP) (USDA Forest Service 1987) provides direction for management to reach desired resource conditions. This includes identification of ROS classes across the Forest, along with management standards, goals and objectives for other resource areas. Recreation management direction was developed through scientific review, and response to public comments on the LRMP and its associated amendments. This assessment utilizes the ROS framework to determine appropriate limits of use in conjunction with the LRMP direction. Sound professional judgment has been applied as necessary to complete the assessment. In addition, the assessment considers the physical, ecological and social components of the RRRD, as well as capacities of associated facilities to identify recreation carrying capacity.

This assessment combines existing information on the bio-physical resource conditions, visitor studies related to the RRRD, and additional information compiled from various recreation capacity studies and other related literature to analyze recreation visitor capacity. This programmatic analysis includes existing use categories and identifies new potential activities throughout the entire RRRD. The best data available is used in the analysis to provide a measurable assessment of the recreation special uses program.

Types of Recreation Visitor Capacity

This assessment considered the following types of recreation visitor capacity: Physical, Ecological and Social.

Physical recreation visitor capacity refers to the amount of recreation use or visitation that can take place in a defined space. The assessment takes into account the total land base of the RRRD (536,747), a portion of the Peaks Ranger District (9,975 acres primarily near Oak Creek Canyon and the Red Rock Secret Canyon Wilderness), and a portion of the Mormon Lake Ranger District (6,390 acres near Oak Creek Canyon and the Schnebly Rim) for a total of 553,112 acres. In a physical sense, the RRRD could accommodate many more people at one time than what has occurred historically, or what theoretical recreation capacity estimates are, since the land base is so large and visitors have not been using the whole land base, but primarily recreating on roads and trails. Recreation use is not ever expected to approach the physical capability of the RRRD; therefore physical recreation visitor capacity is not a limiting factor in this analysis. Even though the overall area physical capacity may be close to un-limited, the lineal capacity of some roads and trails has already reached capacity due to the physical capacity limitations of narrow roads and trails ability to accommodate vehicles safely and efficiently.

Ecological recreation visitor capacity refers to the amount of recreation use that can occur without creating unacceptable impacts to the ecosystem. Several factors are considered including

potential impacts to vegetation, water quality, soils, wildlife, fish, etc. Ecological recreation visitor capacity is an important factor of this assessment. Ecological concerns were used to modify recreation visitor capacity in areas with identified resource concerns.

Social Recreation Visitor Capacity refers to the amount of recreational use that can occur in an area without impairing the desired social experience. The ROS Primer and Field Guide (USDA Forest Service, 1990) states that social encounters "measure the extent to which an area provides experiences such as solitude or the opportunity for social interaction. Increasing the number of visitors to an area changes the kind of recreation experiences such as solitude or the opportunity for social interaction. Increasing the number of visitors to an area changes the kind of recreation experience offered, attracting new users and causing others to leave." The Forest Plan has outlined the maximum amount of people that can be in a specific ROS class at one time. Forest Plan Amendment 12, Map 3 provides the following direction: social encounter is defined as 1 vehicle or 6 or fewer people. For example, if you pass a group of 14 on the trail that would equal 3 encounters, or if you pass two jeeps, that would equal 2 encounters.

ROS Scale

Primitive	Semi-Primitive Non-motorized	Semi-Primitive Motorized	Roaded Natural	Roaded Modified	Rural	Urban

Lower Capacity — Higher Capacity

Table 6. Social Encounters

ROS Class	FP (Map 3, Amendment 12) Social Encounters Parties/ Vehicles Per Day - Total Use	FP (Map 3, Amendment 12) Social Encounters Parties/ Vehicles Per Hour Commercial Use
Primitive	15 per day** (90 people (15 parties)/ day or 15 vehicles)	
Semi-Primitive (Non-Motorized)	15 per day** (90 people (15 parties)/ day or 15 vehicles)	
Semi-Primitive (Motorized)	15 per day** (90 people (15 parties)/ day or 15 vehicles)	
Roaded Natural		15 per hour*(90 people/ hour or 15 vehicles)
Rural		15 per hour*(90 people/ hour or 15 vehicles)

* 15 per hour for Forest Service permitted commercial tour operators only. All other users are moderate to high contact frequency.
**All users (commercial tours and self-guided).
Note- 1 day equals 8 hours, 15 vehicles x 6 people = 90 maximum people

Social encounters are a critical component of the assessment, and are identified as being the most limiting factor for determining recreation visitor capacity.

This Assessment examines recreation visitation using the landscape method. This method looks at recreation activities occurring in thirty-five geographical areas referred to as Recreation Use Units (RUUs) within the District. The product of the landscape method is a recreation capacity figure, parties of 6 or vehicles at one time (P/V-AOT) per acre, for each Recreation Opportunity Class (ROS) for individual RUUs. This information is summarized in Chapter 4. Chapter 5 displays the RUUs with available capacity for guided recreation activities determined to have a demonstrated need (Chapter 3), and the activities that are suitable to be performed in each RUU. Refer to Figure 1 for the Vicinity Map depicting the RUUs and authorized roads and trails, and the additional maps in Appendix A for more detailed information.

Landscape Method

Recreation Use Units

The original ID Team broke the District down into smaller units called Recreation Use Units (RUUs). The delegated sub-team that developed the RUUs included the District Recreation Staff, Assistant Recreation Staff, Forest Landscape Architect, and the District Soil and Watershed Staff Officer. The RUUs are geographically-based units generally characterized by homogeneous natural and cultural features, similar public opportunities and activities, and a common transportation network. The following criteria were used to map recreation use units:

• In the Amendment 12 area (163,000 acres of the District) management area (MA) boundaries were used almost exclusively to derive RUUs within the Amendment 12 management areas. For instance, the Sedona and the Upper Loop RUU nearly matches the Neighborwoods MA;

Savannah, Kachina, part of the Dry Creek and Windmill RUUs are the Savannah MA; and the Oak Creek RUU is the Oak Creek MA etc.

In areas outside of Amendment 12 the following criteria were used to delineate RUUs.

• Topographical landform - the top of the Rim, the foothills to the Rim, the Chalk Hills, Towel & Hackberry Mountains, Wickiup Mesa etc

• Wilderness Area Boundaries

• Road systems, i.e. Fossil Creek Road, Interstate 17, the Cornville Rd., Highway. 89A, FR 761 etc.

• Sub-watershed boundaries where a break was needed.

Rational for the use and development of Recreation Use Units, and multiple ROS classes within each RUU.

The principles of the "National Forest Management Act" (36 CFR 219.1 (b)) include:

- Recognizing that the National Forests are ecosystems and their management for goods and services requires an awareness and consideration of the interrelationships among plants, animals, soil, water, air, and other environmental factors within such ecosystems.

- Using a systematic, interdisciplinary approach to ensure coordination and integration of planning activities for multiple-use management.

The "Coconino National Forest Land Management Plan" (USDA Forest Service 1987), describes "Management Areas" in the following way: The mission, goals, and objectives for the Forest are realized by applying groups of management activities to specific units of land. Groups of management areas are called "Prescriptions" and the land units are called "Management Areas" . "Amendment 12" to the Forest Plan included "12 distinct management areas, which allow us to recognize and manage the variety of special places" The definition of "sense of place" can be defined as referring to the entire group of cognitions and affective sentiments held regarding a particular geographic locale and the meanings one attributes to such areas.

For the purpose of this "Recreation Special Use Assessment" Recreation Use Units are the recreation opportunity settings which according to the Recreation Opportunity Spectrum Book, "…We define as the combination of physical, biological, social and managerial conditions that give value to a place. Thus, an opportunity includes qualities provided by nature (vegetation, landscape, topography, scenery), and conditions provided by management (developments, roads, regulations. By combining variations of these qualities and conditions, management can provide a variety of opportunities for recreationists" (USDA Forest Service 1988). The Forest Service manages land which includes the setting. For the purposes of this assessment the RUU is the recreation opportunity setting.

The RUUs were developed by an interdisciplinary team including the Forest Landscape Architect, the District and Asst. District Recreation Staff Officers and the District Soil and Watershed Staff Officer based on landscape character, landform, topography, ROS Class, Amendment 12 Management Area Boundaries, recreation benefits, typical use patterns and similar transportation

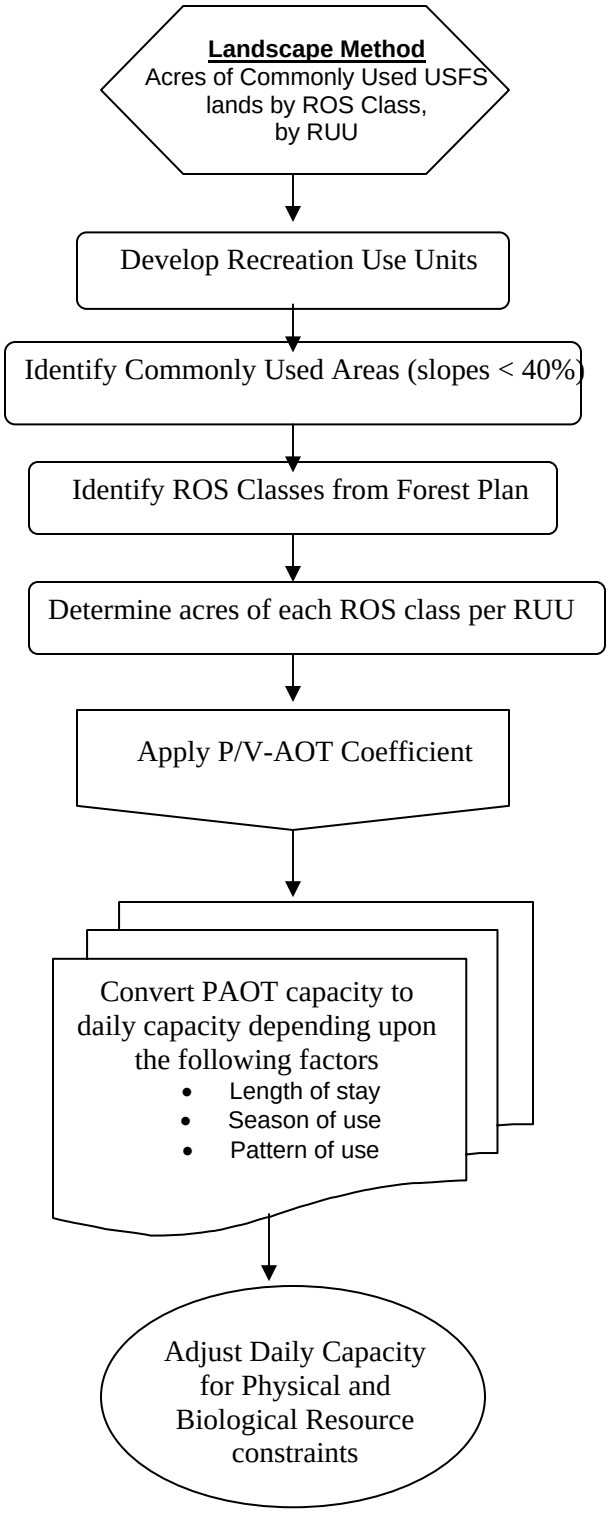
systems. They define the recreation opportunity setting. The Recreation Opportunity Spectrum has been divided into six major classes of Forest Service use: Urban (U), Rural (R), Roaded Natural (RN), Semi-Primitive Non-Motorized (SPNM), Semi-Primitive Motorized (SPM), and Primitive (P). Maintaining a broad spectrum of these classes is very important to provide people with choices." The RUU is the recreation opportunity setting and the ROS class within that setting (U, R, RNA, SPM, SPNM or P) is the choice within that setting. That is why there are numerous ROS classes within the RUU. People seek numerous choices (semi-primitive, roaded natural, rural etc.) within the recreation opportunity setting or RUU. That plus interdisciplinary management is why we divided the Red Rock Ranger District into RUUs and further divided the RUUs by ROS classes (to allow for a variety of choices within a setting). We then used the RUUs and ROS classes within the RUUs to determine "Needs and Capacity".

The RUU allows us to analyze areas for a particular action i.e. recreation capacity and needs. It provides an integrated resource management "look" at a specific area. The RUUs couldn't be too small or it would have been impossible to reasonably analyze all of them for this "assessment". They did, however, need to be small enough to share common characteristics. If time and budget allowed, the District could have been divided into topographical units where people see and hear each other and seek similar recreation benefits, outputs and choices. These little "theaters" of activity are typically 300-1,000 acres in size (Bill Stafford, Rec. Staff actually mapped them at one time). There would have been too many to analyze. On the 575,000 acre Red Rock District there would have been over 950 of them.

Landscape Method Process

Figure 5 illustrates the key steps of the Landscape Method. Refer to Chapter 4 for a complete explanation of the Landscape Method.

Figure 5. Landscape Method Process



Direction Associated with Commercial Services on National Forest System Lands

National Direction for Commercial Services on National Forest System Lands

Wilderness

• "Commercial services may be performed within the wilderness areas designated by this Act to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the area" (Wilderness Act of 1964).

• "Limit and distribute visitor use in accordance with periodic estimates of the maximum levels of use that allow natural processes to operate freely and do not impair the values for which wildernesses were created." (CFR 293)

• Where a choice must be made between wilderness values and visitor or any other activity, preserving the wilderness resource is the overriding value. Economy, convenience, commercial value, and comfort are not standards for management or use of wilderness (Forest Service Manual (FSM) Amendment 2300-90-2, Section 2320.6).

• Prohibit caches, and phase out existing ones on a planned basis (FSM Amendment 2300-90-2, Section 2323.13g).

• Do not permit competitive events, including competition involving physical or mental endurance of a person or animal, foot races, canoe or boat races, competitive trail rides, survival exercises (including military), or other activities of this nature in wilderness (FSM Amendment 2300-90-2, Section 2323).

General Forest Areas (GFA)

• "As identified in forest land and resource management plans, provide for commercial outfitting and guiding services that address concerns of public health and safety and foster small business. Encourage skilled and experienced individuals and entities to conduct outfitting and guiding activities in a manner that protects environmental resources and ensures that National Forest visitors receive high quality services." (FSH 2709.11)

• Authorize only those outfitting and guiding activities that are consistent with forest land and resource management plans." (FSH 2709.11)

• Assignment of priority use shall be at the discretion of the authorized officer and shall be consistent with forest land and resource management plans. Base any assignment of priority use on the capacity of the area or standards and guidelines as established in forest land and resource management plans. (FSH 2709.11)

Forest Direction Associated with Commercial Services on the Coconino National Forest

Outfitter-Guides are our agents in helping to provide a wide range of services to the public. The Forest wants to support and maintain Outfitter-Guide services that are viable, professional, and effective in delivering these services. Following are some of the goals and objectives that guide the RRRD in the management of Outfitter-Guide services.

Outfitter-Guides provide a broad spectrum of dispersed recreation opportunities in accordance with the established Recreation Opportunity Spectrum (ROS) classification for the area (USDA Forest Service 1987). Refer to Figure 2- Recreation Opportunity Spectrum Classes and Recreation Use Units in the Map Appendix.

Amendment 12 Project Area Direction

In 1987, when the Coconino National Forest Plan was finalized, few people foresaw the immense impact human activities would have on lands surrounding Sedona, Arizona. Beginning in the early 1990's the community of Sedona recognized that the Coconino National Forest Plan was too broad to deal with the unique landscape surrounding Sedona.

In June 1998 the Forest finalized Amendment 12 of the Coconino National Forest Plan (USDA Forest Service 1998). This amendment further defined the management of nearly 163,000 acres in the vicinity of Sedona, AZ. In the Decision Notice for Amendment 12, the Details and Reasons for the Decisions part states the following: 'I believe there is currently an adequate number of FS permit holders/tour operations to meet the demand for activities like four-wheel-drive touring, balloon touring, guided hiking, horseback touring, or spiritual touring. To expand current services on National Forest land, particularly in light of our knowledge of a somewhat general dislike for commercial uses on public lands, would be inappropriate, in fact, could limit our options for protecting sensitive resources or providing quality visitor experiences. The guiding principles of Amendment 12 outlined on pages 206-8 state that "We respect the links between ourselves, all human activities and the natural world, and realize that the environment is a sensitive and limited living system in need of actions to sustain and enhance it. We will not regard the area as a potential theme park for commercial exploitation at the expanse of nature. We will not sell the day to profit the hour."

The following direction pertains to the Amendment 12 project area. Additional LRMP management direction applicable to this assessment is found in Appendix H.

• The only new commercial tours "needed" are additional archaeological tours, instructional/training rock climbing, public transportation, and mountain bike tours (LRMP – Amendment 12, pgs. 18-19).

• Recreation Goals of Amendment 12 include: "Emphasize opportunities for individuals, families or small groups and opportunities for experiencing solitude, scenic beauty and natural quiet. Recreation opportunities are primarily nature based. Both short and long visits are available. (LRMP –Amendment 12, pg. 206-22).

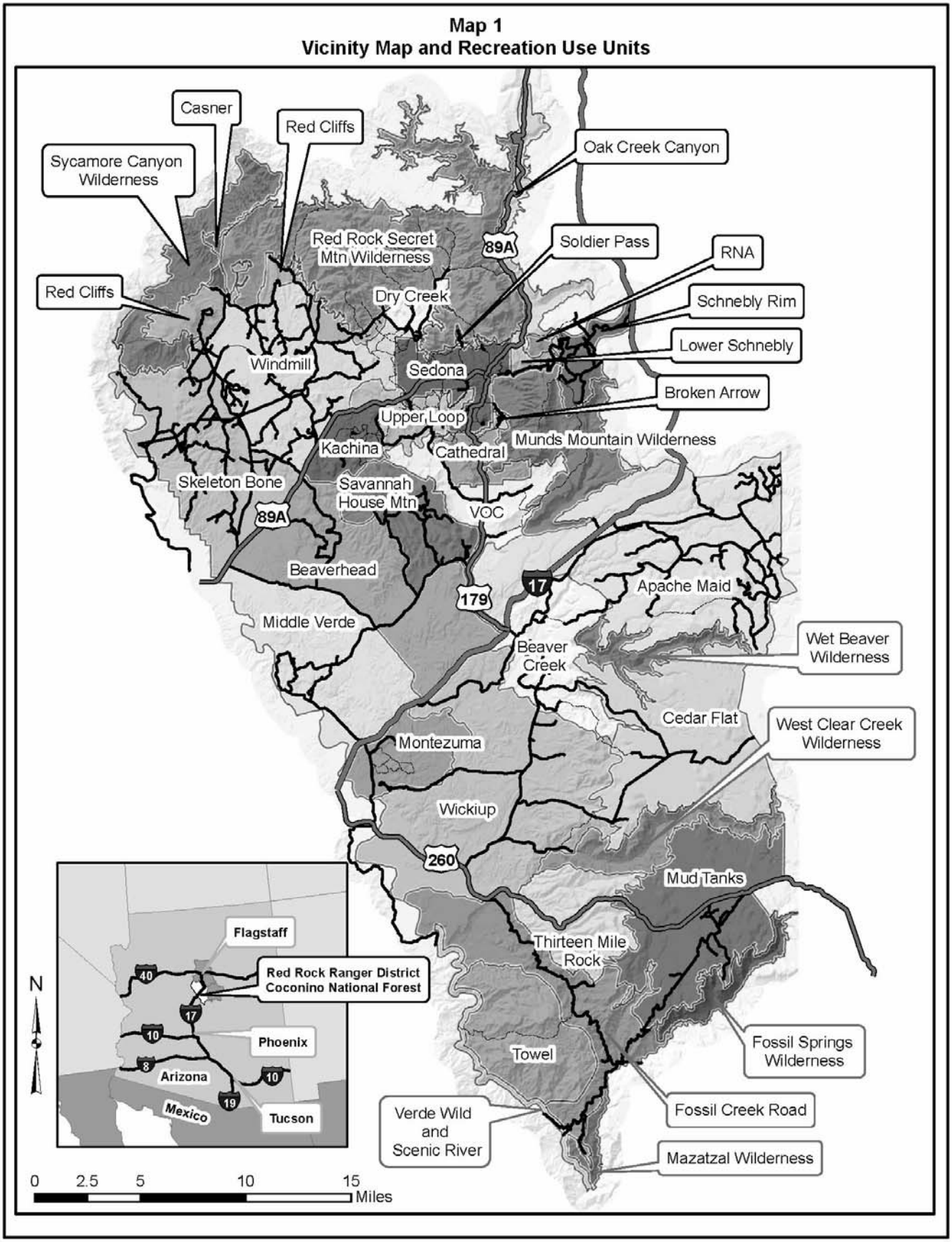
• No off-road or off-trail guided services (LRMP –Amendment 12, new pg. 206-27). Outfitter-Guides will actively participate in efforts to reduce the proliferation of social trails.

• Encourage all permitted service providers to support the National Forest through road and trail maintenance, teaching "Leave No Trace Ethics" to forest visitors, providing natural history interpretation and avoiding and preventing damage to National Forest resources and infrastructure (LRMP –Amendment 12, pgs 26-27).

• Commercial tours in Wilderness will be limited to Wilderness-dependent opportunities that cannot occur outside Wilderness (LRMP –Amendment 12, new pg 108-4).

• Objectives for Scenery include: "Commercial tours blend visually into the landscape and do not draw attention to the activity or equipment."

Figure 6. Vicinity Map



Chapter 3: Needs Assessment for Recreation Activities

Public need for services forms the basis for commercial recreation permits on the National Forest. It is ultimately the responsibility of the Forest Service to identify public need for services that meet agency objectives. The RRRD has accomplished this with consideration of input from private citizens, guided and unguided forest visitors, institutional and organized group users, and permit holders. The recreation trend data outlined below was also used to assess the need of various types of Outfitter-Guide recreation services. The actual use of authorized Outfitter-Guide companies is also a factor in determining if there is a need for additional guided services for specific activities. The output of this Chapter is a list of commercial recreation activity categories that are consistent with agency objectives and are needed to meet current and foreseeable future visitor Outfitter-Guide demands on the RRRD. Market-generated demand or a prospective Outfitter-Guide's desire for a special use authorization does not constitute public need. The issuance of a permit is a discretionary act made by a Forest Service Line Officer.

Commercial Recreation Activity Categories

Potential and Existing Recreation Activity Categories

The following activity categories were identified or requested as additional use to existing commercial services and/or possible new commercial opportunities. A definition of each activity is presented to prevent confusion or future misinterpretation of activity categories. Several activities have been grouped if the recreation experience was not significantly different. An example of grouping is the combination of jeep and hummer tours into the Jeep 4X4/ Scenic tour category, and backpacking/camping category. A unique activity category was identified if the experience sought and the setting attributes needed were unique. Some activities require use of maintenance level 2, 3, and 4 roads. Refer to section 2.4 for information on maintenance levels. The most requested setting attribute that visitors seek is to have a view of the Red Rocks. In other areas of this Assessment the RUUs that have these views are described as the RUUs in the most desired commercial opportunity locations.

ATV Tours

Definition: ATVs are recreation vehicles primarily designed for off-road use. They are 50 inches or less in width, have an unladen weight of nine hundred pounds or less and are designed to be ridden astride upon a seat or saddle. ATVs travel on at least three low pressure tires.

Important Setting Attributes: A motorized trail system, or level 2 roads with very little full size vehicle use, high clearance, challenging obstacles.

Backpacking/Camping/Canyoneering (Overnight Use)

Definition: For purposes of this analysis backpacking/canyoneering is defined as multiple-day trips on foot and not supported by stock. Since multiple-day trips of this sort often incorporate canyon areas the two subcategories were combined.

Important Setting Attributes: A diverse hiking trails system and dispersed camping opportunities.

Coach/Tour Buses

Definition: A motor vehicle for mass transit, built in various capacities and sizes, and designed for carrying from 10 to 60 passengers. Bus service provides transit for tourists to see notable sites. Tours originate from outside the region or state.

Important Setting Attributes: Compatible pullouts, Level 4 and 5 roads

Equestrian (Day Use)

Definition: Includes lessons or riding horses for pleasure.

Important Setting Attributes: Adequate trail and trailhead infrastructure

Equestrian (Overnight Use)

Definition: A series of camps are utilized during trips through a designated area. Clients and guides utilize stock to transport people and supplies from location to location. Duration is usually 1-2 nights per location.

Important Setting Attributes: Adequate trail and trailhead infrastructure and camping opportunities.

Fishing

Definition: Fly or spin fishing accessed by trail or road. There are no float fishing opportunities on the RRRD.

Important Setting Attributes: Adequate fishing waters and access points

Free Riding

Definition: Free riding is off trail mountain bike riding often utilizing fabricated jumps and terrain obstacles.

Important Setting Attributes: This activity is dependant on areas available for cross country travel and trail/feature construction.

Heritage Tours

Definition: Primary purpose of heritage tours is to visit specific cultural sites. Vehicles travel directly to and from identified sites. All guides are certified Arizona Site Stewards.

Important Setting Attributes: Adequate access to suitable cultural sites

Hiking (Day Use)

Definition: Includes day hikes on trails for fitness, interpretation, education or pleasure. Hiking tours must spend the majority of the time hiking, not driving.

Important Setting Attributes: Adequate trail system, trailheads that provide adequate parking, and the availability of short and long hikes.

Hot Air Balloon Tours

Definition: Hot air balloon rides utilize designated take off and landing areas.

Important Setting Attributes: Large take off and landing areas and suitable flight paths (We designate launch sites, but are unable to specify exact landing spots because ballons are subject to where the wind carries them.)

Jeep Tours- 4X4

Definition: Any open (no-top) 4-wheel-drive vehicle used to demonstrate, teach, or provide an extreme off road experience, or utilized to access remote scenic areas as opposed to visiting heritage sites or accessing sites for other activities such as hiking, biking, etc.. Hummers are included in this category. Specialized skills and training are required to operate the vehicle, and to negotiate the road bed.

Important Setting Attributes: Forest Level 2 roads that require a 4X4 vehicle to manuever the road.

Note: Previous attempts to separate 4X4 and scenic tours as separate categories proved to be difficult. Most tours contain aspects of both categories (stretches of challenging terrain and scenic views accessed by low clearance roads).

Jeep Tour- Scenic with 4X4 Component

Definition: Tour provides access to scenic views of the Forest, in open (no-top) vehicle, in a natural appearing condition, and requires specialized skills and training to operate the 4X4 vehicle and to negotiate the roadbed.

Important Setting Attributes: Adequate system of Level 2 4X4 roads to scenic vistas.

Jeep Tour- Scenic

Definition: Tour provides access to scenic views of the Forest in a natural appearing condition. An open (no-top) vehicle may be used in the tour.

Important Setting Attributes: Adequate system of Level 3, 4 and 5 roads to scenic vistas. No roads which require a 4X4 are used in these tours.

Metaphysical

Definition: Purpose of activity is to provide, share, and guide spiritual experiences. Often include vortex experiences and require only minimal physical exertion. This activity can be done in small groups or in a private session.

Important Setting Attributes: Access to vortexes and/or inspirational areas

Mountain Biking

Definition: Guided, instructional, or fitness trail riding utilizing Forest system trails.

Important Setting Attributes: Adequate trail systems containing variety of difficulty levels

Public Transit

Definition: A motor vehicle for mass transit, built in various capacities and sizes, designed for carrying from 10 to 60 passengers. Vehicles are used to transport members of the general public to designated locations on the Forest. Tours originate locally and run on an established schedule. Funding is often subsidized by local government to promote mass transit.

Important Setting Attributes: Level 4 and 5 roads, possible infrastructure at stops to support bus system.

Rock Climbing/Caving

Definition: Instruction and guidance with technical rock climbing and caving. Participation in this category requires specialized equipment such as harness, rope, rappelling and ascending devices.

Important Setting Attributes: Suitable and stable rock and caves

Segway

Definition: An electric, self-balancing two wheel vehicle.

Important Setting Attributes: Adequate trail system

Activities not Considered in this Analysis

Wedding Events and Planners

Wedding permits are short-time authorizations usually not exceeding one hour per event. District staff will pre-approve a variety of specific locations with detailed terms and conditions associated with each site. Either the wedding party or the wedding planners are the responsible party for the wedding event. No individual entity will receive a blanket authorization to provide wedding services due the uniqueness of each wedding. Each application will be reviewed separately. Proposals meeting the terms and conditions of the pre-approved sites will be approved immediately. Proposals not consistent with the pre-approved sites may be rejected.

Recreation Events

Recreation events are generally authorized for 1-2 day periods. Historical information such as public reception to an event, environmental impacts, and logistical challenges are only available for annual events that have been previously held. New requests require a significant upfront analysis, especially given the relatively small segment of the public they serve and the short duration of the event. The RRRD permits an average of 7 recreation events per year. Assuming most recreation events will occur on weekends, up to 14 recreation events would make up 27 percent of available weekends in a year. The top seven events for each season (winter and summer) will be considered. Preference will be given to established annual events in good standing. A limit on the maximum number of participants is recommended for events occurring in high use areas. The following application timeline allows for appropriate application analysis.

Table 7. Recreation Event Application Timeline

Season	Proposed Event Date	Application Processing Period	
		Application Due Date	Permit Award Date
Summer	May 1-November 30	Proposals must be received by February 1	April 1
Winter	December 1-April 30	Proposals must be received by September 1	November 1

Geocaching

Geocaching is experiencing exponential growth in popularity throughout the nation. It is essentially a scavenger hunt for global positioning system (GPS) users. Individuals and organizations set up caches all over the world (including National Forest system lands) and share the locations of these caches on the internet. GPS users can then use the location coordinates to find the caches. As of 10/26/2006 there are 553 geocaches within 50 miles of Sedona.

Several Forests have established guidelines and areas for the activity. The overwhelming popularity, accessibility (locations found on the web) and simplicity of the activity suggests that there is no need for a commercial operation on the RRRD. The RRRD will establish an interdisciplinary team to consider guidelines and restrictions of this activity.

Hunting

There are some guided hunting permits issued to Outfitter-Guides on the Forest. There are not very many of these permits, and they are not prevalent on the RRRD. Most of the hunting permits occur on the Beaver Creek portion of the RRRD. Hunting permits are managed by the Mogollon Rim Ranger District on the Coconino National Forest, not the RRRD. Therefore, these permits will not be analyzed.

Recreation Trends

Introduction

Several studies have been done regarding Arizona tourism including specific studies for the Sedona area. The following information highlights the findings from these studies that are relevant to outdoor recreation on the Red Rock Ranger District, Coconino National Forest. This information will be used to assist managers in determining the need for guided recreation activities in this Chapter.

Oak Creek Canyon Customer Surveys

In 1992, the Forest conducted a customer survey to gather information on visitors going to Oak Creek Canyon. The survey found that the top activities that visitors participated in along Oak Creek Canyon were sightseeing, fishing, relaxing, camping, picnicking, day hiking, wildlife observation or photography, swimming, driving for pleasure, and general photography.

Sedona Forum XII Background Research Report

The Sedona Forum XII Background Research Report on Maximizing Benefits and Minimizing Impacts, an Examination of Tourism in the Greater Sedona Red Rock, Vannette and Newton, Northern Arizona University, 1996 identified tourism trends in the Sedona area. This report identifies Arizona as one of the top five tourist destinations in the United States. Between 1984 and 1994 tourism in Arizona increased steadily to become the State's second largest industry. The study revealed the primary reasons people visit Sedona are touring and sight-seeing, and to recreate and vacation.

Visitors to Sedona that also visited the Coconino National Forest had the following perceptions of National Forest system lands surrounding Sedona. The most frequent responses stated that the Forest was beautiful, clean, and breathtaking. Ninety-five percent of those surveyed had positive perceptions of their visit. A small fraction of visitors, (1.7 percent) had negative perceptions of

their visit. Negative responses stated that the Forest was crowded, touristy, dirty, inaccessible and expensive. Traffic was identified as a problem in Oak Creek Canyon and Schnebly Hill Road.

This research effort included a sample size of 1,434 visitors interviewed. The most popular activities for Sedona visitors on National Forest system lands include sight-seeing (19 percent) and hiking (11.7 percent). Jeep tours and camping ranked at 4.1 percent and 3.1 percent respectively in popularity. Photography is another activity pursued by visitors. Approximately 64 percent of visitors were seeking a spiritual experience. These visitors were interested in going to vortexes (42.5 percent), including Airport Mesa, Bell Rock, Boynton Canyon, and others. Only 17.5 percent of the visitors interviewed for the study used an Outfitter-Guide service. Of those that did, 65 percent took a jeep tour and 9 percent took a tour on a plane/helicopter or balloon. In 1996 there were approximately 55 guided services in the areas of Oak Creek, Sedona, and Oak Creek Canyon.

Summer visitors to the Forest recommended the following changes:

- Limit the number of vehicles on Forest lands.
- More transportation options should be provided.
- Transportation onto the Forest in general needs improvement.

Recommendations to improve satisfaction were:

- Limit and regulate activities more closely
- Provide good quality activities
- Allow guided tours on the Forest
- Ensure that activities yield limited impact on Forest lands.
- Provide more information on activities and access to Forest lands

Sedona Red Rock Visitor Study

The Sedona Red Rock Visitor Study was another study conducted to examine recreation activities of visitors to the Red Rock District (Executive Summary; Report 2, Northern Arizona University, Lee, Peirskalla, 1996). *The Sedona Forum XII Report* and this study reported similar findings regarding primary activities that visitors are seeking, and their desired settings. This study was conducted during the high visitor use seasons of spring and fall in 1995. Over 1,500 visitors were contacted with a combination of on-site interviews and mail back questionnaires. Completed questionnaires were returned by 1,107 recreation visitors. Jeep passengers were given 334 questionnaires, and 232 were completed and returned. Visitors seeking a dispersed recreation experience and visitors seeking a guided tour were analyzed in those categories.

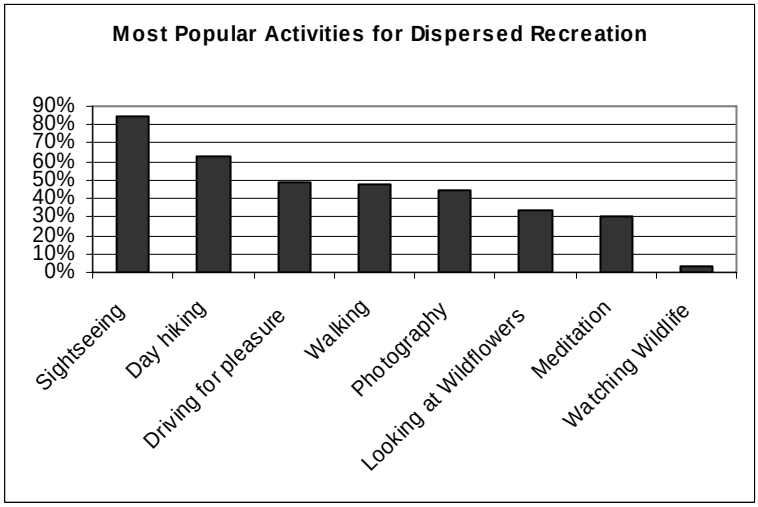
Both visitor groups sought an experience that would get them away from crowds and the usual demands of life to enjoy natural scenery, experience quiet, and rest mentally.

Dispersed Recreation Visitors

Visitors who were seeking a dispersed recreation experience desired settings that were largely undisturbed natural areas; accessible only by hiking or mountain biking; little contact with other people (6 or fewer); a few primitive facilities (trails or signs); and some general information available (regulations, maps). This group of visitors felt that guided tours, rental or private four-wheel drive vehicles and airplanes or other aircraft detracted from their experience.

The results of the survey showed that the primary activities that dispersed recreation visitors were pursuing were sightseeing, day hiking, driving for pleasure, walking, photography, looking at wild flowers, meditation, and watching wildlife respectively. See Figure 7.

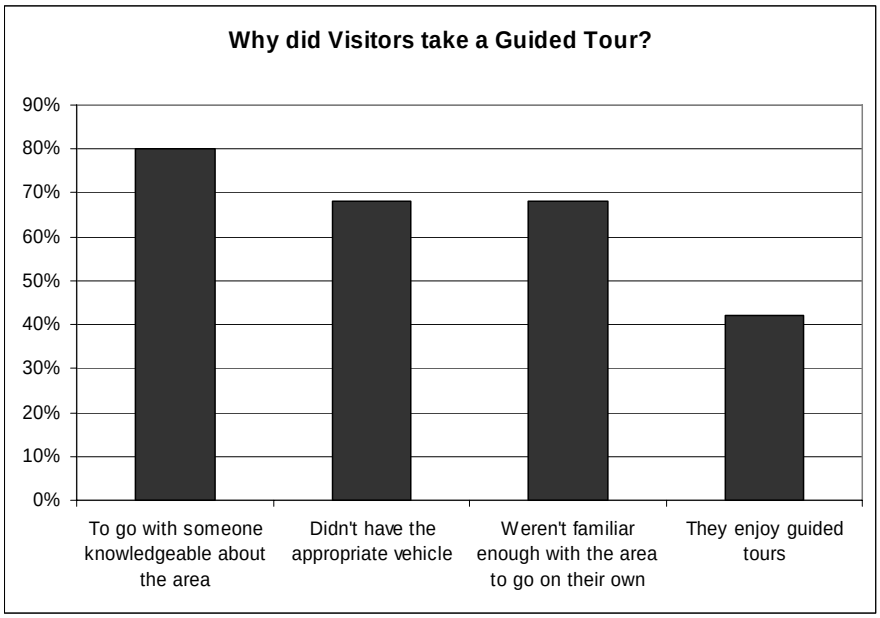
Figure 7. Most Popular Activities for Dispersed Recreation



Guided Tour Visitor Group

Jeep tour visitors prefer undisturbed or largely undisturbed natural areas that are accessible on motorized trails and primitive roads; very little contact with other people (less than 15 groups per day); none or a few signs or facilities, and none or a few facilities for regulations and information. The primary reasons that visitors participated in a guided tour are shown in Figure 8.

Figure 8. Why did Visitors take a Guided Tour?



The study also surveyed visitors at different locations on the Red Rock Ranger District.

Visitors at Broken Arrow participated in the activities shown in Figures 9 and 10 below.

Figure 9. Most Popular Dispersed Activities at Broken Arrow

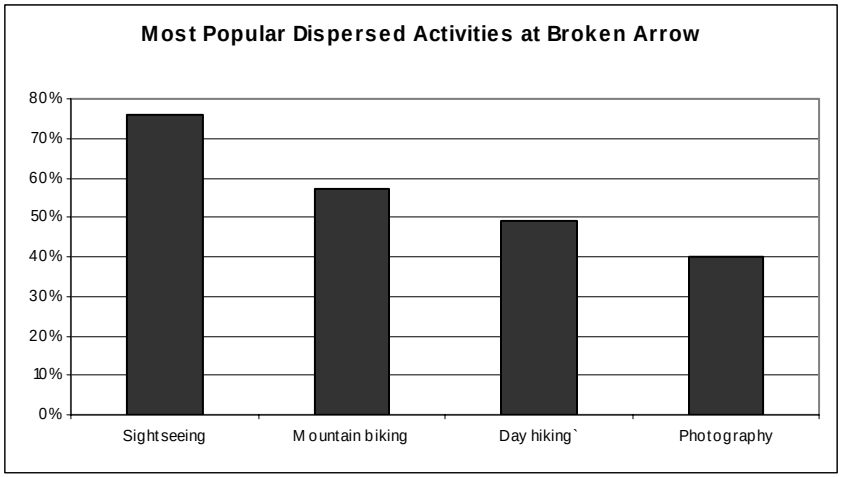
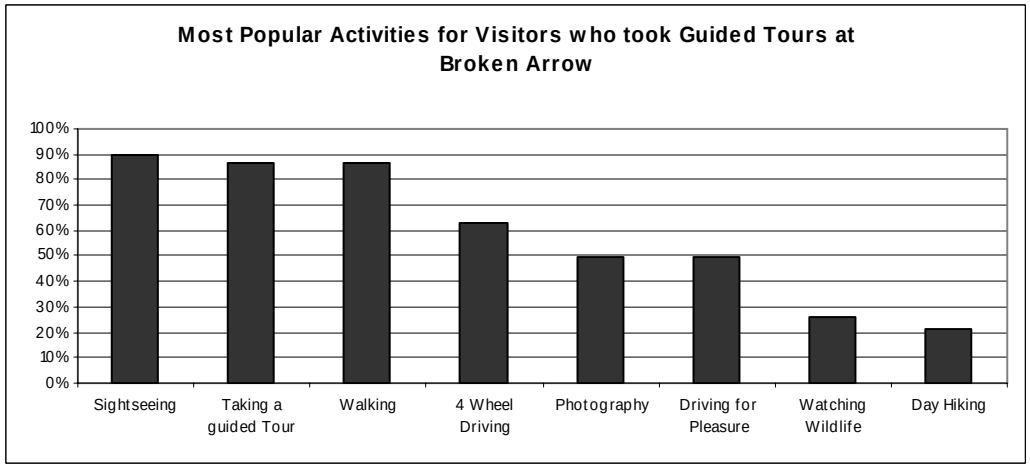


Figure 10. Most Popular Activities Visitors who took Guided Tours at Broken Arrow



Visitors at Schnebly Hill participated in the activities shown in figures 11 and 12 below.

Figure 10. Most Popular Dispersed Activities for Schnebly Hill

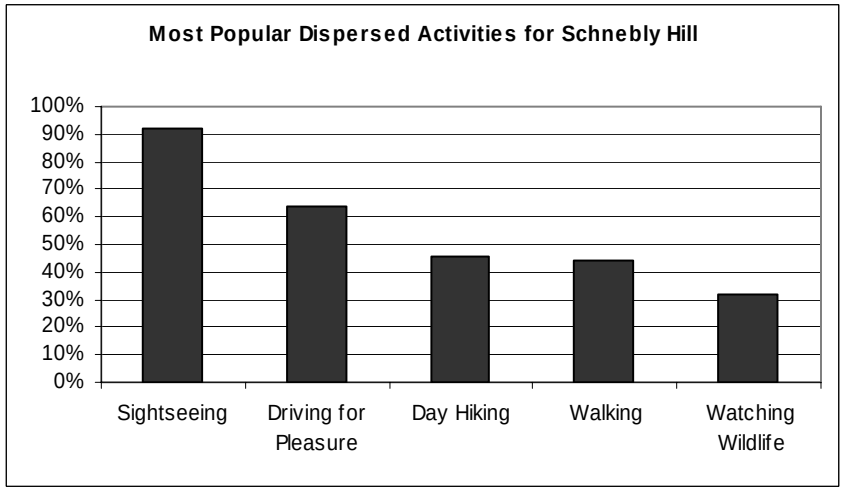
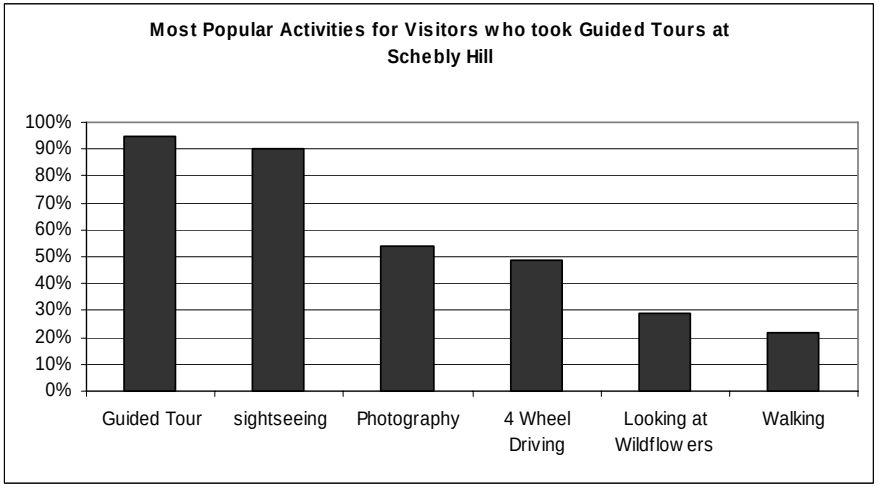


Figure 11. Most Popular Activities for Guided Visitors at Schnebly Hill



Visitors at Soldier Pass participated in the activities shown in figures 13 and 14 below.

Figure 12. Most Popular Dispersed Activities at Soldier Pass

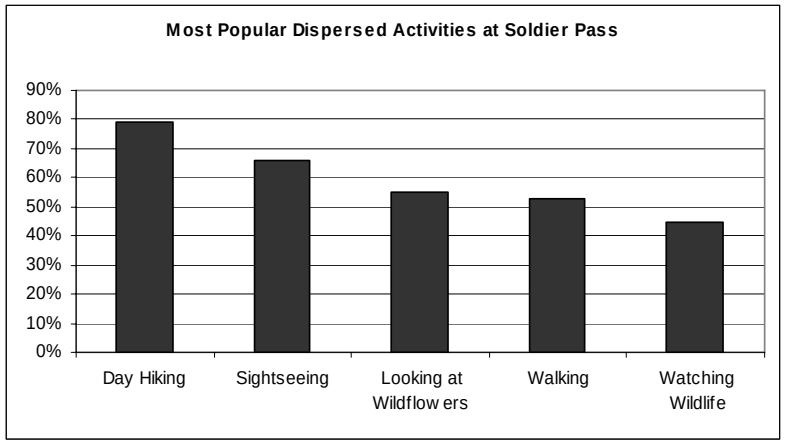
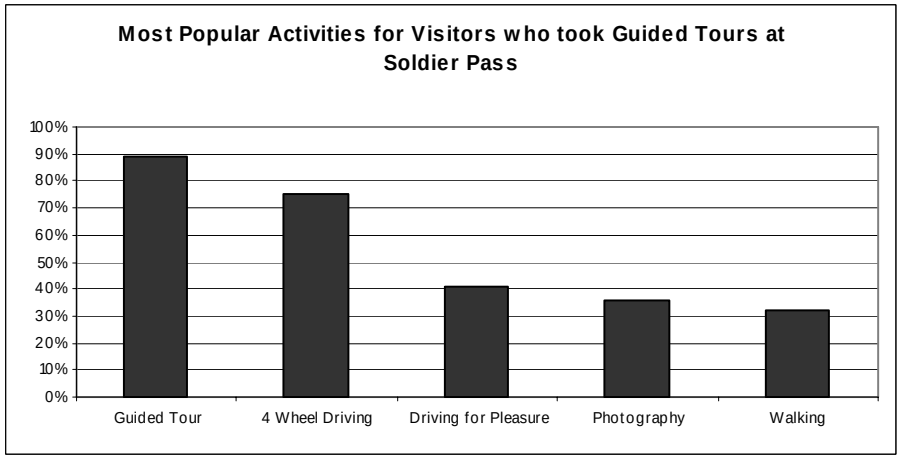


Figure 13. Most Popular Activities for Guided Visitors at Soldier Pass



Visitors at Dry Creek participated in the activities shown in figures 15 and 16 below.

Figure 14. Most Popular Dispersed Activities at Vultee Arch Road

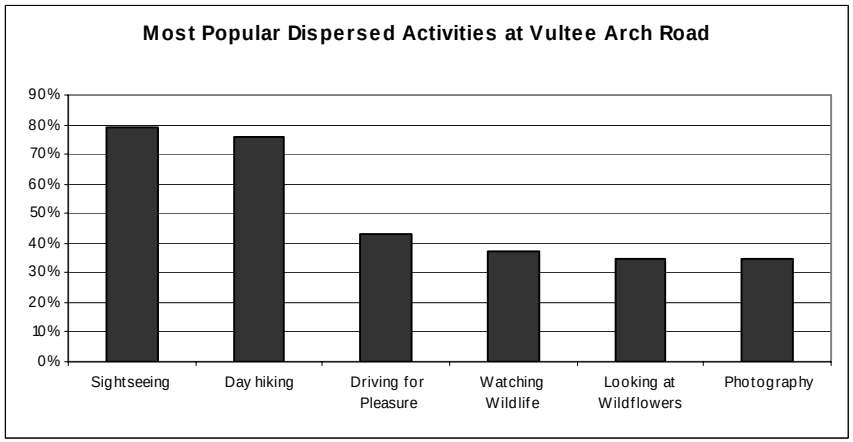
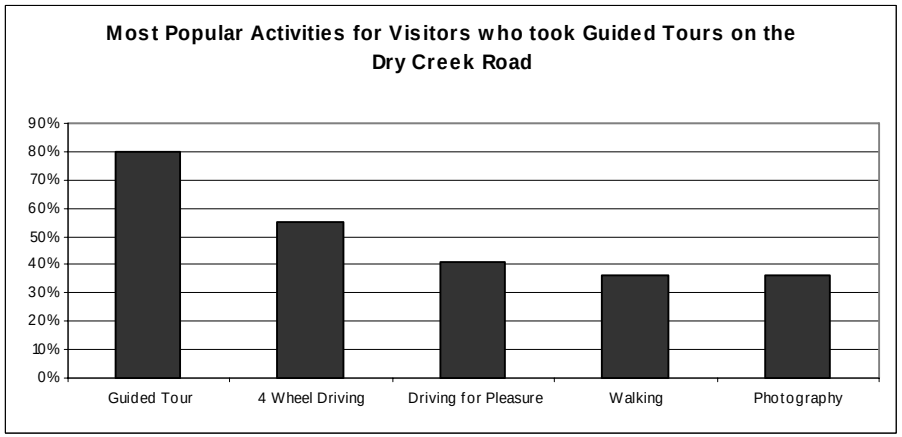


Figure 15. Most Popular Activities for Guided Visitors at Dry Creek Road



Visitors at the Red Cliff Recreation Use unit were separated into two groups, Honanki and Palatki. The activities that were participated in are shown in figures 17, 18 and 19 below.

Figure 16. Most Popular Dispersed Activities at Palatki

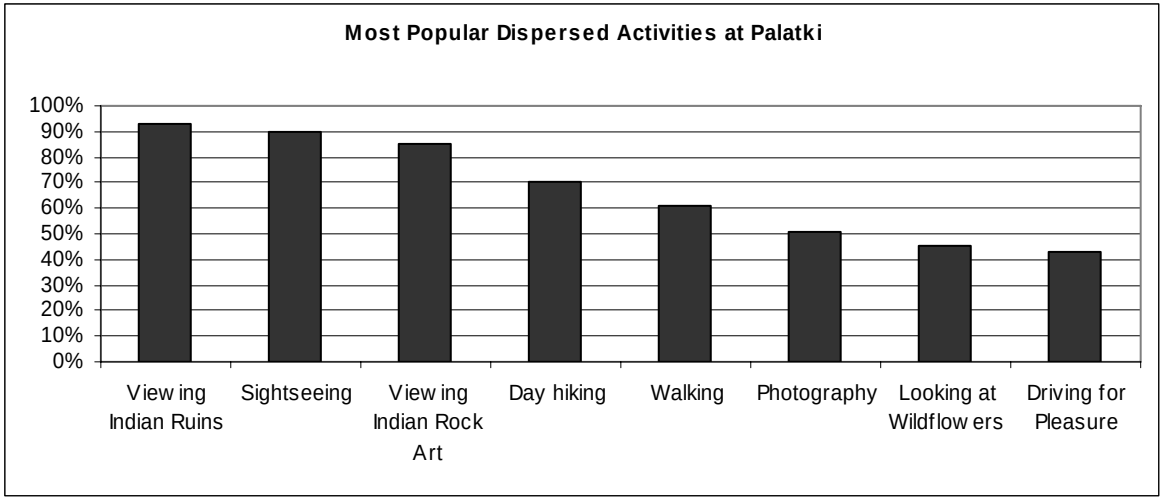


Figure 17. Most Popular Dispersed Activities at Honanki

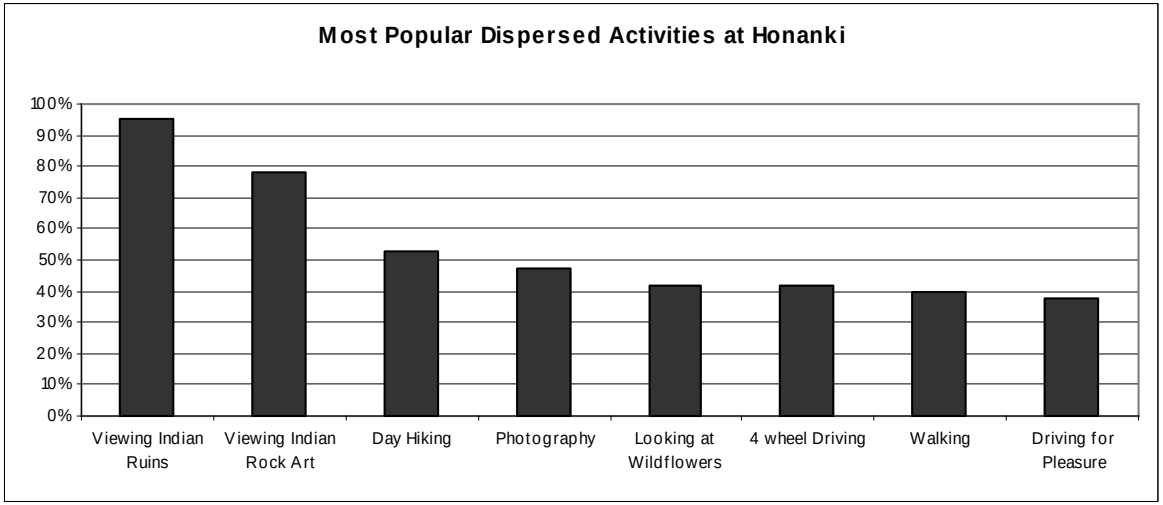
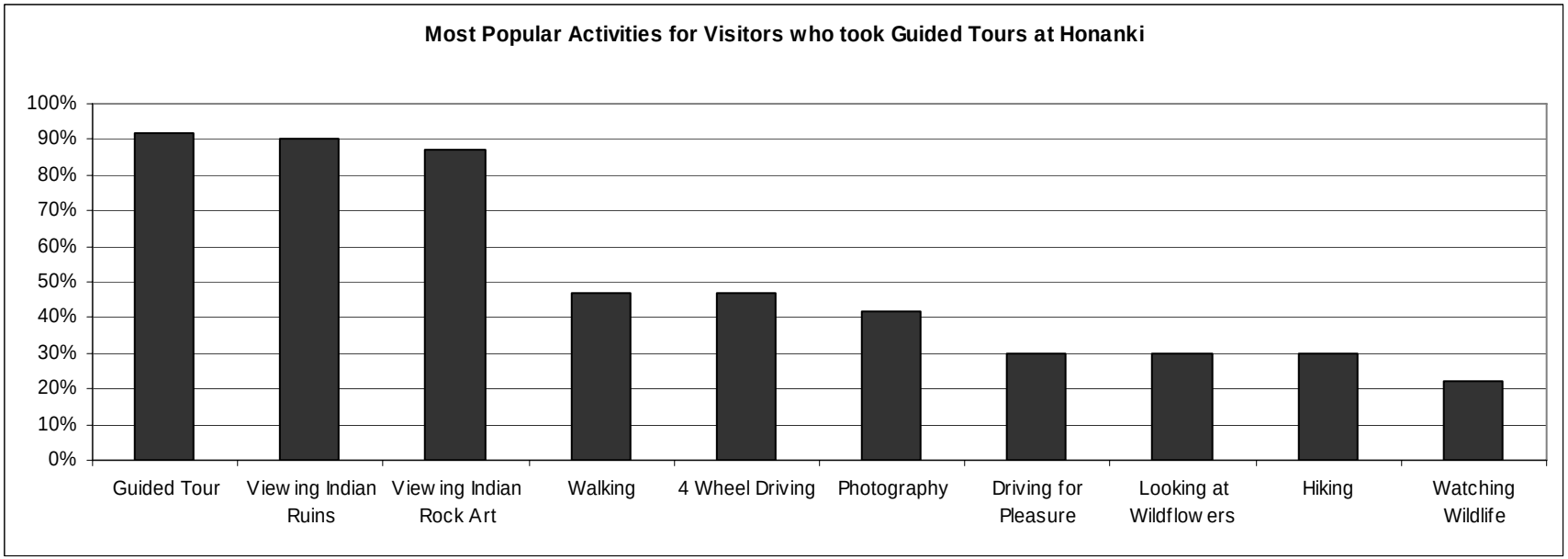


Figure 18. Most Popular Activities for Guided Visitors at Honanki



The Cathedral and Red Rock- Secret Mountain recreation use units surveyed only dispersed recreation visitors. The activities at Cathedral RUU the visitors participated in are shown in figure 20 at Bell Rock, and activities at Boynton Canyon occur in Red Rock-Secret Mountain RUU Figure 21.

Figure 19. Most Popular Dispersed Activities at Bell Rock

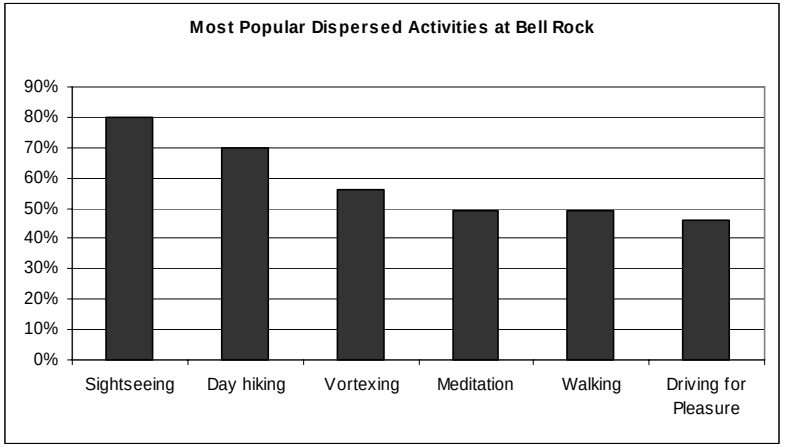
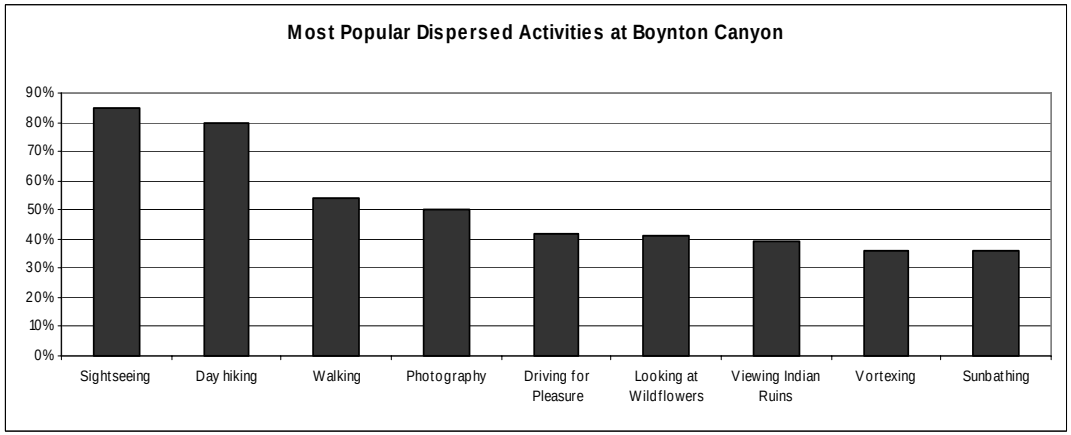
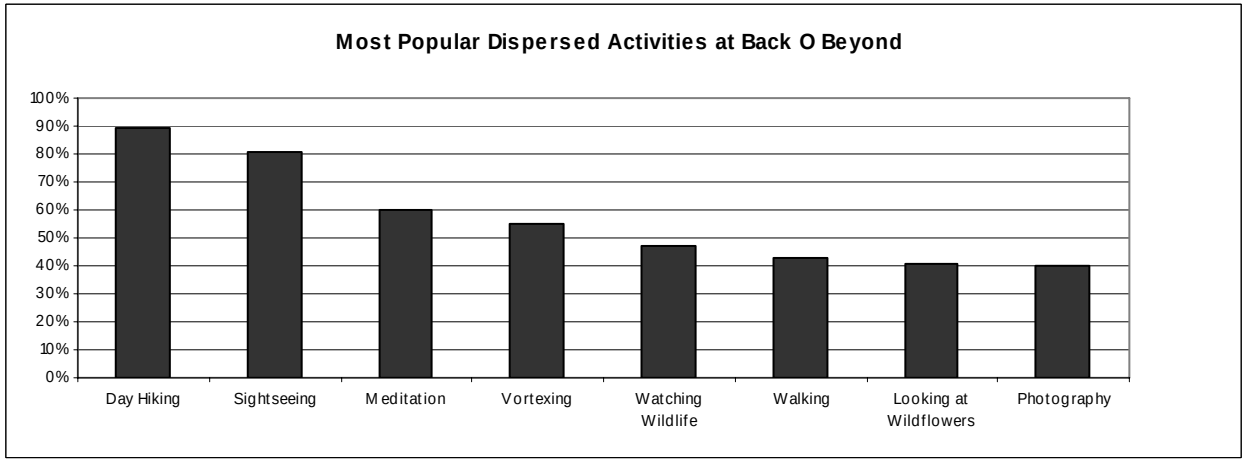


Figure 20. Most Popular Dispersed Activities at Boynton Canyon



The activities at Cathedral RUU the visitors participated in figure 22 below.

Figure 21. Most Popular Dispersed Activities at Back-O-Beyond



Sedona/Red Rock Area Market Analysis, 2000

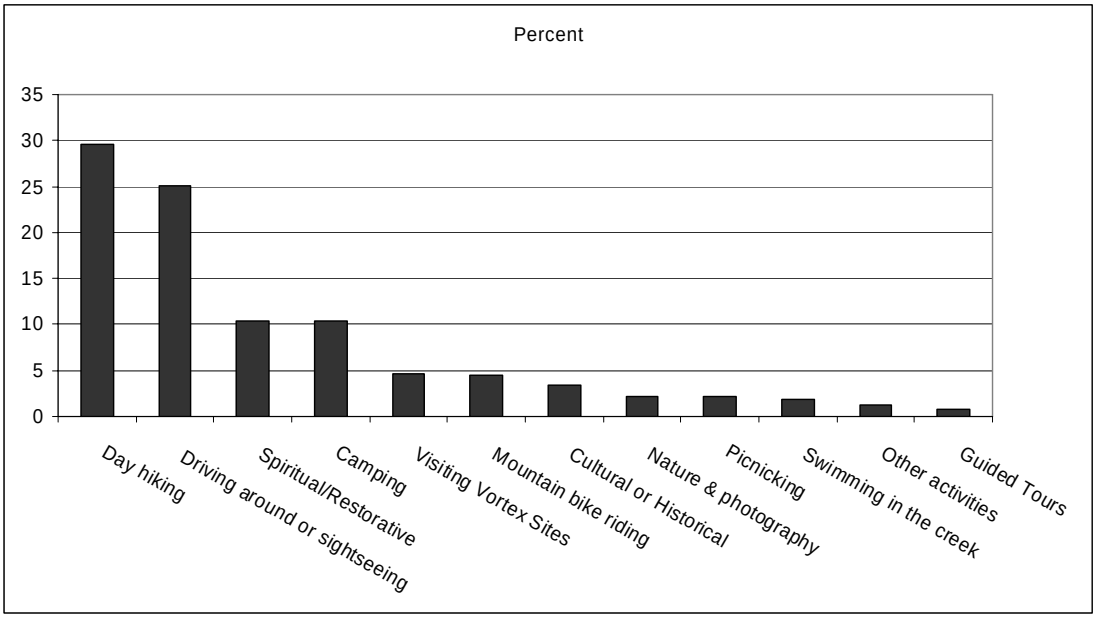
Desired activities of visitors to Sedona and residents of Sedona on the Coconino National Forest were identified in the *Sedona/Red Rock Area Market Analysis*, Baker, Knopf and Virden; Arizona State University; and Absher, USDA Forest Service (2000). Residents of Sedona spend a lot of time recreating in the Forest. The average resident visits the Forest around 84 times per year.

The surveys done in the marketing analysis were used to identify desired activities and the primary reason of the visit for Forest visitors. A total of 1,396 Forest visitors were contacted through the on-site and mail back questionnaire portion of the data collection market analysis effort. Of those visitors, 1,238 completed the on-site survey, and 47% of those visitors completed the in-depth mail back questionnaire. There was also an exhaustive effort to collect data from visitors by telephone surveys. The telephone surveys resulted in completion of 1,009 interviews out of 12, 433 attempted calls. Table 8 and Figure 23 display the *top twelve most desired activities* out of seventeen activities surveyed.

Table 8. Desired Activity and Primary Reasons for visiting the area

Desired Activity and Primary Reasons for Visiting	Percent of Visitors that Participated in this Activity
Day hiking	29.6
Driving around or sightseeing	25.1
Spiritual/Restorative	10.3
Camping	10.3
Visiting Vortex Sites	4.7
Mountain bike riding	4.5
Cultural or Historical	3.4
Nature & photography	2.1
Picnicking	2.1
Swimming in the creek	1.8
Other activities	1.2
Guided Tours	0.8

Figure 22. Desired Activity and Primary reason for Visit



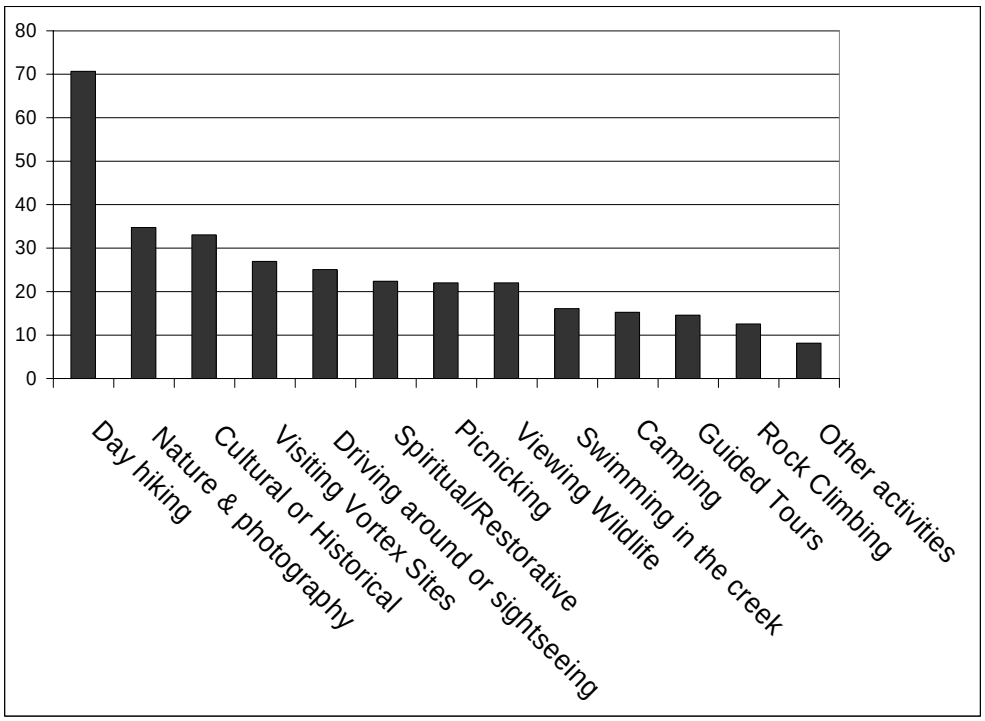
Activities that did not have an average of at least 1% included guided tours, rock climbing, backpacking, fishing, wildlife viewing, and nature study or bird watching.

The previous figures displayed the primary reason for visitors to take the trip, however the surveys identified the actual activities that the visitors participated in. The top twelve activities actually pursued are illustrated in Table 9 and Figure 24.

Table 9. Actual Activity Pursued

Actual Activity Pursued	Percent of Visitors Participating
Day hiking	70.7
Nature & photography	34.7
Cultural or Historical	33.1
Visiting Vortex Sites	26.9
Driving around or sightseeing	25.1
Spiritual/Restorative	22.4
Picnicking	22.1
Viewing Wildlife	22.1
Swimming in the creek	16.1
Camping	15.2
Guided Tours	14.5
Rock Climbing	12.6
Other activities	8.1

Figure 23. Actual Activity Pursued



The Market Analysis displayed the most desired benefits for visitors to the Sedona area and Coconino National Forest. The highest ranked benefits were to experience nature in a pristine setting, and to achieve a greater connection with nature.

An interesting finding of the analysis shows that the majority of visitors would be willing to pay an additional surcharge to a general use fee for specialized services such as ranger led tours and tour guide books. These visitors are interested in ranger led Wilderness backpacking, archeological tours, nature hikes/bird watching, area orientation tours, and park and ride free trams to National Forest sites.

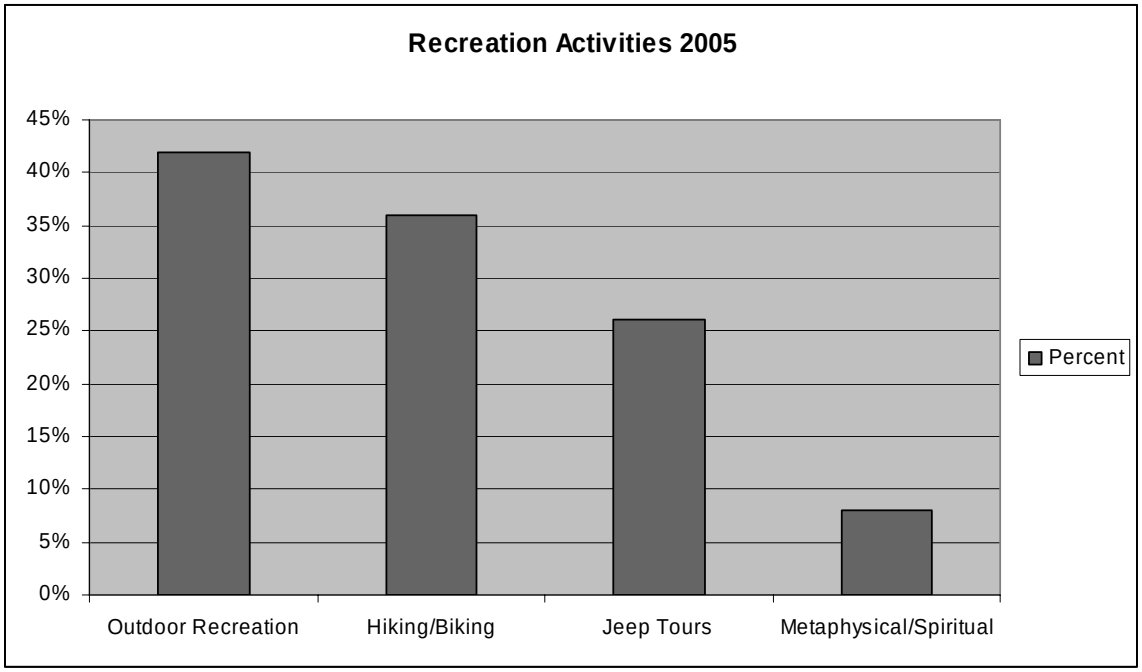
2002 Red Rock Ranger District Monitoring Study

The 2002 Red Rock Ranger District Monitoring Study that follows the Marketing Survey shows that driving for pleasure, sightseeing, day hiking, other activities including (OHV riding), and camping are the primary activities on the Red Rock District.

2005 Sedona Visitors Study

The *2005 Sedona Visitors Study* prepared for the city of Sedona by Behavior Research Center asked visitors if they participated in any of the following eleven specific activities: Shopping, art galleries/museums, outdoor recreation, hiking/biking, jeep tour, special event, spiritual/metaphysical, spa treatment, golf, camping/picnicking, and cultural events. Approximately 42 percent of the visitors surveyed participated in outdoor recreation, 36 percent participated in hiking/biking, 26 percent participated in jeep tours, and 8 percent participated in metaphysical/spiritual activities all of which can occur on National Forest system lands. No information is available on the sampling size of the study. Refer to the Figure 25.

Figure 24. Recreation Activities in 2005



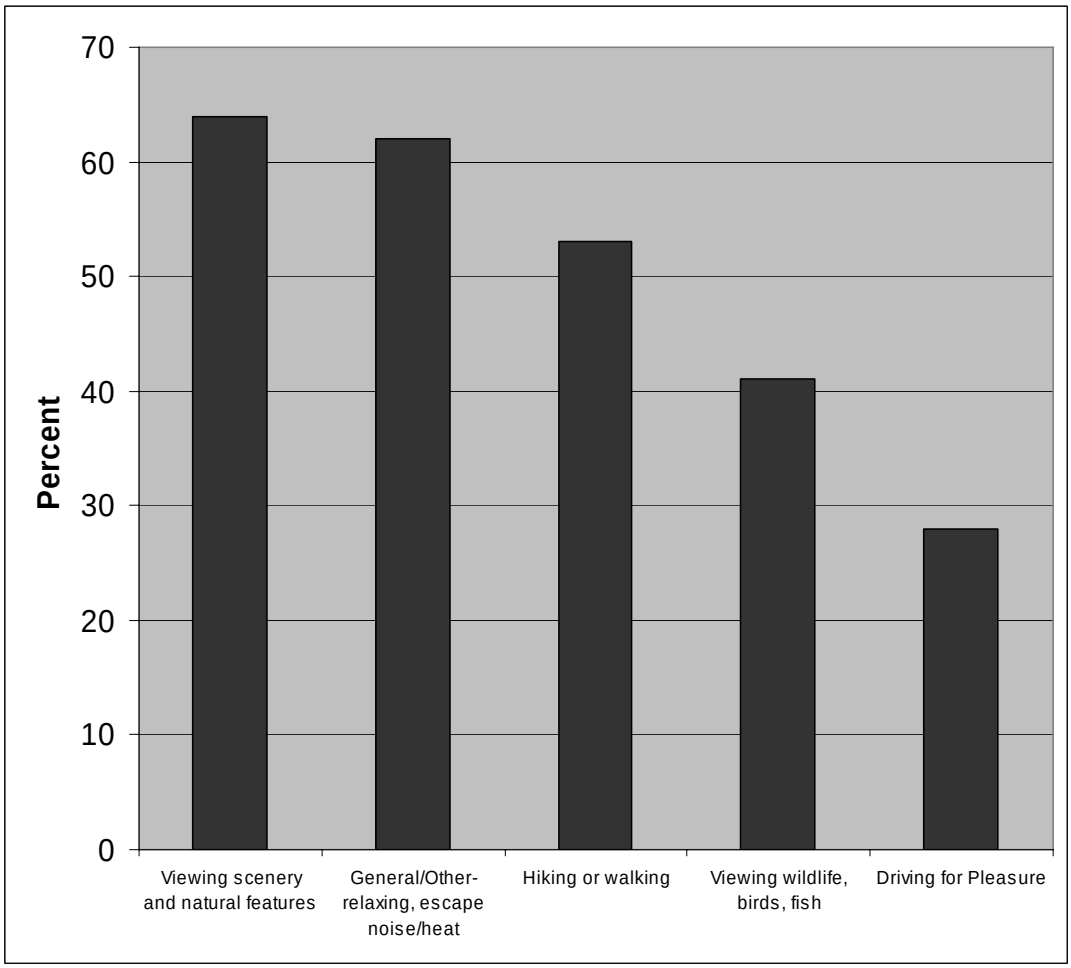
National Visitor Use Monitoring (NVUM) Reports

The 2001 NVUM Report

The National Visitor Use Monitoring (NVUM) program provides reliable information about recreation visitors to National Forest system lands at the National, Regional, and Forest level. The use statistics can be helpful in considering visitor capacity issues; however the survey is not designed to be accurate at the district or site level. Approximately 1,321 people were interviewed for this study.

The top five recreation activities of visitors to the Coconino National Forest determined were: watching wildlife and natural features, camping, general relaxation, and hiking or walking. Each visitor also picked one of these activities as their main activity for their current recreation visit to the forest: camping, and viewing wildlife or natural features, hiking/walking, general (relaxing, hanging out). Figure 26 displays the most popular activities participated in during 2000 and 2001.

Figure 25. Visitor Participation in most popular Activities in 2001



NVUM asked visitors to rate their perception of how crowded a recreation site or area felt to them. This information is useful when looking at the type of site the visitor was using since someone visiting a designated Wilderness may think 5 people is too many while someone visiting a developed campground may think 200 people is about right. Table 8 summarizes mean perception of crowding by site type on a scale of 1 to 10 where 1 denotes hardly anyone was there, and a 10 indicates the area was perceived as overcrowded. For example, the mean perception of visitors that felt day use sites were ranked 4 out of 10 was 10.

Table 10. Percent of crowding by visitor on the Coconino National Forest by site type (site visits)

Crowding Rating	Day Use Developed Sites	Overnight Developed Use Sites	General Forest Areas (GFA)	Designated Wilderness
10 Overcrowded	1	1	11	0
9	0	15	1	0
8	7	7	3	7
7	2	33*	4	0
6	12	0	3	12
5	14	27	20*	1
4	10	15	14	8
3	12	0	16	15
2	21*	0	16	19
1 Hardly anyone there	21*	2	12	38*

(Source: NVUM 2001 Table 20) *Most visitors in these areas perceived crowding to be at this level

Most visitors at day use developed sites and Wilderness areas felt that there was hardly anyone there. Whereas, at overnight developed use sites; most people felt that it was crowded. Most people interviewed at general forest areas did not feel that it was crowded.

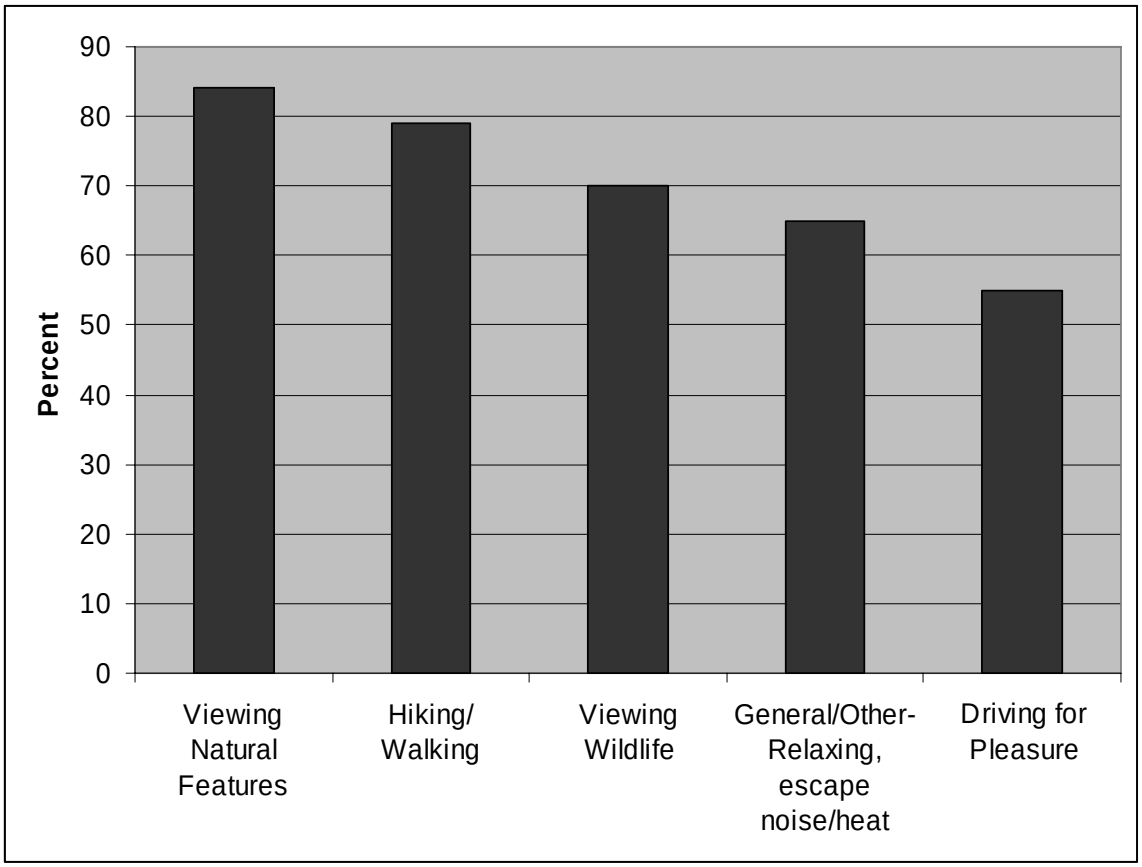
The 2001 NVUM study identified the average length of stay on the Forest for a visit at about 2.4 hours. Roughly 2.5 percent of visitors of the 1,321 interviewed stayed overnight on the Forest.

The 2005 NVUM Report

During the 2005 study, approximately 3,419 people were interviewed that were recreating on the Coconino National Forest. During their visit to the Forest, the top five recreation activities of the visitors were: viewing natural features, hiking/walking, viewing wildlife, relaxing, and driving for pleasure.

Each visitor also picked one of these activities as their main activity for their current recreation visit to the forest: Hiking/walking, viewing natural features, relaxing, driving for pleasure, and downhill skiing. Figure 27 displays the most popular activities participated in during 2004 and 2005.

Figure 26. Visitor Participation in most popular Activities in 2005



Hiking/ walking and viewing wildlife became more popular than relaxing and escaping noise and heat over the 4 year period.

Crowding

Visitors rated their perception of how crowded the various types of recreation sites or areas felt to them. This information depicts how an opinion on the amount of encounters with other people varies by the type of experience or setting being sought after. The NVUM report, when looking at the type of site the visitor was using. Someone visiting a designated Wilderness may think five people are too many while someone visiting a developed campground may think 200 people are about right. Table 11 summarizes mean perception of crowding by site type on a scale of 1 to 10 where 1 denotes hardly anyone was there, and a 10 indicates the area was perceived as overcrowded. Table 11 shows that 5 percent of site visits in Undeveloped Areas (GFA) and 6 percent of Overnight Use Developed site visits are rated as overcrowded. For example the mean perception of visitors that felt day use sites were ranked 4 out of 10 was 6.

Table 11. Percent of Site Visits by Crowding Rating by Site Type for Coconino National Forest (NVUM 2005 data)

Crowding Rating	Day Use Developed Sites	Overnight Developed Use Sites	Undeveloped Areas (GFA)	Designated Wilderness
10 Overcrowded	3	6	5	1
9	1	11	0	0
8	7	17	3	4
7	10	15	5	7
6	7	11	6	3
5	33*	18*	16	24*
4	6	0	8	11
3	10	4	20*	24*
2	10	10	16	10
1 Hardly anyone there	14	8	21	15

(Source: NVUM 2005 table 33) *Most visitors in these areas perceived crowding to be at this level

Since 2001, visitors at day use developed sites are feeling more crowded. Most people still felt that there was hardly anyone there while visiting Wilderness areas. Whereas, at overnight developed use sites; even more people felt that it was crowded. As in the 2001 study, most people interviewed at general forest areas did not feel that it was crowded.

The 2005 NVUM study identified the average length of stay on the Forest for a visit at about 18 hours. This is a tremendous increase since the 2001 survey. The average site visit lasted about 5.5 hours, and varies by site type. The average stay at day use developed sites is about 2.3 hours, overnight use at developed sites is about 47.6 hours, undeveloped areas is around 6.2 hours, and stay of Wilderness areas was about 2.8 hours.

There was an average of 2.5 people per vehicle in the 2005 study.

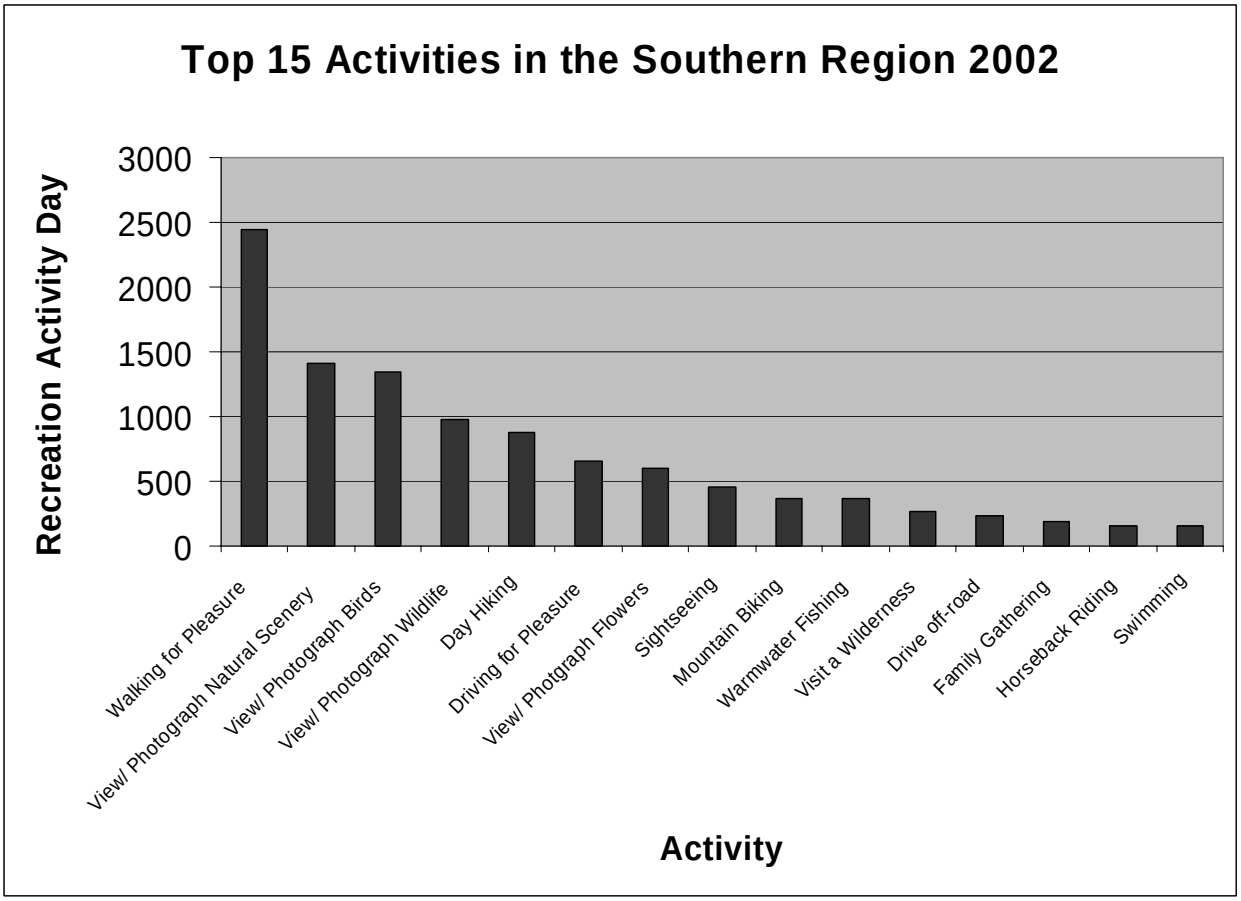
Demand for Forest-Based Outdoor Recreation Outlook on Forest Service Lands

The Forest Service 2002 Paper: Outlook on Forest Service Lands, demonstrates that the Forest Service has been tracking trends and demand of outdoor recreation activities since 1983. This most recent study illustrates the recreation activities with the highest recreation activity days (RVDs) for the southern region, which in this particular analysis, the Coconino National Forest is part of. Following are the top 15 activities in the Southern Region beginning with the most popular activity participated in at the top:

- Walking for Pleasure
- View/ Photographing Natural Scenery
- View/ Photograph Birds
- View/ Photograph Wildlife
- Day Hiking
- Driving for Pleasure
- View/ Photograph Flowers
- Sightseeing
- Mountain Biking
- Warm water Fishing
- Visit a Wilderness
- Drive off-road
- Family Gathering
- Horseback Riding
- Swimming

The activity days reported represents a range of duration of activity from a few minutes to many hours. Also, a person could participate in more than one activity during the same day, or the same outing. Figure 28 illustrates the amount of recreation visitor days per activity.

Figure 27. Top 15 Activities in the Southern Region 2002



Demographic Trends

The Census Bureau reported in March of 2007, that the reason for Arizona becoming the fastest growing state in the nation between 2005-2006, is the significant increase in Maricopa County's population. "Maricopa County, Arizona gained 696,000 residents between 2000 and 2006" www.census.gov. This growth led to Maricopa County being the 4th largest county in the country.

Approximately 13 percent of the Arizona's population is age sixty-five or older. The baby boomer generation is quickly reaching retirement age. There are approximately 77 million baby boomers in the country. "Despite the statistics about the overall national reluctance to exercise, psychographics compiled in the newly-released research report, "Active Aging in America, Residential and Commercial Fitness, United States," boomers understand the value of physical activity and are seeking residential communities, programs and facilities to find it." www.thematuremarket.com.

The following trends and patterns were identified in the USDA Forest Service, *Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wilderness, Appendix D Needs Assessment.*

> "The Association of Partners for Public Lands (APPL) compiled in 2004 from websites, reports, and surveys of members and agency partners reported the following trends and patterns information:
>
> - Consumers are seeking out uniquely different experiences when they travel, yet expect certain standards of destinations, tour companies, lodging establishments and transportation. Sixty-five percent of travelers are city-dwellers living in urban areas with populations of 500,000 or more. Among those visiting a National Park while traveling in the last five years, seventy-five percent stayed overnight or within 10 miles of the parks on their most recent trip. (National Geographic Traveler and Travel Industry Association)
> - Fifty percent of American adults have taken an adventure vacation in the last 5 years. (E. Sheffield, California State University, Chico)
> - Aging baby boomers seek easier ways of recreating but have more money to spend, resulting in a desire for greater conveniences like full hook-up campgrounds. (APPL 2004 Agency survey)
> - Baby boomers are now moving into their retirement years, leading to increased leisure time and greater demands on parks. They are the mobile generation of the next twenty years. (Trends in Demographics and information Technology Affecting Visitor Center Use, NPS, 2003)
> - The over-fifty population is expected to grow by 18.3 million people over the next ten years. (Independent Sector)"

Conclusion of Trends Affecting Need for Commercial Recreation Outfitter-Guide Services

The following conclusions of the recreation trends will be used as criteria in determining which recreation activities have a demonstrated need on the RRRD.

Recreation Activities in Demand on the Red Rock Ranger District

Over the last decade the primary recreation activities that visitors demand on the Red Rock are:

- Sightseeing/driving for pleasure
- Day Hiking
- Walking
- Photography
- Spiritual activities
- 4 wheel driving
- Driving for Pleasure
- Watching wildlife
- Guided tours
- Cultural/historical site visits
- Camping

Recreation Activities in Demand based on Recreation Use Units

The primary activities by RUU based on the research outlined in this chapter are displayed in the table below.

Table 12. Primary Activities identified in the Research Review by Recreation Use Unit (RUU)

Activity	Photography	Sightseeing	Driving for Pleasure	Walking for Pleasure	Watching Wildlife	Viewing Wildflowers	Day Hiking	4 Wheel Driving	Guided Tour	Vortexing	Meditation	Mountain Biking	Sunbathing	Fishing	Relaxing	Viewing Ruins	Camping	Picnicking	Swimming
RUU																			
Broken Arrow	X	X	X	X	X		X	X	X			X							
Cathedral	X		X	X		X	X			X	X		X						
Dry Creek	X	X	X	X	X	X			X										
Oak Creek Canyon	X	X	X		X									X	X		X	X	X
Red Cliffs	X	X	X		X	X	X	X	X							X			
Red Rock-Secret Mountain	X	X		X	X	X	X			X	X								
Schnebly Hill	X	X	X	X	X	X	X	X	X										
Soldier Pass	X	X	X	X	X	X	X	X	X										

The activities of highest demand in these 8 RUUs are photography, sightseeing, driving for pleasure, walking for pleasure, viewing wildlife, viewing wildflowers, day hiking, 4 wheel driving, and guided tours respectively. The other activities were popular just in the RUU where they were being performed.

Perception of Crowding

The 2001 and 2005 National Visitor Use Monitoring studies show that the majority of visitors surveyed did not feel that the areas they recreated in were crowded. Visitors were surveyed at overnight developed sites, day use developed sites, general forest areas, and Wilderness areas. However, the trend in the shift of the mean number representing the perception of crowding between 2001 and 2005 shows that an increasing amount of people believe areas are crowded, or are becoming crowded.

Impacts to the Need for Recreation Services from Demographic Trends

The trends discussed above will most likely affect the need for recreation activities and services in the following ways:

- The population is significantly growing and this growth is taking place in urban areas.
- The population core is usually less knowledgeable or skilled regarding outdoor activities
- Some segments of the baby boomer generation will be less physically fit.
- The some segments of the American public will have an increased need for guided recreation activities to access and enjoy the Forest over the next two decades.

New technologies to assist visitors in enjoying a recreation experience on the Forest will most likely be developed. The new technologies will have to be evaluated to see if they are appropriate for use in some places on the Forest.

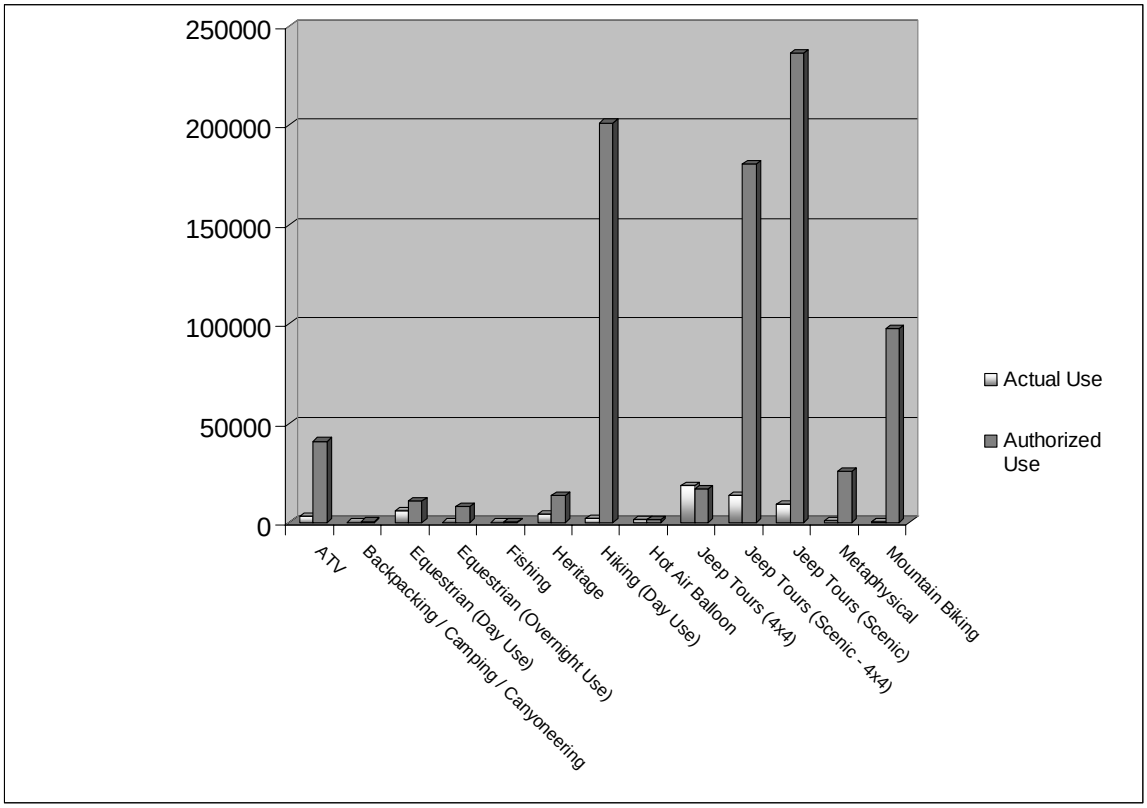
Actual Use of Authorized Outfitter-Guide Companies for 2002-2006

The following overview contains Priority and Long-term Temporary Permit actual and authorized use numbers for the period between January 1, 2002 and December 31, 2006. Temporary actual use numbers are summarized for a shorter period of time because these permits did not start operating until August 1, 2005. Temporary actual use is therefore summarized for the period August 1, 2005 to December 31, 2006. For all three categories of authorizations, actual use numbers are based on the average of the highest two years of use within the five year period. Priority and Long-term Temporary Authorizations are seen as historical use authorizations on the RRRD and will be used to establish a baseline for this analysis. However, in order to present a complete picture of the Red Rock Ranger District Recreation Special Uses Program a snapshot was created representing 2002- 2006 calendar years. All analysis including need and capacity studies utilizes 2002-2006 figures. Refer to Appendix E for detailed information regrading actual use data for all Outfitter-Guide companies who operated during 2002 - 2006.

Throughout this analysis one vehicle is equivalent to a group of up to six people (one party). The same situation applies to non-vehicle related activities (Hiking, Mountain Biking, Equestrian). One party hiking, mountain biking, or riding horses on a trail is equivalent to no more than six people per party. Vehicle or parties were determined to be the unit of measure due to the fact that most commercial use data and the majority of total use (commercial and noncommercial) monitoring data is recorded in “vehicles” rather than in “people.” Additionaly the common denominator between all commercial activity categories is that they all utilize a vehicle. The vast majority of commercial activities are vehicle based tours, however, all other activities utilize a vehicle to get to a trailhead, launch site, vortex, or cultural site.

Refer to Table 13 on the following page, for an overview of RRRD Actual Use by Activity for Priority, Long-Term Temporary, and Temporary Authorized Activities. When reviewing this table note that a company may be authorized to conduct several types of activities. For example, a permit that is issued to one company may include authorizations for hiking, heritage, and scenic tours. Figure 29 displays the amount of authorized use of an activity to the actual use that occurred in that activity. Figure 30 displays the percent of **commercial annual actual use by activity.**

Figure 28. Actual Annual Use vs. Authorized Annual Use Limit per Recreation Activity



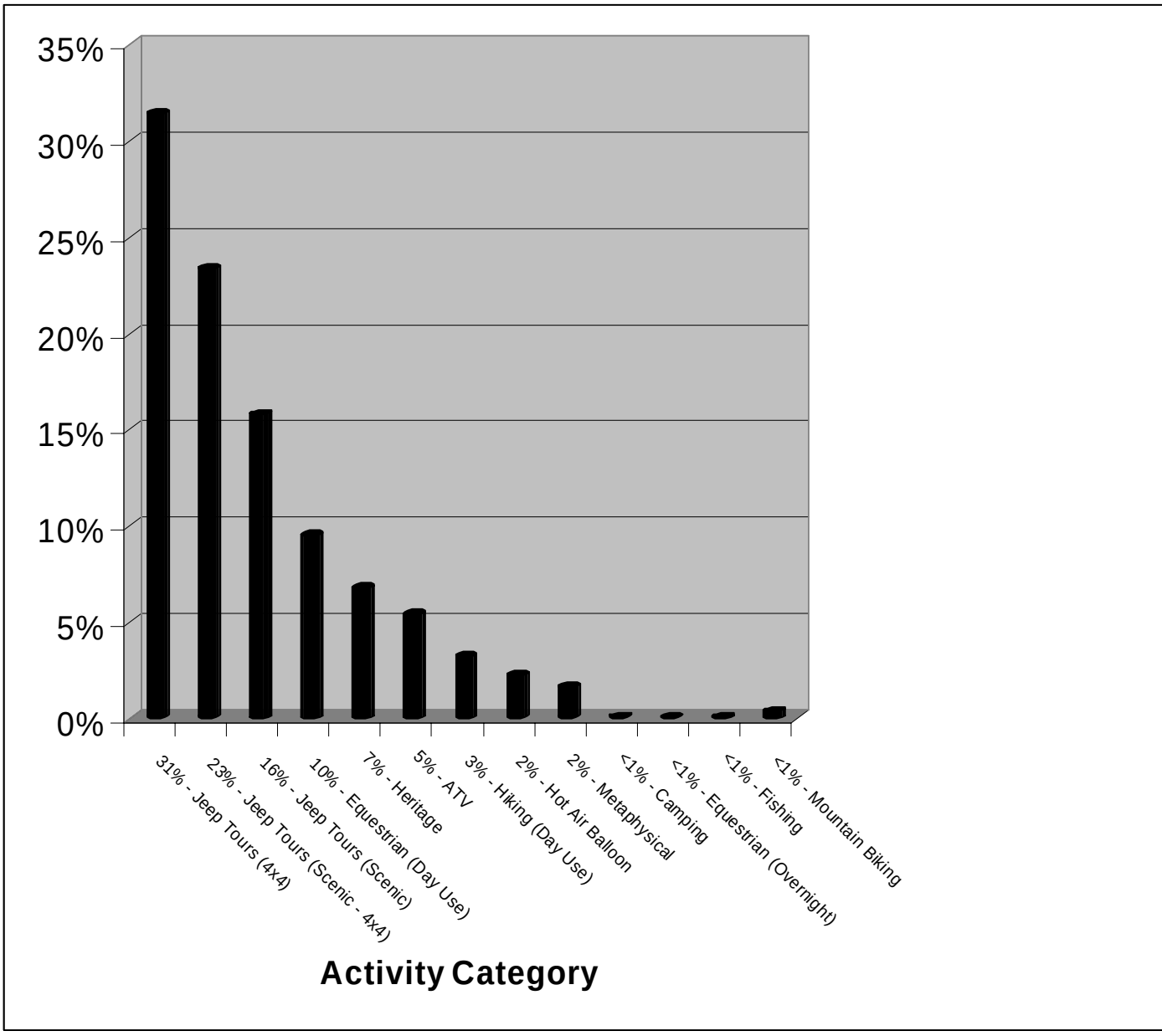
Source- Actual Use Reports and Outfitter-Guide permits and operating plans. Refer to Appendix E for Summary Data. Refer to section 3.2 for descriptions of the recreation activity categories.

Table 13. Actual Annual Use for the Red Rock Ranger District's Recreation Special Use Program Activity Categories

	COMPANIES	ATV	Backpacking / Camping	Equestrian (Day Use)	Equestrian (Overnight Use)	Fishing	Heritage	Hiking (Day Use)	Hot Air Balloon	Jeep Tours (4x4)	Jeep Tours (Scenic – 4x4)	Jeep Tours (Scenic)	Metaphysical	Mtn Biking
	# Companies	2	4	3	2	1	2	11	2	2	11	15	6	4
	Total Annual Actual Use	3196	45	5607	10	50	3988	1905	1314	18427	13719	9283	956	224
	Authorized Annual Limit	40880	570	10785	7865	260	13744	201357	1535	16700	180802	236540	25636	97455
	% Allocation Used	8%	8%	52%	<1%	19%	29%	1%	86%	110%	8%	4%	4%	<1%
PRIORITY	PJT		0							15411	4603	0		
	AE						3912				831	2317		
	SAI		0					39			3026	1598		
LONG-TERM TEMPORARY	CWJ		3										225	
	CLC							2						
	FSPE												109	
	EWT							1175			118	382	105	
	GF					50								
	HEI			4158	10									
	NVHA			322	0									
	NLBE								1015					
	RRBA								299					
	RRWJT SRRJT						76	47		3016	2396	1020	418	
	SNE		42					304						
	SS												83	
TEMPORARY	A360							6						9
	ACAT										66	1241		
	ADT							0				0		
	ADW							10			983	1254		0
	CWALK							37						
	ASJT										809	497		
	NAJ										5	19		
	GCATV	2145												
	LUTZ	1052												
	MDIAMOND			1128										
	SMTBA													114
	SRM							269						101
	SSJ												18	
	STE							16			0	5		
	STROLLEY											29		
	SUNCA											127		
	HUMMER										884	779		
	VSCT											17		

Note: Actual Use figures are depicted as Vehicles / Parties and are derived from the average of the two highest years of actual use in 2002 – 2006. Source- Appendix E.

Figure 29. Percent of Commercial Annual Actual Use by Activity



Source- Actual Use Reports 2002 – 2006 (Refer to Summary in Appendix E)

Forest Service Policy Regarding Needs Assessment

It is the responsibility of the Forest Service to substantiate public need through agency analysis and provide only for those services that support or further agency policies, objectives, and guidelines.

Forest Service policy (FSM 2720) states that:

a. As identified in forest land and resource management plans, provide for commercial outfitting and guiding services that address concerns of public health and safety and that foster small business.

b. Encourage skilled and experienced individuals and entities to conduct outfitting and guiding activities in a manner that protects environmental resources and ensures that national forest visitors receive high quality services.

Agency Objectives outlined in the *Outfitter-Guide Administration Guidebook USDA R1-97-23, Appendix A3* (public need is based on these types of wildland objectives)

a. Conservation/stewardship of natural and cultural resources, air, water, soil, vegetation, wildlife, cultural - promote responsible use so that natural systems are sustained for future generations.

b. Public service - enable people to obtain benefits such as personal growth, family/friend bonding, spiritual reconnection, stress relief/personal reflection, physical exercise, challenge, learning/ mental stimulation, etc.

c. Visitor safety - enable people to experience wildland settings in a manner that they perceive the risk is within their control.

d. Retain lands in the public domain – Allow people of all races, gender, and economic categories the opportunity to reconnect with nature and experience their common heritage.

e. Contribute to the people's quality of life and economic sustainability in communities - foster small business, provide clean water and air, add beauty to people’s lives, etc.

Needs Criteria

The following needs assessment criteria will be used as a basis for establishing a demonstrated need of additional or new use for specific activities within this assessment. Activity categories must pass all four criteria to be considered for further analysis, and for further consideration on whether or not to issue a new special use permit.

1. Skills, Equipment, and Knowledge are required for a safe and meaningful experience - Within the RRRD, does the activity require specialized skills, equipment, or knowledge to safely and responsibly visit the area? **Yes or No—All activities need specialized skills, equipment and knowledge**

2. Demand for new or additional use - If the activity category is currently permitted:

Are at least 70 percent of the existing Priority and Long-term Temporary and Temporary authorized days being utilized as shown in Table 14? **Yes or No**

If the activity category is not currently permitted, have there been requests for a particular commercial activity service? **Yes or No**

OR does research outlined in this Chapter indicate a future commercial demand for this activity that may not fit into the amount of use currently authorized. **Yes or No**

3. Dependence on National Forest Setting – The activity is dependant on National Forest Lands or there are no alternate areas off National Forest lands to conduct these types of activities? **Yes or No**

4. Forest Management - Use is consistent with Forest Regulations and/or management objectives? **Yes or No—All activities except free riding are consistent with Coconino Forest Plan.**

5. *Potential Benefit to Local Economy*- would Outfitter-Guide services of the activity promote economic sustainability to local communities, and foster small business? **Yes or No**

6. *Conservation and Stewardship of Natural Resources*- would Outfitter-Guide services of the activity promote responsible use so that natural systems are sustained for future generations? **Yes or No**

Demand for new or additional Recreation Use

Table 14 displays the demand for new or additional use by comparing the actual use performing an activity to the amount of authorized use for that activity, as well as displaying the activities not currently permitted, that the public requested, and those activities that reasearch indicates a need for future commercial demand.

Figures displayed in Table 14 for the Jeep (4X4) category were derived from only two tour routes: Broken Arrow and Soldier Pass. Based on the definition of the activity categories in this Chapter, these were determined to be the only 4X4 tours on the Red Rock Ranger District. The actual use figures are derived from the average of the two highest years of actual use for the period of time sampled during the actual use review 2002-2006. Refer to Appendix E for these figures. The Authorized annual limit was only projected for one of the two tours. Broken Arrow Tour does not have an annual limit. To project this figure the following calculation was done (5 veh / hr x 8 hr day x 365 days/yr = 14,600 vehicles per year). Sedona Red Rock Jeeps & Red Rock Western Jeeps have an annual limit already established in their operating plan for the Soldier Pass Tour as (10 VAOT, with a total of 2100 vehicles per year). Next the authorized days were combined: 14,600 (Broken Arrow) + 2,100 (Soldier Pass) = a combined allocation of 16,700 allocated vehicles per year for the activity category of Jeep - 4x4. The Annual Actual Use figure is based on 15,411 (Broken Arrow) + 3,016 (Soldier Pass) = a combined allocation of 18,427 actual vehicles per year for the activity category of Jeep - 4x4.Any overages shown here were not the result of improper reporting or permit violations by the Companies represented. They were likely due to difficulties in calculating annual authorized permit limits at Broken Arrow where no annual limit exists in the permit.

Table 14. Demand for New or Additional Use

				Evaluation Criteria # 2		
Activity	**Actual Annual Use (# of Vehicles / Parties)**	**Authorized Annual Limit (# of Vehicles / Parties)**	**% of Authorized Allocation being used**	**70% of Authorized use being utilized**	**Activities requested, but not currently permitted,**	**Research in Cha indicates futu commercial De**
ATV Tours	3,197	40,880	8%	No	N/A	No
Backpacking / Camping / Canyoneering	45	570	8%	No	N/A	No
Equestrian (Day Use)	5,607	10,785	52%	No	N/A	No
Equestrian (Overnight Use)	10	7,865	<1%	No	N/A	No
Fishing	50	260	19%	No	N/A	No
Heritage	3,988	13,744	29%	No	N/A	Yes
Hiking (Day Use)	1,905	201,357	1%	No	N/A	Yes
Hot Air Balloons	1,314	1,535	86%	Yes	N/A	No
Jeep Tours (4X4)****	18,427	16,700	110%	Yes	N/A	Yes
Jeep Tours (Scenic - 4X4)	13,719	180,802	8%	No	N/A	Yes
Jeep Tours (Scenic)	9,283	236,540	4%	No	N/A	Yes
Metaphysical	956	25,636	4%	No	N/A	Yes
Mountain Biking	224	97,455	<1%	No	N/A	Yes
Photography *				No	N/A	Yes
Public Transit**				No	Yes	Yes
Rock Climbing /Caving				No	Yes	No
Watching Wildlife***				No	N/A	Yes
Free Riding				No	Yes	No

Source: Red Rock Ranger District Special Use Program permit files, and 2006 actual use review, observations of District Recreation Staff Officer

* The Jeep Tours offer Photo Taking Opportunities. There used to be a company that specialized in Photo Tours… This company was bought out by A Day in the West

** Sedona Trolley offers a service like this – but they don't need a permit for the destinations they take people. Sedona Trolley could expand their service area to more trailheads, etc…

*** Some of the Jeep Tours Offer Wildlife Sightseeing Tours.

Activities with a Demonstrated Need

Table 15 identifies activities with a demonstrated need based on the criteria described previously.

Table 15. Activities with a Demonstrated Need

Activity	Criteria #2 Demand for new or additional use based on 70% of Authorized use being Utilized	Criteria # 2 Activities not currently permitted, with public requests for the activity	Criteria # 2 Research in Chapter 3 indicates future commercial Demand	Criteria # 3 Dependence on National Forest Setting	Criteria # 4 Consistent with Forest Management	Criteria # 5 Potential Benefit to the Local Economy	Criteria # 6 Conservation and Stewardship of Natural Resources
Jeep (4X4)	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Hot Air Balloon Tours	Yes	N/A	Yes	Yes	Yes	Yes	Yes
Public Transit	N/A	Yes	No	Yes	Yes	Yes	Yes
Rock Climbing/Caving	N/A	Yes	No	Yes	Yes	Yes	Yes

Summary of activities not currently permitted with requests for the activity made by the public based on observations by the RRRD Recreation Staff

Public Transit- Local public leaders, particularly from the environmental community have asked for public transit to major day use sites including trailheads to reduce traffic congestion and the use of fossil fuels. Many trailheads are hard for tourists to find and much time is spent by front liners explaining trailhead locations. Therefore, a public transit guided service would be dependent upon the National Forest Setting.

Rock Climbing/ Caving- Requests have been made for guided climbs at Bell Rock, Cathedral Rock, Courthouse Butte and Grey Back (Capital Butte) from the relatives of deceased or injured climbers and from search and rescue departments.

Activities Determined to Possess an Inadequate Need for New or Additional Commercial Use:

The following activities do not have a demonstrated need, and will not be considered further in this assessment since additional allocation of service days is not warranted. This is based on the comparison of actual to authorized use which shows less than 70% of authorized use taking place for these activities. Only a small percentage of authorized use was utilized in the average of the two highest years between 2002- 2006 for these activities. That comparison shows that the public need for that commercially guided activity is currently being met. A demonstrated need for free riding was not found, due to the activity being incompatible with Forest management.

• **Equestrian (Day Use)** Only 52% of authorized use was utilized.

• **Equestrian (Overnight)** – Less than 1 percent of authorized use was utilized.

• **Fishing** – Only 19 percent of authorized use was utilized. This amounted to an average of 14 fishing trips per year.

• **Free Riding** – This activity requires areas of off trail (cross-country) travel. Currently the Red Rock Ranger District does not have areas established for cross country travel. If the Forest Plan revision or Travel Management processes establish such areas, then free riding and other activities dependant on cross country travel should be evaluated for commercial opportunities.

• **Heritage Tours** – Only 29 percent of authorized use was utilized.

• **Hiking** – Only 1% percent of authorized use was utilized.

• **Jeep Tours (Scenic – 4x4)** – only 8% of authorized allocation was utilized.

• **Jeep Tours (Scenic)** – Only 4% of authorized allocation was utilized.

• **Metaphysical** – Only 4% percent of the authorized use in this category was utilized.

• **Photography** – Although the research discussed in Chapter 3 indicates a future demand for Photography, the interdisciplinary team recognizes that these activities are subcomponents of any of the other activities.

• **Watching Wildlife** – Although the research discussed in Chapter 3 indicates a future demand for wildlife watching, the interdisciplinary team recognizes that these activities are subcomponents of any of the other activities.

Chapter 4: Landscape Capacity Analysis

Recreation carrying capacity determines the number of users that can be accommodated in a given area without loss of the quality of the natural environment and/or the visitor experience. (USDA, FS, Tongass 2007) This assessment emphasizes recreation carrying capacity within the management direction provided by the Coconino LRMP.

"Capacity is a function of how a particular combination of physical and social factors on a Forest interacts to absorb or screen the sights and sounds of human activity and absorb the impacts of use. Lower capacities generally exist where landscapes are open (little vegetative screening and flat topography) or where the soil or vegetation is fragile. Higher capacities generally exist where landscapes have more screening and are resistant to physical use." (USDA FS ROS Users Guide, 1982). "Managers must ultimately make value-based judgments about the maximum acceptable levels of visitor-caused impacts to the resource base and the quality of the visitor experience." (Manning, 2001)

The Red Rock Ranger District includes forested areas and interspersed forest, and meadows. The Recreation Use Units are composed mostly of forest according to the Coconino National Forest Vegetative Cover GIS layer. Forest vegetative cover averages 78% for all RUUs. For the purposes of this analysis all RUUs will be considered forested because on the average only 22% of the RUUs have either interspersed forest or meadows.

"In reality there are no simple answers to the complex questions that surround capacity determination. Capacity is ultimately a professional judgment based on the best information available. The end product is not an absolute, but rather a dynamic determination." USDA FS, San Juan National Forest, 1997.

In Limes' *Principles of Recreational Carrying Capacity*, he concluded that "Carrying capacity can be defined only in light of management objectives for the area." The Forest Plan direction provides the baseline for which capacity can be determined, along with other factors. Appendix G displays the Forest Plan Management Area Direction applicable to the RRRD RUUs. "Although the term carrying capacity suggests that the number of users is the main concern, carrying capacity can also be a function of other use conditions, such as type of use, timing and location of encounters between visitors, and visitor behavior. As a result, limiting numbers might have negligible effect on controlling overuse problems and is only one of many management options that might be implemented." (President's Commission on Americans Outdoors)

This capacity analysis considers all recreation visitations by all user groups and by the recreation activities with a demonstrated need outside of Wilderness areas. The analysis does not consider use occurring on state or county roads. For a variety of reasons, some RUUs considered previously in the assessment will not go through a capacity analysis. This includes the research natural area, all Wilderness RUUs, and Verde Wild and Scenic River. Commercial activities are not allowed in research natural areas. Most Wilderness areas cross multiple Forests and District boundaries. This assessment is only considering RUUs whereby the Red Rock Ranger District of the Coconino National Forest has authority to manage commercial use. There is an existing Wild and Scenic River management plan that has determined capacity for the river corridor.

The landscape capacity of an area is determined through an area-wide landscape model to calculate the theoretical capacity of an RUU given management and environmental constraints. A comparison of the resulting capacities for each RUU and the current use in each RUU is found in Table 19. RUUs identified in Chapter 4 that have available capacity, as displayed in Table 21, are carried forward to Chapter 5 Activity Suitability by RUU.

The resulting recreation visitor capacities quantify the supply of available visitor opportunities that a given RUU can accommodate.

RUU Capacity Analysis: Landscape Model

In order to be consistent with the Forest Plan the RRRD used the ROS Landscape Method to establish a theoretical carrying-capacity number for each RUU. This programmatic analysis includes all recreation activity types throughout the project area. Other than ROS class designation there is limited capacity direction in the Forest Plan outside of Amendment 12 to establish constants for calculations. The ROS provides a framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for recreation experiences on the Red Rock Ranger District have been arranged along a continuum or spectrum divided into six classes: Primitive, Semi-primitive Non- motorized, Semi-primitive Motorized, Roaded Natural, Rural, and Urban. Opportunities for experiences along the spectrum represent a range from a very high probability of solitude to a very social experience. Refer to the Forest Service 1982 ROS Users Guide for more information.

The landscape method uses an area-wide approach and determines capacity based on the supply of acreage available in each ROS class. The available acreage for a given RUU was multiplied by a capacity coefficient to arrive at a capacity figure for each ROS class of each RUU. Capacity coefficients are derived from mathematical equations that set a minimum spacing between people, within an area. Coefficients vary by the Recreation Opportunity Class (ROS) and by the type of terrain or vegetation patterns present. The closer to the Primitive end of the ROS scale the area is, the lower the coefficient. Likewise, the less dense the vegetation cover, the lower the coefficient.

Steps for determining the capacity of an RUU

The following 6 steps were used to determine the capacity for each RUU. A fictional RUU is used as an example to illustrate the process:

Step 1) Determine Forest Plan Management Area Direction and Land Status of the RUU

The predominant Management Areas in this RUU are as Follows:

Pinyon-Juniper Woodland, Less than 40 Percent Slopes (MA 7)

18,831 acres or 34% of RUU

Grassland and Sparse Pinyon-Juniper above the Rim (MA10)

21,184 acres or 38% of RUU

Apply the assumption from the ROS system that most recreational use takes place in areas containing a slope of less than 40%. A GIS analysis of the land status of the Destiny RUU minus non USFS lands, and lands with a slope equal to or greater than 40% was used as the “USFS commonly used acres”.

Destiny RUU Land Status

Total RUU Acres	105,000
Non-USFS Acres	5,000
Total USFS Lands	100,000
Total USFS Commonly Used Acres (acres of slope <40%)	50,000

Step 2) Determine Number of Acres for each ROS Class –

A GIS analysis is used to display the number of acres of each ROS class as identified in the Forest Plan for the Red Rock RUU

- If a resource concern or condition attribute existed that affected the capacity of an area by 50% or more of the RUU, then an adjustment was made to the available acres in the appropriate ROS class. In this case, riparian acres were seen as sensitive and the acres were subtracted from the appropriate ROS (SPNM). (See Step 5 to see how significant condition attributes were identified.

Destiny Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres/1000 X Coefficient**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	46,000	22,350 -500 acres* = 21,850	Next Step	Next Step
Semi-Primitive Motorized (SPM)	17,000	5,432	Next Step	Next Step
Roaded Natural (RN)	12,000	16,739	Next Step	Next Step
Rural (R)	25,000	5,479	Next Step	Next Step
			PAOT Total for RUU	

***Bio-Physical Limiting Factor:** 500 Acres of Critical N. Leopard Frog Riparian Habitat. All 500 acres found in Semi-Primitive-Non-Motorized ROS class

Step 3) Apply Capacity Coefficients

The capacity coefficients obtained from Table 8, page 35 of the 1982 USDA Forest Service ROS Users Guide, contain a range of acceptable coefficients per ROS setting. Coefficients in the study were derived from the lower end of the acceptable range per ROS setting. This is because the area on the Red Rock Ranger District is generally very open and human encounters are more evident than in a closed tree canopy in a heavily forested area.

Table 16. ROS User Guide Table 8

Table 8

Capacity Coefficient Ranges* (in PAOT/Acre)					
Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
High: .025	.083	.083	2.500	7.500	N/A
Low: .002	.008	.008	.083	.830	N/A

*Specific ranges must be developed to meet Regional or Forest Conditions.

The coefficients in table 17 were based on Table 8 of the ROS handbook described above. The coefficients for the lower end of the ROS setting were divided by 6 to display parties of 6 persons or 1 vehicle at a time. For instance, the coefficient for Semi-Primitive Motorized Low from Table 8 is .008 people at one time per acre divided by six is .0013 parties or vehicles per acre. See Table 17 for the RRRD coefficients.

The RRRD used Parties or vehicles per acre for the following reasons:

1) **Why was a party or group of people used instead of an individual?** Individuals do not affect people's experience as much as groups or parties. According to the "ROS Primer and Field Guide: pg 5….."Minimizing the number of parities visible …..is one of the most critical social encounter elements to users of Primitive and Semi-Primitive Settings" (USDA Forest Service, 1990). Goals listed in Amendment 12 of the LRMP emphasize opportunities for individuals, families or small groups for experiencing solitude, scenic beauty and natural quiet. The solitude and natural quiet experienced by the visitor or resident is not affected as much by a single individual as it is by a party of individuals. Objectives for Social Encounters (based on National Forest ROS Guidelines) displayed in figure 30- Map 3 of Amendment 12 of the Forest Plan defines a "Social Encounter" as an encounter with 1 vehicle or 6 people. For example, if you pass a group of 14 on the trail that would equal 3 encounters (USDA Forest Service, 1998). The ROS Book pg. III-15 under Social Interaction states…" "The number of people in an area, how they are distributed in space and time and the probability of interaction between parties are important elements in determining the appropriate social carrying capacities" (USDA Forest Service 1990). For these reasons we used parties of people or 1 vehicle at one time as a factor in our carrying capacity coefficients.

2) **Why did we use vehicles per acre?** The content analysis of the comments received during the original proposed action showed that some people feel that too much jeep traffic degrades the hiker's experience. This was evidenced in the Tour Jeep Study Environmental Assessment of 1989 where issues were raised related to incidents between 4X4's and hikers. Also, in a wild land environment, people are not adversely affected by an individual hiker but they are, however, adversely affected by encounters with vehicles. The ROS Book, pg. III-15 explains that research has shown that people are much more tolerant to encounters with individuals than motorized equipment. One party of 6 is considered equivalent to one motorized vehicle. This is because one group of six people has approximately the same social encounter impact on a visitor as one vehicle and Map 3 of Amendment 12 lists a "Social Encounter" as an encounter with 1 vehicle or 6 people.

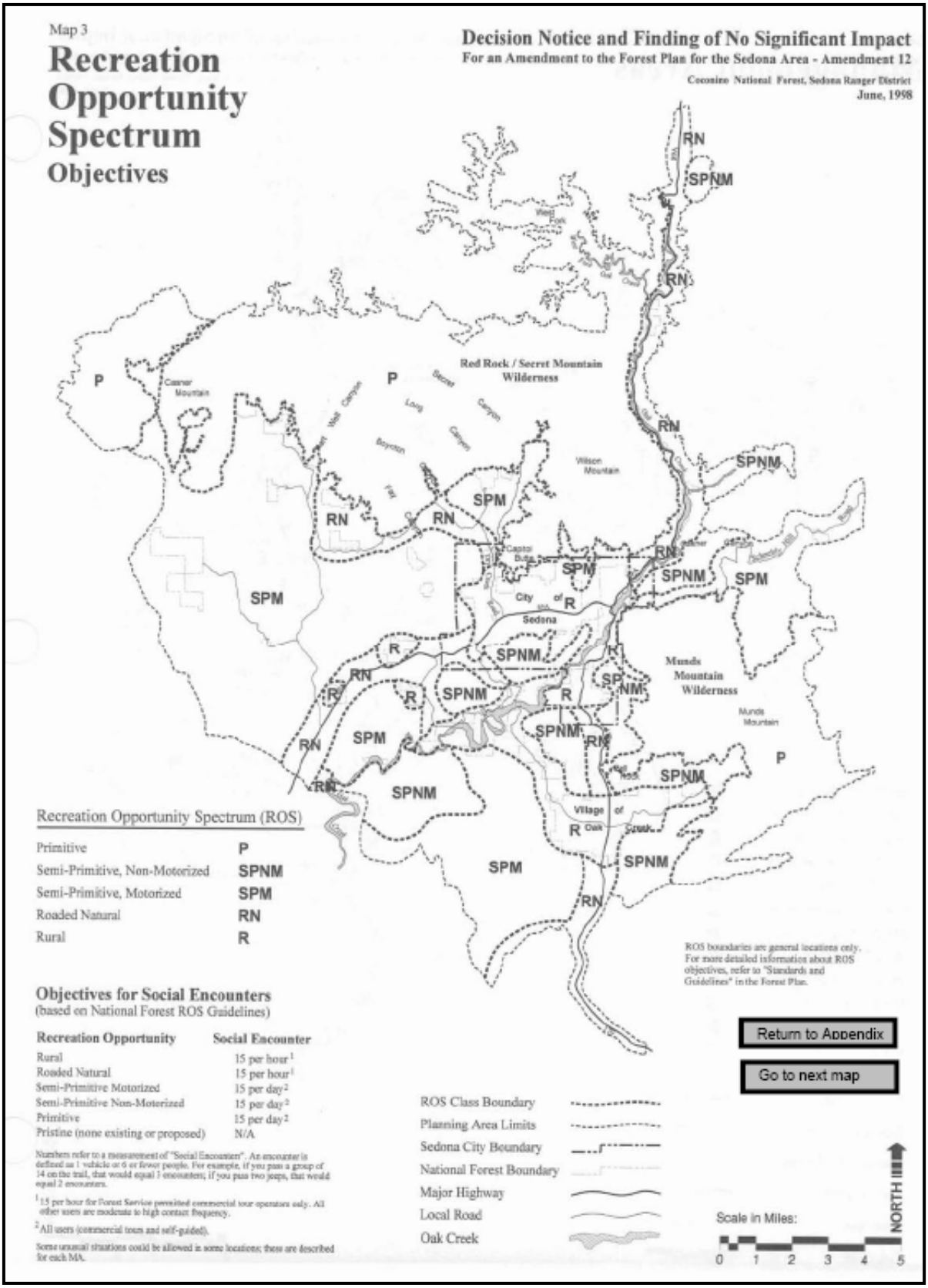
3) **Why were both parties and vehicles used in this "Assessment" as a measure of Social Encounter Capacity?** One unit of measure was needed to apply to all of the Recreation Use Units on the Red Rock Ranger District and both parties of people and vehicles use these RUUs. Use had to be totaled and combined for all types of users to determine acceptable capacities for the RUUs. Some RUUs are used by hikers, mountain bikers or equestrians only. Other RUUs are used by a combination of hikers, mountain bikers, equestrians and various types of motorized vehicles. In an RUU without roads people are concerned about parties of people encountered. In an RUU with roads people are concerned mostly with vehicle encounters. These need to be combined and displayed to determine capacity for each RUU.

Table 17. RRRD Capacity Coefficients for Parties of 6 or Vehicles At One Time (P/V-AOT) per acre

ROS Classification	Pinyon Juniper, Interspersed Dessert Shrubs, Grassland or Rock
Primitive (P)	(ROS Coeff- .002 X 6) = .003
Semi-Primitive Non-Motorized (SPNM)	(ROS Coeff- .008 X 6) = .0013
Semi-Primitive Motorized (SPM)	(ROS Coeff- .008 X 6) = .0013
Roaded Natural (RN)	(ROS Coeff- .083 X 6) = .0138
Rural (R)	(ROS Coeff- .830 X 6) = .138

*Source- This table was developed from the Recreation Opportunity Spectrum (ROS) User Guide, USDA Forest Service 1986, Table 8 pg. 35.

Figure 30. Amendment 12, Map 3



Step 4) Multiply Available Acres by the P/V-AOT Coefficient

The following table is provided to display the calculations for the P/V-AOT Capacity for each RUU.

Table 18. P/V-AOT Capacity Calculation Process

Recreation Use Unit: Destiny RUU				
ROS Class	**Acres**	**Commonly Used Acres (acres with slope under 40% and Acres without Riparian Habitat**	**Calculation: Acre X (Coeff)**	**Parties or Vehicles At One Time (P/V-AOT) per acre**
Semi-Primitive Non-Motorized (SPNM)	46,000	22,350 -500 acres = 21,850	21,850 X .0013	28
Semi-Primitive Motorized (SPM)	17,000	5,432	5,432 X .0013	7
Roaded Natural (RN)	12,000	16,739	16,739 X .0138	231
Rural (R)	25,000	5,479	5,479 X .138	76
			PAOT Total for RUU	**342**

Parties or vehicles per acre was used based on long-term experience in the area and professional judgment by the Coconino NF and the Red Rock Ranger District recreation staff. They believe that in a "wildland" environment, people are not adversely affected by an individual hiker but they are, however, adversely affected by encounters with vehicles.[2] The content analysis of the scoping comments in Chapter 1 on the original proposed action showed that some feel too much jeep traffic degrades hiker's experiences in Broken Arrow. This was also evidenced in the Tour Jeep Study Environmental Assessment of 1989 where issues were raised related to incidents between 4X4's and hikers.[3] Parties or vehicles per acre allow us to use a common measure for both roaded and un-roaded areas District-wide for this "Assessment" (i.e. some RUUs have only parties of people or horses and others have mostly vehicles or both).

Estimated Capacity (both commercial and non-commercial) was calculated per RUU by totaling the sum of the parties or vehicles per acre for each ROS class within the RUU. Determining capacity per RUU is the only place where parties or a vehicle per acre is used. That sum provides the total parties or vehicle capacity per year for the RUU.

[2] USDA Forest Service, Methodology for Application of ROS "Social Encounter" Criteria to Jeep Touring on the Sedona Ranger District, Jim Beard, Coconino NF, 1989, pg. 2.
[3] USDA, Forest Service, Tour Jeep Study Environmental Assessment—Broken Arrow and Soldier's Pass, Dec. 1989, pg. 3 and 33.

Step 5) Daily Capacity Adjustments Based On Bio-Physical Resource Limiting Factor

The interdisciplinary team was assembled to identify managerial and bio-physical factors that would limit daily capacity figures. A number of combinations of variables and relationships among variables can theoretically affect the capacity of a given area. The following criteria was used for each RUU to determine if an adjustment to the landscape model results were necessary.

• Forest Service management direction and/or a bio-physical resource condition affect 50 percent or more of the land base available for recreation in a given RUU (Example: sensitive riparian areas)

If the above criteria occurred in an RUU, then the interdisciplinary team applied professional judgment to make measurable adjustments within applicable RUUs. The additional attributes considered for each RUU are included in the capacity write-up for each RUU. Refer to Appendix F for RUU descriptions, Appendix G for Forest Plan management area direction applicable to the RUUs, and Appendix H for landscape method P/V-AOT calculations, and adjustments to the daily P/V-AOT capacity figures.

Step 6) Adjustments to the P/V-AOT Capacity

The ROS P/V-AOT adjustment factors used in this method produce a theoretical snapshot of capacity at any given time throughout an 8 hour day. These P/V-AOT adjustment factors were derived from the ROS Users Guide pages 33-38. In the above example 342 vehicles or parties of 6 could theoretically occupy the Red Rock RUU at any given time. However, several other variables affect the total capacity for a given area throughout a day (Daily Capacity).

• **Length of Stay** - As stated in the San Juan Recreation Use Analysis and Outfitter-Guide Determination, 1997; P/V-AOTs represent capacity at one point in time. Although useful for developing a capacity, the concept of P/V-AOTs does not, in most cases, represent the total use within a given area for an average day. For areas that experience a large proportion of day use, there is a turnover of people during the day. Some recreation use units experience a high amount of pass-through traffic, and thus the total amount of use during the day is higher than the P/V-AOT capacity.

Based on the 2005 NVUM findings, the average stay at day use developed sites is about 2.3 hours, overnight use of developed sites is about 47.6 hours, use of undeveloped areas is around 6.2 hours, and use of Wilderness areas is about 2.8 hours for the Coconino National Forest.

The RRRD determined that the following RUUs have an average length of stay of 6.2 hours since these RUUs are mostly undeveloped, which ends up as an adjustment factor of 1.3; (8/6.2=1.3): Apache Maid, Cedar Flat, Mud Tanks, Towel, and Fossil Creek Road.

The RRRD determined that the following RUUs have an average length of stay of 2.3 hours, resulting as an adjustment factor of 3.5; (8/2.8= 3.5). The average length of stay of 2.3 hours for day use was determined by the 2005 NVUM study. This study showed on page 11, that these RUUs have a much quicker turnover, they are not in wilderness, and use occurs mostly on roads, which are considered a developed feature. The average length of stay of 2.3 hours was used instead of the 6.2 per hour associated with use at undeveloped sites, since most of the use occurring in these RUUs is short day use lasting around 2 hours. This applies to the following RUUs: Beaver Creek, Beaverhead, Broken Arrow, Casner, Cathedral, Dry Creek, Kachina, Lower Schnebly, Middle Verde, Montezuma, Oak Creek Canyon, Research Natural Area, Red Cliff,

Savannah/House Mountain, Sedona, Schnebly Rim, Skeleton Bone, Soldier Pass, Upper Loop, Thirteen Mile Rock, Wickiup, and Windmill.

• **Season of Use** – The following information is based on professional judgment from the District Recreation Staff. RUUs including Apache Maid, Casner, Cedar Flat, Fossil Creek, Mud Tanks, Savannah/House, Schnebly Rim, Thirteen Mile and Towel are either partially or totally closed during the winter months of Dec., Jan. and Feb. due to snow and muddy conditions. That's 90 days per year or 25% of the year. Therefore the adjustment factor would be .75 for these units. The remaining RUUs including Beaver Creek, Beaverhead, Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Middle Verde, Montezuma, Oak Creek Canyon, Red Cliffs, Sedona, Skeleton Bone, Soldier Pass, Upper Loop, Village of Oak Creek, Wickiup and Windmill have only 30 days per year with road closures or other weather related issues such as heavy rain. Therefore the adjustment factor for season of use for these areas is 30 days divided by 365 days/yr.=8%. That makes the adjustment 100%-8%=92% rounded off to a factor of .9 for these areas.

• **Pattern of Use** – This refers to recreational use on weekends rather than weekdays. The tourist destination status of Sedona, AZ results in a 1:1.5 ratio as described on page 36 of the ROS Users Guide. The adjustment factor for this ratio of weekend to weekday use is .8.

RUU	PAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity =Daily Capacity X 365
Destiny	342	3.5	0.8	0.9	670.32	244,667

Supporting Maps

The maps that support the Landscape capacity analysis are in Appendix A: Map 4- Management Areas and Recreation Use Units; Map 5- Level II and III Roads and Recreation Use Units.

Summary of Landscape Method Capacity Figures

The adjusted annual capacity of each RUU figure represents the number of parties of 6 or vehicles at one time for a 1,000 acre area within the RUU. Refer to Appendix H for landscape method P/V-AOT calculations, and adjustments to the daily P/V-AOT capacity figures.

A detailed display of actual commercial use and existing commercial authorized use is shown in Appendix E. Actual use and existing commercial authorized use are not displayed on an acre basis.

The process to derive the estimated annual total commercial use, estimated average percent public use, and the average number of parties of 6 or 1 vehicle per hour is displayed in Appendix I. The estimated annual total commercial use is not displayed on an acre basis. The average number of parties of 6 or 1 vehicle per hour represents the amount of use occurring on representative roads or trails within a specific RUU based on information detailed in Appendix I.

Parties or vehicles at one time
Parties or vehicles-at-one-time needs to be converted to parties or vehicles per unit of time. Parties or vehicles at one time cannot be accurately measured unless we have a bird's eye view of the landscape. Therefore, parties or vehicles-at-one-time needs to be converted to parties or vehicles per hour, day or year. The most commonly used unit to determine capacity is parties or vehicles at one time/acre. This gives us total capacity per RUU.

The most commonly used unit on permits and to allocate use is parties or vehicles per hour, per day or per year on a given road or trail. The capacity for an area is displayed as parties or vehicles at one time per thousand acres. That can then be divided up into parties or vehicles per unit of time on a given road or trail. Parties or vehicles-at-one-time is converted to parties or vehicles per day by multiplying parties or vehicles at one time coefficients by the average length of stay in the specific area. The average length of stay in many of the areas on the RRRD is 2.3 hours (according to the 2005 Natl. Visitor Use Inventory).[4] Therefore the daily turnover for an 8 hour day is 8 hours divided by 2.3 hours or 3.5. The coefficient is then multiplied by 3.5. For more outlying areas the average length of stay is 6.2 hours or 8 hrs. divided by 6.2 hours, which equals an adjustment of 1.3 per day.

Therefore, four use numbers are particularly important to this "Assessment". They include: annual actual commercial use; authorized annual commercial use; estimated total use (commercial and non-commercial); and adjusted annual capacity (both commercial and non-commercial). Actual commercial use was calculated by using actual commercial use records. This includes vehicles and ATV's or horses and hikers on a particular road or trail per year. This number can be applied per RUU as vehicles or parties per year.

Existing Commercial Authorized Use
Authorized annual commercial limit had to be extrapolated in many cases because some permits do not have yearly limits but have jeeps per hour or jeeps per day limits. These were expanded using the authorized use maximum on the permit times an average 8 hour day divided by the number of tours per day. This was multiplied by 365 days per year to determine the annual use limit. Some commercial use is reported as the number of persons or horses on a particular trail per year. These were converted to parties per year by type of use or by RUU.

Estimated Total Use
Estimated Total Use (commercial and non-commercial) was gathered per hour or per day using hourly use observations, daily traffic counts and/or professional estimates of use. This was converted to parties or vehicles per hour, day or year for comparison purposes. Also, approximate percent of commercial tour and non-commercial use was determined for some areas. This actual total use was calculated for each RUU as vehicles or parties per year which is the same unit as all of the others.

Comparing different Types of Use Units
In order to compare the different categories of use, the categories were converted to a common unit of measure, since any time limit can be converted, approximately, into any other time limit (i.e. e. hours to days and days to years). Also, limits or allocations of use on a given road whether they are actual commercial use, authorized commercial use or total actual commercial and non-commercial use can be applied directly to a given RUU.

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[4] USDA Forest Service, National Visitor Use Monitoring Survey, 2005

Lineal Measure VS. Landscape Method or Use and Capacity:
Substantial time was spent by the interdisciplinary Team discussing the use of lineal vs. landscape for determining capacity per RUU. Lineal was dropped because our research did not reveal any lineal coefficients tied to the ROS or any other similar recreation management system that were defendable. In order to arrive at a capacity conclusion for linear features, we must have two elements that work together: 1) a standard that says how many people should be on those linear features, and 2) data, in the same unit of measure, that tell us how many people are currently on those linear features. The RRRD does not have these two elements that work together. Capacity must be measured in all dimensions not one. Although, people recreate on lineal features such as road and trails, ridges, streams, gullies etc., they react to two and even three dimensional factors such as what exists or appears to their left and to their right in the foreground, middle ground and back ground views. The landscape method was selected for determining capacity because it best represents how visitors to this area react to other users and the surrounding environment.

Therefore, in conclusion; parties or vehicles-at-one-time (hour, day, or year) is a figure that can be used to compare use and capacity. Individual parties or vehicles per length of time can also be used to issue commercial permits and monitor use. Laymen and technicians alike can measure parties or vehicles per hour. There have been many meetings where citizens have reported seeing a given number of vehicles per hour. That is much easier to measure than vehicles per mile or per day or year.

Table 19 displays the annual capacity of each RUU, estimated total use, and actual commercial use figures to estimate the percentage split between commercial and non-commercial uses. Commercial use represents 25% or more of the use in the Broken Arrow, Dry Creek, Lower Schnebly, Red Cliff, Schnebly Rim, Sedona, Solider Pass, and Windmill RUUs.

Table 19. Annual RUU Capacity and Commercial Percentages of Use

RUU	Adjusted Annual Capacity Parties of 6 or Vehicles	Estimated Annual Total Use by Parties of 6 or Vehicles Commercial & Non-Commercial	Actual Commercial Use	Existing Commercial Authorized Use	Percent of Authorized Use actually being used	Percent Commercial Use of Estimated Total Use	Percent Non- Commercial Use of Estimated Total Use	Average Parties of 6 people or Vehicles per Hour
Apache Maid	128,457	107,700	487	36,870	1	1	99	14
Beaver Creek	121,414	69,700	1,694	60,100	3	3	97	23
Beaverhead	630,063	5,500	1	19,710	<1	1	99	2
Broken Arrow	2,760	46,720	15,445	23,360	66	67	33	16
Cathedral	767	103,500	1,731	45,359	4	7	93	35
Cedar Flat	68,065	6,200	0	8,960	0	0	100	2
Dry Creek	25,876	58,400	5,069	77,360	7	25	75	20
Fossil Creek Road	8,278	26,600	10	13,340	0	1	99	9
Kachina	83,768	5,800	25,884	18,320	141	13	87	2
Lower Schnebly	53,348	73,000	12,337	78,821	16	37	63	25
Middle Verde	5,519	28,800	0	4,380	0	0	100	7
Montezuma	73,584	5,100	322	200	161	0	100	2
Mud Tanks	43,231	4,400	10	4,380	0	0	100	2
Oak Creek Canyon	49,253	261,700	365	56,146	1	0	100	88
Red Cliff	31,273	68,000	12,997	141,668	9	36	64	23
Savannah/House Mtn.	20,696	3,830	771	15,330	5	0	100	2
Schnebly Rim	20,696	36,500	11,658	68,904	17	29	71	12
Sedona	3,807	196,740	14,773	142,838	10	37	63	67
Skeleton Bone	197,757	21,300	3,623	61,494	6	22	78	5
Soldier Pass	35,872	29,200	3,029	21,810	14	28	72	10
Thirteen Mile Rock	1,840	3,800	0	0	0	0	100	1
Towel	40,625	220	0	200	0	0	100	1
Upper Loop	4,840	49,300	21,097	51,436	41	11	89	17
Village of Oak Creek	124,173	75,200	791	27,495	3	6	94	23
Wickiup	168,323	50,400	1,141	23,230	5	0	100	15
Windmill	973,148	58,400	14,768	156,787	9	50	50	20

Recreation Use Units with Total (Commercial and noncommercial) Use Greater than Capacity:

The following Recreation Units are out of Management Prescription according to landscape model calculation and associated adjustments. RUUs within this category should be considered for changes to the ROS class through a Forest Plan Amendment or commercial and/or non-commercial use reductions or other mitigations to bring use into compliance with Forest Plan guidance.

Table 20. Recreation Use Units with Total Use greater than Adjusted Annual Capacity.

RUU	Estimated Annual Total Use by Parties of 6 or Vehicles Commercial & Non-Commercial	Adjusted Annual Capacity— Commercial or Non-Commercial In Parties of 6 or Vehicles Commercial & Non-Commercial	Estimated Use Approaching (75% or more) Estimated Capacity (.	Estimated Use Exceeds Estimated Capacity
Apache Maid	107,700	128,457	X	
Broken Arrow	46,720	2,759		X
Casner	1,095	1,533	X	
Cathedral	103,500	68,065		X
Dry Creek	58,400	8,278		X
Lower Schnebly	73,000	5,519		X
Oak Creek Canyon	261,700	31,273		X
Red Cliff	68,000	31,273		X
Schnebly Rim	36,500	3,807		X
Sedona	196,740	197,757	X	
Soldier Pass	29,200	1,839		X
Windmill	58,400	57,028		X

Recreation Use Units with Available Capacity for New or Additional Commercial Services

Recreation Use Units within this category are carried forward to Chapter 5: Activity Suitability/RUU

Table 21. Recreation Use Units with Available Capacity

RUU	Potential Available Annual Capacity—Commercial and Non-Commercial. In Parties of 6 or Vehicles
Beaver Creek	51,714
Beaverhead	624,563
Cedar Flat	19,656
Fossil Creek Road	57,256
Kachina	47,548
Middle Verde	44,784
Montezuma	38,131
Mud Tanks	44,853
Savannah/House Mountain	16,866
Skeleton Bone	14,572
Thirteen Mile Rock	36,825
Towel	4,620
Upper Loop	74,873
Village of Oak Creek	93,123
Wickiup	922,749

Bold RUUs are in the most desirable commercial opportunity locations

Chapter 5: Activity Suitability/RUU

Chapter 5 determines if an activity with a demonstrated need determined in Chapter 3 is appropriate in a RUU that has available capacity as determined in Chapter 4. The interdisciplinary team considered the following issues for each activity within a given RUU:

- Availability of important setting attributes for each activity (Refer to Chapter 3)
- Potential conflicts with sensitive and/or critical habitat
- Compatibility of activity with existing infrastructure
- Consistency with Forest special orders applicable to an RUU
- Conflict potential of an activity with existing activities in a RUU
- Potential safety issues

The following table displays activities with a demonstrated need that are suitable in RUUs with available capacity.

Table 1. Suitability/ RUU

RUUS with Available Capacity	Activities with a Demonstrated Need				
	Jeep (4X4)	**Hot Air Balloon**	**Public Transit**	**Caving**	**Rock Climbing**
Beaver Creek	**X**	**4**	**X**	**1**	**X**
Beaverhead	**X**	**X**	**8**	**1**	**5**
Cedar Flat	**X**	**3**	**8**	**1**	**X**
Fossil Creek Road	**X**	**X**	**8**	**1**	**X**
Kachina	**X**	**X**	**X**	**1**	**5**
Middle Verde	**X**	**X**	**8**	**1**	**5**
Montezuma	**8**	**2**	**8**	**1**	**5**
Mud Tanks	**X**	**3**	**8**	**1**	**5**
Savannah/House Mountain	**X**	**X**	**8**	**1**	**X**
Skeleton Bone	**X**	**X**	**8**	**1**	**5**
Thirteen Mile Rock	**X**	**4**	**3**	**1**	**X**
Towel	**8**	**4**	**8**	**1**	**X**
Upper Loop	**3**	**X**	**X**	**1**	**5**
Village of Oak Creek	**8**	**2**	**X**	**1**	**5**
Wickiup	**X**	**X**	**8**	**1**	**X**

Table 105 Legend:
X – the activity is suitable within the RUU

Numeric values indicate that the RUU is not suitable for the specific activity based on the following condition(s):

1. Caves are sensitive habitat or not present in RUU
2. Unsafe conditions due to user conflicts
3. Inadequate infrastructure or acreage to support activity
4. Unsafe conditions due to terrain
5. Lack of available rock faces
6. User and/or private land conflicts
7. Sensitive or critical wildlife habitat
8. Inadequate Road and/or trail system
9. Desirable setting is lacking
10. Camping not permitted

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Appendix A- Maps supporting the Assessment

Click Here for Map

Click Here for Map

Page 88

Click Here for Map

Page 89

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Page 93

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Page 101

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Page 108

Click Here for Map

Page 109

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Page 113

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Click Here for Map

Appendix B- Road Condition Survey

The Red Rock Ranger District, Coconino National Forest is carrying out a study of Outfitter-Guide needs and opportunities. The District Recreation Staff, Bill Stafford requested some information on needed road maintenance costs on specific Forest Service roads in the Red Rock Ranger District from the Engineering Department, Coconino NF. Most Maintenance Level 2 (ML2) roads on the Coconino do not have condition surveys completed and documented. In order to document the type of maintenance needed and the approximate costs for completing the maintenance work, Andrew Espinoza performed standard condition surveys with Electronic Road Log (ERL) database, and uploaded the data into the national INFRA-Travel Routes database.

Condition Surveys

The condition surveys were conducted by driving the road in a standard four wheel drive pickup truck or SUV, fitted with an electronic Distance Measurement Instrument, (DMI). The DMI is essentially a very accurate, easily calibrated, electronic odometer. During the condition surveys, standard features of a road (drainage, surfacing, signs and structures) are noted, and their condition and location are recorded.

The DMI is connected to a laptop computer in the truck, which is running ERL, a Forest Service developed MS-Access database interface which allows for rapid and precise recording of features and work items along a road. Upon returning to the office, the laptop is connected to the servers and the stored road condition data is transmitted to the IWEB servers in Kansas City, and stored in various Oracle tables in the national database.

Spreadsheet

I downloaded the INFRA Travel Routes table "II_ROAD_WORK_ITEMS_V", saved this to a spreadsheet worksheet marked "data". Moved this table to a MS Access database called rrog_costs.mdb. I also loaded the tables Sedona rds and RTE_basics to the mdb. In Access, I queried out all the work items for roads on the Sedona rds list. I exported the table resulting from this query into Excel, and ran a pivot table on it to subtotal all the costs by type. I created lists of roads and dollar totals by surfacing, structures, signs and drainage. I used a vlookup command to create a consolidated table, and a final worksheet to format the data for readability.

Spreadsheet components

Data- This is the raw table from the database query that collected all of the road costs for the Sedona Roads.

Vlookup- this is the table where I placed the results of the individual quires by maintenance description (surfacing, structures, signs, drainage),and created a total table.

Pivot- this is the pivot table created from ALL the maintenance costs from the Sedona Roads, which was used to determine the costs by maintenance type.

Surfacing- costs for surfacing by road

Structures- costs for structures by road

Signs- costs for signs by road

Drainage- costs for drainage by road

Totals- total costs by road

Summary Page- This page is formatted for easy reading

The information provided in this Appendix was written by John O'Brien, Roads Manager, Engineering, Kaibab and Coconino National Forests. Please refer to the project record for the road condition survey spreadsheet.

Appendix C- Recreation Special Use Program Overview

Appendix C

Company Codes	Red Rock Ranger District List of Commercial Outfitter-Guide Companies
COMPANIES with PRIORITY AUTHORIZATIONS	
PJT	Pink Jeep Tours, Inc. (1)
AE	Pink Jeep Tours, Inc. dba Ancient Expeditions
SAI	Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
SRRJT	Sedona Red Rock Jeep Tours, Inc. (1) (2)
COMPANIES with LONG TERM TEMPORARY AUTHORIZATIONS	
CWJ	Crossing Worlds Journeys (1)
CLC	Crystal Light Center (1)
FSPE	Free Soul Public Education (1)
EWT	GANESH 108 dba Earth Wisdom Tours (1)
GF	Gon' Fishen
HEI	Horsecents Entertainment, Inc. dba Trail Horse Adventures F.N. (2)
NVHA	Yavapai-Apache Nation dba Native Visions Horseback Adventures (2)
NLBE	Northern Light Balloon Expeditions, Sedona Balloon Flights, Inc.
RRBA	P-Marks Plus, Inc. Red Rock Balloon Adventures
RRWJT	Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (1)
SNE	Sedona Nature Excursions (1)
SS	Spirit Steps, a subsidiary of Aquarian Concepts
COMPANIES with TEMPORARY AUTHORIZATIONS (from 2005 Solicitation)	
A360	360 Adventures, LLC
ACAT	Adventure Company at Tlaquepaque, LLC
ADT	American Dream Tours, Inc.
ADW	Bradshaw Bros., LLC dba A Day In The West
CWALK	Country Walkers, Inc. of Grand Canyon Expeditions, LLC
ASJT	Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
NAJ	Destination Marketing Group, LLC dba Native American Journeys
GCATV	Grand Canyon ATV Adventures, Inc. dba Sedona ATV Adventures & FAT CAT ATV Tours (2)
LUTZ	Lutz Adventure Tours, LLC dba Arizona ATV Adventures
MDIAMOND	M Diamond Trailrides, LLC
SMTBA	Sedona MTB Adventures, LLC
SRM	Sedona Resort Management, Inc.
SSJ	Sedona Spirit Tours and Retreats, LLC dba Sedona Spirit Journeys
STE	Spirit Trails Expeditions
STROLLEY	Sedona Transportation & Tours, LLC dba Sedona Trolley
SUNCA	Sun Country Adventures, LLC
HUMMER	Top Hat Expeditions dba Hummer Affair
VSCT	Vaughan's Southwest Custom Tours, Inc.

(1) Denotes company received an amendment for additional tour routes from the 2005 solicitation. This category only applies to Priority and Long-Term Temporary Companies.

(2) Denotes company stopped operating during the 2002 – 2006 data collection window.

Overview of the Red Rock Ranger District's Recreation Special Use Program Activity Categories

Note: "X" denotes Company provides a tour within depicted activity category

		PRIORITY			LONG-TERM TEMPORARY												TEMPORARY																	
ACTIVITY CATEGORY	# of Companies	PJT	AE	SAI	CWJ	CLC	FSPE	EWT	GF	HEI	NVHA	NLBE	RRBA	RRWJT SRRJT	SNE	SS	A360	ACAT	ADT	ADW	CWALK	ASJT	NAJ	GCATV	LUTZ	MDIAMOND	SMTBA	SRM	SSJ	STE	STROLLEY	SUNCA	HUMMER	VSCT
ATV	2																							X	X									
Backpacking / Camping / Canyoneering	4	X		X	X										X																			
Equestrian (Day Use)	3									X	X															X								
Equestrian (Overnight Use)	2									X	X																							
Fishing	1								X																									
Heritage	2		X											X																				
Hiking (Day Use)	11			X		X		X						X	X		X		X	X	X							X		X				
Hot Air Balloon	2											X	X																					
Jeep Tours (4x4)	2	X												X																				
Jeep Tours (Scenic - 4x4)	11	X	X	X				X						X				X		X		X	X							X			X	
Jeep Tours (Scenic)	15	X	X	X				X						X				X	X	X		X	X							X	X	X	X	X
Metaphysical	6				X		X	X						X		X													X					
Mountain Bike	4																X			X							X	X						

Overview of the Red Rock Ranger District's Commercial Authorizations

Note: "X" denotes authorization for use.
"A" denotes authorization for use received from March 2005 solicitation.

		PRIORITY			LONG-TERM TEMPORARY												TEMPORARY																	
Road / Trail Number	**4x4 Rd**	PJT	AE	SAI	CWJ	CLC	FSPE	EWT	GF	HEI	NVHA	NLBE	RRBA	RRWJT SRRJT	SNE	SS	A360	ACAT	ADT	ADW	CWALK	ASJT	NAJ	GCATV	LUTZ	MDIAMOND	SMTBA	SRM	SSJ	STE	STROLLEY	SUNCA	HUMMER	VSCT
Sites																																		
Bell Rock			X																															
Cathedral Rock Area								X																										
Oak Creek Canyon Vista				X																														
Rarick Canyon Petroglyph														X																				
Red Rock Crossing								X						X		X																		
Red Tank Draw Petroglyph			X											X																				
Camping Sites 1, 2, 4, 6, 7, 8, 9, via FR152				X																														
Camping Site 12 via FR152D				X																														
Camping Site 13 via FR9587 & FR9587A				X																														
Camping Site 14 via FR152E				X																														
Camping Site 15 via FR9600				X																														
Forest Roads -- Historically Used that form the Basis of the Red Rock District Recreation Special Use Program																																		
00089B		X						X	X										X															
00119 (to Montezuma's Well)			X					A						X																X				
00119A																															X			
00131															X									X	X					X				
00152		X	X	X				A						X				X		X		X	X							X		X	X	
00152A	**X**			X										X	X																			
00152C (Unpaved portion from Marshall Tank)		X	X	X				A						X	X																			
00152E	**X**			X											X																			
00153 (Schnebly Hill Rd)		X	X	X	X	A	X	A						X	X	X		X		X	X	X	X				X	X		X	X	X	X	X
00153A	**X**	X	X	X										X																				
00153E				X																														
00179F (Broken Arrow)	**X**	X																									X							
00213F	**X**										X											X	X											
00214											X									X												X		
00214B											X																							
00258		X																		X				X	X					X				
00258A		X																		X					X					X				
00525		X	X	X				A				X		X				X		X		X	X	X	X			X		X		X	X	
00525A	**X**	X																				X	X	X	X					X			X	
00525C		X		X				A												X		X	X	X	X			X		X			X	
00525D			X	X				A												X		X	X		X			X					X	
00618			X		A			A			X			X						X		X	X			X			X	X		X		
00618C											X																							
00618D											X																							
00623									X																									
00633				X				A						A						X	X						X	X						
00644											X											X	X											
00644H											X											X	X											
00645A			X								X			X								X	X											
00645A - Connector											X																							
00689			X								X			X								X	X											
00708											X									X										X				
00761		X																		X				X	X					X		X	X	
00761A		X																							X			X					X	
00761B	**X**	X																						X	X									
00788				X				X														X	X											
00788A								X														X	X											
00795		X		X																X								X						
00801				X										X																				
09139J											X																							
09201A			X																															
09201C											X																							
09206M			X																															
09494F				X										X																				
09495F				X										X																				
09496F				X																														
09497F				X																														
09498F				X																														
09499F				X																														
09499G				X																														
09501					X																													
09513	**X**			X																		X	X	X	X									
09567 (Taylor Tank)			X	X																														

Overview of the Red Rock Ranger District's Commercial Authorizations

Note: "X" denotes authorization for use.
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		PRIORITY			LONG-TERM TEMPORARY												TEMPORARY																	
Road / Trail Number	**4x4 Rd**	PJT	AE	SAI	CWJ	CLC	FSPE	EWT	GF	HEI	NVHA	NLBE	RRBA	RRWJT SRRJT	SNE	SS	A360	ACAT	ADT	ADW	CWALK	ASJT	NAJ	GCATV	LUTZ	MDIAMOND	SMTBA	SRM	SSJ	STE	STROLLEY	SUNCA	HUMMER	VSCT
Forest Roads (cont.) -- Historically Used that form the Basis of the Red Rock District Recreation Special Use Program																																		
09584				X																														
09586H															X																			
09587				X				X																										
09587A				X				X																										
09589													X																					
09600	**X**			X											X																			
09600A				X											X																			
09851B												X																						
09862 (RR Loop Pullout Rd)		X																																
09867															X																			
09869 (Chapel Rd)		X																											X					
09876															X																			
09881 (N. Bell Trvlwy Access)								X																										
09904 (Soldier Pass Rd)	**X**													X																				
09908		X	X	X										X																				
09910		X		X																														
09917	**X**	X		X										X																				
09926 (Long Canyon Mesa)							X																											
09940 to Cowpies				X												X																		
Forest Trails -- Historically Used that form the Basis of the Red Rock District Recreation Special Use Program																																		
Airport Saddle Trail 126		X	X	X			X							X		X																		
Allens Bend Trail 111															X																			
Bear Mountain Trail 54															X																			
Brins Mesa Trail 119				X																														
Casner Canyon Trail 11															X																			
Cathedral Rock Trail 170				X	X		X																											
Cockscomb Trail 167 (FR9586, 9586A, 9586B)					X	A									X						X						X	X		X				
Dawa Trail 188 (FR9586, 9586B)															X						X						X	X		X				
Dawa Trail 188B (FR9586H)															X													X		X				
Deadmans Pass Trail 110				X				X						A	X				X	X							X	X	X	X				
Devils Bridge Trail 120				X																														
Doe Mountain Trail 60				X		X		X																										
Dry Creek Trail 52				X																														
Elmerville Spur A Trail 115A										X																								
Elmerville Spur B Trail 115B										X																								
Elmerville Spur C Trail 115C										X																								
Elmerville Spur E Trail 115E										X																								
Elmerville Spur K Trail 115K										X																								
Elmerville Spur L Trail 115L										X																								
Elmerville Spur M Trail 115M										X																								
Elmerville Spur R Trail 115R										X																								
Elmerville Spur S Trail 115S										X																								
Fay Canyon Trail 53								X																			X							
Hot Loop Trail 40 and 40A					X																													
Indian Point Trail FR 9457R					X																													
Little Horse Trail 61								X									X			X	X						X			X				
Long Canyon Trail 122				X				X																										
Loy Canyon Trail 5				X																														
Munds Wagon Trail 78				X		A									A					X							X	X						
Native Visions Horse Trails in T14N R5E Sec 16 - 21											X																							
Northern Bell Travelway								X																										
Parsons Trail 144															X																			
Red Rock Loop Trail 118										X																								
Scheurman Mtn Trail 56										X																								
Schnebly Hill Trail 158				X											X																			
Secret Canyon Trail 121				X																														
Sterling Pass Trail 46				X											X																			
Towel Creek Trail 67											X																							
Vultee Arch Trail 22				X																														
Walker Basin Trail 81											X																							
Woods Canyon Trail 93					X																													
Streams -- Historically Used that form the Basis of the Red Rock District Recreation Special Use Program																																		
Oak Creek									X																									

Overview of the Red Rock Ranger District's Commercial Authorizations

Note: "X" denotes authorization for use.
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		PRIORITY			LONG-TERM TEMPORARY												TEMPORARY																	
Road / Trail Number	**4x4 Rd**	PJT	AE	SAI	CWJ	CLC	FSPE	EWT	GF	HEI	NVHA	NLBE	RRBA	RRWJT SRRJT	SNE	SS	A360	ACAT	ADT	ADW	CWALK	ASJT	NAJ	GCATV	LUTZ	MDIAMOND	SMTBA	SRM	SSJ	STE	STROLLEY	SUNCA	HUMMER	VSCT
Forest Roads -- Added to the Red Rock District Recreation Special Use Program during the March 2005 Solicitation																																		
00009D	**X**																					X	X											
00009E																						X	X											
00080																						X	X											
00119B																														X				
00119H																														X				
00120A	**X**																	X				X	X											
00121					A									A						X														
00213																						X	X											
00213A																						X	X											
00214A																																X		
00215																														X		X		
00229																						X	X											
00229E																						X	X											
00229F																						X	X											
00502																				X										X				
00502C																														X				
00618G					A									A						X										X				
00620																						X	X											
00620A																						X	X											
00620C																						X	X											
00620D																						X	X											
00620E																						X	X											
Portions of 00620E = Apache Maid Trail 15																						X	X											
00620F																						X	X											
00620G																						X	X											
00644A																						X	X											
00644B																						X	X											
00644E																						X	X											
00644G																						X	X											
00647 (Rattlesnake)	**X**																					X	X											
00665																						X	X											
00665A																						X	X											
00665B																						X	X											
00689A																						X	X											
00708A																														X				
00761D																									X									
00796																																X		
09201D																																X		
09201E																										X						X		
09201H																										X						X		
09201J																				X														
09202L					A																													
09206T	**X**																					X	X											
09206X																														X				
09235	**X**																					X	X											
09235A	**X**																					X	X											
09235C	**X**																					X	X											
09235E																														X				
09235X																														X				
09236C																						X	X											
09236D																						X	X											
09236S																														X				
09236V																														X				
09238M																						X	X											
09238S																						X	X											
09240A																						X	X											
09240D																						X	X											
09240G																						X	X											
09240W																						X	X											
09242E																						X	X											
09242H																						X	X											
09243E																						X	X											
09243H																						X	X											
09244E																						X	X											
09247C																						X	X											
09247D																						X	X											
09248C																														X				
09248D																						X	X											

Overview of the Red Rock Ranger District's Commercial Authorizations

Note: "X" denotes authorization for use.
"A" denotes authorization for use received from March 2005 solicitation.

		PRIORITY			LONG-TERM TEMPORARY												TEMPORARY																	
Road / Trail Number	**4x4 Rd**	PJT	AE	SAI	CWJ	CLC	FSPE	EWT	GF	HEI	NVHA	NLBE	RRBA	RRWJT SRRJT	SNE	SS	A360	ACAT	ADT	ADW	CWALK	ASJT	NAJ	GCATV	LUTZ	MDIAMOND	SMTBA	SRM	SSJ	STE	STROLLEY	SUNCA	HUMMER	VSCT
Forest Roads (cont.) -- Added to the Red Rock District Recreation Special Use Program during the March 2005 Solicitation																																		
09248G																						X	X											
09500A																		X																
09500L																		X																
09500M																		X																
09500N																		X																
09500P																		X																
09513A																									X									
09513B																									X									
09517A																									X									
09518																									X					X				
09518A																									X									
09518B																									X									
09518C																									X									
09518D																									X									
09518E																									X									
09518F																									X									
09519																									X									
09520																									X									
09524	**X**																								X			X					X	
09524B																									X									
09524C																									X									
09524E																									X									
09524F																									X									
09524N																									X									
09524P																									X									
09525	**X**																								X									
09532																						X	X		X									
09536																									X									
09536C																									X									
09536D																									X									
09536E																									X									
09536G																									X									
09538																									X									
09538A																									X									
09538B																									X									
09538C																									X									
09538D																									X									
09539																									X									
09540																									X									
09541	**X**																								X									
09541A	**X**																								X									
09541B																									X									
09542C																									X									
09543																						X	X		X									
09544A																									X									
09546																									X									
09546A																									X									
09547																									X									
09548																									X					X				
09548A																									X					X				
09548B																									X									
09548C																									X					X				
09548D																									X					X				
09548E																									X					X				
09548F																									X					X				
09549	**X**							A										X		X		X	X	X	X								X	
09549A																						X	X		X									
09549B	**X**							A										X		X		X	X		X								X	
09549E																		X				X	X		X									
09549F																		X				X	X		X									
09549G																		X		X		X	X		X									
09549H																		X				X	X		X									
09549M																				X		X	X		X								X	
09549N																						X	X		X									
09551	**X**							A										X		X		X	X		X			X					X	
09551B																						X	X											
09552																						X	X		X									
09553																						X	X		X									
09554																						X	X		X									

Overview of the Red Rock Ranger District's Commercial Authorizations

Note: "X" denotes authorization for use.
"A" denotes authorization for use received from March 2005 solicitation.

		PRIORITY			LONG-TERM TEMPORARY												TEMPORARY																	
Road / Trail Number	**4x4 Rd**	PJT	AE	SAI	CWJ	CLC	FSPE	EWT	GF	HEI	NVHA	NLBE	RRBA	RRWJT SRRJT	SNE	SS	A360	ACAT	ADT	ADW	CWALK	ASJT	NAJ	GCATV	LUTZ	MDIAMOND	SMTBA	SRM	SSJ	STE	STROLLEY	SUNCA	HUMMER	VSCT
Forest Roads (cont.) -- Added to the Red Rock District Recreation Special Use Program during the March 2005 Solicitation																																		
09555																						X	X											
09558																				X		X	X		X									
09559	**X**																			X		X	X		X									
09559A																				X		X	X		X									
09571																									X									
09571B																									X									
09573																						X	X											
09573C																						X	X											
09573F																						X	X											
09574																						X	X		X									
09886												X																						
09904 to Teacup/Jordan Trail						A		A							A					X	X						X	X		X				
09934 (Huckaby / Munds Wagon Trailhead)						A		A						A	A				X	X	X						X	X			X		X	
09951																								X										
09951B																								X										
09951C																								X										
09952	**X**																	X				X	X											
09952A																						X	X											
09952B	**X**																	X				X	X											
09952C																						X	X											
09953																		X				X	X											
09954																						X	X											
09957																						X	X											
09958																						X	X											
09960	**X**																	X				X	X											
09960A	**X**																	X				X	X											
09965																						X	X											
Forest Trails -- Added to the Red Rock District Recreation Special Use Program during the March 2005 Solicitation																																		
Airport Loop Trail 210						A									A				X		X						X		X					
Arizona Cypress Trail 203																					X						X	X		X				
Baldwin Trail 191						A		A						A	A				X								X	X		X				
Bandit Trail 209						A																					X							
Bell Rock Pathway Trail 96					A	A	A	A									X		X	X	X						X		X	X				
Blodgett Basin Trail 31																														X				
Broken Arrow Trail 125																	X			X	X						X							
Carroll Canyon Trail 207																											X	X						
Girdner Trail 162						A		A													X						X	X		X				
Herkenham Trail 202						A														X							X	X						
HT Trail 197						A																					X	X						
Huckaby Trail 161						A		A						A					X	X	X						X	X						
Jim Thompson Trail 124						A								A						X	X						X	X						
Jordan Trail 186								A						A						X	X						X	X						
Mystic Trail 157																											X							
Old Post Trail 206						A																					X	X						
Ridge Trail 208						A																					X	X						
Rupp Trail 204																					X						X	X		X				
Teacup Trail 183						A		A							A					X	X						X	X		X				
Templeton Trail 156						A								A	A				X	X	X						X	X	X	X				
Thunder Mountain Trail 165						A									A					X	X						X	X		X				

Appendix D

Appendix E

Company Codes	Red Rock Ranger District List of Commercial Outfitter-Guide Companies
COMPANIES with PRIORITY AUTHORIZATIONS	
PJT	Pink Jeep Tours, Inc. (1)
AE	Pink Jeep Tours, Inc. dba Ancient Expeditions
SAI	Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
SRRJT	Sedona Red Rock Jeep Tours, Inc. (1) (2)
COMPANIES with LONG TERM TEMPORARY AUTHORIZATIONS	
CWJ	Crossing Worlds Journeys (1)
CLC	Crystal Light Center (1)
FSPE	Free Soul Public Education (1)
EWT	GANESH 108 dba Earth Wisdom Tours (1)
GF	Gon' Fishen
HEI	Horsecents Entertainment, Inc. dba Trail Horse Adventures F.N. (2)
NVHA	Yavapai-Apache Nation dba Native Visions Horseback Adventures (2)
NLBE	Northern Light Balloon Expeditions, Sedona Balloon Flights, Inc.
RRBA	P-Marks Plus, Inc. Red Rock Balloon Adventures
RRWJT	Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (1)
SNE	Sedona Nature Excursions (1)
SS	Spirit Steps, a subsidiary of Aquarian Concepts
COMPANIES with TEMPORARY AUTHORIZATIONS (from 2005 Solicitation)	
A360	360 Adventures, LLC
ACAT	Adventure Company at Tlaquepaque, LLC
ADT	American Dream Tours, Inc.
ADW	Bradshaw Bros., LLC dba A Day In The West
CWALK	Country Walkers, Inc. of Grand Canyon Expeditions, LLC
ASJT	Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
NAJ	Destination Marketing Group, LLC dba Native American Journeys
GCATV	Grand Canyon ATV Adventures, Inc. dba Sedona ATV Adventures & FAT CAT ATV Tours (2)
LUTZ	Lutz Adventure Tours, LLC dba Arizona ATV Adventures
MDIAMOND	M Diamond Trailrides, LLC
SMTBA	Sedona MTB Adventures, LLC
SRM	Sedona Resort Management, Inc.
SSJ	Sedona Spirit Tours and Retreats, LLC dba Sedona Spirit Journeys
STE	Spirit Trails Expeditions
STROLLEY	Sedona Transportation & Tours, LLC dba Sedona Trolley
SUNCA	Sun Country Adventures, LLC
HUMMER	Top Hat Expeditions dba Hummer Affair
VSCT	Vaughan's Southwest Custom Tours, Inc.

(1) Denotes company received an amendment for additional tour routes from the 2005 solicitation. This category only applies to Priority and Long-Term Temporary Companies.

(2) Denotes company stopped operating during the 2002 – 2006 data collection window.

Actual Annual Use and Authorized Annual Limits for the Red Rock Ranger District's Recreation Special Use Program Activity Categories

	ACTIVITY CATEGORY	ATV	Backpacking / Camping / Canyoneering	Equestrian (Day Use)	Equestrian (Overnight Use)	Fishing	Heritage	Hiking (Day Use)	Hot Air Balloon	Jeep Tours (4x4)	Jeep Tours (Scenic - 4x4)	Jeep Tours (Scenic)	Metaphysical	Mountain Bike	Totals for Each Company
	# of Companies offering activity	2	4	3	2	1	2	11	2	2	11	15	6	4	65
	Total Actual Use for each Activity	**3,196**	**45**	**5,607**	**10**	**50**	**3,988**	**1,905**	**1,314**	**18,427**	**13,719**	**9,283**	**956**	**224**	**58,721**
	Sum of Authorized Annual Limits for each Activity	**40,880**	**570**	**10,785**	**7,865**	**260**	**13,744**	**201,357**	**1,535**	**16,700**	**180,802**	**236,540**	**25,636**	**97,455**	**834,129**
	% of Allocation Used for each Activity	**8%**	**8%**	**52%**	**0%**	**19%**	**29%**	**1%**	**86%**	**110%**	**8%**	**4%**	**4%**	**0%**	**7%**
PRIORITY	PJT Actual Use		0							15,411	4,603	0			20,014
PRIORITY	PJT Authorized Annual Limit		0							14,600	4,200	2,200			21,000
PRIORITY	PJT % Allocation Used		0%							106%	110%	0%			95%
PRIORITY	AE Actual Use						3,912				831	2,317			7,060
PRIORITY	AE Authorized Annual Limit						12,280				1,019	4,761			18,060
PRIORITY	AE % Allocation Used						32%				82%	49%			39%
PRIORITY	SAI Actual Use		0					39			3,026	1,598			4,662
PRIORITY	SAI Authorized Annual Limit		206					20,440			35,040	37,314			93,000
PRIORITY	SAI % Allocation Used		0%					0.2%			9%	4%			5%
LONG-TERM TEMPORARY	CWJ Actual Use		3										225		228
LONG-TERM TEMPORARY	CWJ Authorized Annual Limit		104										7,086		7,190
LONG-TERM TEMPORARY	CWJ % Allocation Used		3%										3%		3%
LONG-TERM TEMPORARY	CLC Actual Use							2							2
LONG-TERM TEMPORARY	CLC Authorized Annual Limit							35,560							35,560
LONG-TERM TEMPORARY	CLC % Allocation Used							0%							0%
LONG-TERM TEMPORARY	FSPE Actual Use												109		109
LONG-TERM TEMPORARY	FSPE Authorized Annual Limit												4,559		4,559
LONG-TERM TEMPORARY	FSPE % Allocation Used												2%		2%
LONG-TERM TEMPORARY	EWT Actual Use							1,175			118	382	105		1,780
LONG-TERM TEMPORARY	EWT Authorized Annual Limit							19,652			8,760	30,660	4,380		63,452
LONG-TERM TEMPORARY	EWT % Allocation Used							6%			1%	1%	2%		3%
LONG-TERM TEMPORARY	GF Actual Use					50									50
LONG-TERM TEMPORARY	GF Authorized Annual Limit					260									260
LONG-TERM TEMPORARY	GF % Allocation Used					19%									19%
LONG-TERM TEMPORARY	HEI Actual Use			4,158	10										4,167
LONG-TERM TEMPORARY	HEI Authorized Annual Limit			7,665											7,665
LONG-TERM TEMPORARY	HEI % Allocation Used			54%	0.1%										54%
LONG-TERM TEMPORARY	NVHA Actual Use			322	0										322
LONG-TERM TEMPORARY	NVHA Authorized Annual Limit			200											200
LONG-TERM TEMPORARY	NVHA % Allocation Used			161%	0%										161%
LONG-TERM TEMPORARY	NLBE Actual Use								1,015						1,015
LONG-TERM TEMPORARY	NLBE Authorized Annual Limit								1,235						1,235
LONG-TERM TEMPORARY	NLBE % Allocation Used								82%						82%

Actual Annual Use and Authorized Use for the Red Rock Ranger District's Recreation Special Use Program Activity Categories (cont.)

	ACTIVITY CATEGORY	ATV	Backpacking / Camping / Canyoneering	Equestrian (Day Use)	Equestrian (Overnight Use)	Fishing	Heritage	Hiking (Day Use)	Hot Air Balloon	Jeep Tours (4x4)	Jeep Tours (Scenic - 4x4)	Jeep Tours (Scenic)	Metaphysical	Mountain Bike	Totals for Each Company
LONG-TERM TEMPORARY (cont.)	RRBA Actual Use								299						299
	RRBA Authorized Annual Limit								300						300
	RRBA % Allocation Used								100%						100%
	RRWJT SRRJT Actual Use						76	47		3,016	2,396	1,020	418		6,973
	RRWJT SRRJT Authorized Annual Limit						1,464	10,950		2,100	6,223	1,735	539		23,011
	RRWJT SRRJT % Allocation Used						5%	0%		144%	39%	59%	77%		30%
	SNE Actual Use		42					304							346
	SNE Authorized Annual Limit		260					15,110							15,370
	SNE % Allocation Used		16%					2%							2%
	SS Actual Use												83		83
	SS Authorized Annual Limit												312		312
	SS % Allocation Used												26%		26%
TEMPORARY	A360 Actual Use							6						9	15
	A360 Authorized Annual Limit							3,285						3,285	6,570
	A360 % Allocation Used							0.2%						0.3%	0.2%
	ACAT Actual Use										66	1,241			1,307
	ACAT Authorized Annual Limit										8,760	13,140			21,900
	ACAT % Allocation Used										1%	9%			6%
	ADT Actual Use							0				0			0
	ADT Authorized Annual Limit							10,950				4,380			15,330
	ADT % Allocation Used							0%				0%			0%
	ADW Actual Use							10			983	1,254		0	2,247
	ADW Authorized Annual Limit							8,760			13,140	17,520		8,760	48,180
	ADW % Allocation Used							0%			7%	7%		0%	5%
	CWALK Actual Use							37							37
	CWALK Authorized Annual Limit							35,040							35,040
	CWALK % Allocation Used							0.1%							0.1%
	ASJT Actual Use										809	497			1,306
	ASJT Authorized Annual Limit										38,690	8,760			47,450
	ASJT % Allocation Used										2%	6%			3%
	NAJ Actual Use										5	19			24
	NAJ Authorized Annual Limit										38,690	8,760			47,450
	NAJ % Allocation Used										0.01%	0.2%			0.0%
	GCATV Actual Use	2,145													2,145
	GCATV Authorized Annual Limit	20,440													20,440
	GCATV % Allocation Used	10%													10%

Actual Annual Use and Authorized Use for the Red Rock Ranger District's Recreation Special Use Program Activity Categories (cont.)

	ACTIVITY CATEGORY	ATV	Backpacking / Camping / Canyoneering	Equestrian (Day Use)	Equestrian (Overnight Use)	Fishing	Heritage	Hiking (Day Use)	Hot Air Balloon	Jeep Tours (4x4)	Jeep Tours (Scenic - 4x4)	Jeep Tours (Scenic)	Metaphysical	Mountain Bike	Totals for Each Company
TEMPORARY (cont.)	LUTZ Actual Use	1,052													1,052
	LUTZ Authorized Annual Limit	20,440													20,440
	LUTZ % Allocation Used	5%													5%
	MDIAMOND Actual Use			1,128											1,128
	MDIAMOND Authorized Annual Limit			2,920											2,920
	MDIAMOND % Allocation Used			39%											39%
	SMTBA Actual Use													114	114
	SMTBA Authorized Annual Limit													54,750	54,750
	SMTBA % Allocation Used													0.2%	0.2%
	SRM Actual Use							269						101	370
	SRM Authorized Annual Limit							30,660						30,660	61,320
	SRM % Allocation Used							1%						0.3%	0.6%
	SSJ Actual Use												18		18
	SSJ Authorized Annual Limit												8,760		8,760
	SSJ % Allocation Used												0.2%		0.2%
	STE Actual Use							16			0	5			21
	STE Authorized Annual Limit							10,950			4,380	30,660			45,990
	STE % Allocation Used							0.1%			0%	0.02%			0.0%
	STROLLEY Actual Use											29			29
	STROLLEY Authorized Annual Limit											2,190			2,190
	STROLLEY % Allocation Used											1%			1%
	SUNCA Actual Use											127			127
	SUNCA Authorized Annual Limit											52,560			52,560
	SUNCA % Allocation Used											0%			0%
	HUMMER Actual Use										884	779			1,663
	HUMMER Authorized Annual Limit										21,900	17,520			39,420
	HUMMER % Allocation Used										4%	4%			4%
	VSCT Actual Use											17			17
	VSCT Authorized Annual Limit											4,380			4,380
	VSCT % Allocation Used											0%			0%

Data Source: Red Rock Ranger District Actual Use Records

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006

Actual Annual Use and Annual Allocations for the Red Rock Ranger District's Recreation Special Use Program Sites, Roads, Trails, and Streams

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006
Data Source: Red Rock Ranger District Actual Use Records

| Road / Trail Number / Site Name | 4x4 Rd | PRIORITY | | | | | | LONG-TERM TEMPORARY | | | | | |

Actual Annual Use and Annual Allocations for the Red Rock Ranger District's Recreation Special Use Program Sites, Roads, Trails, and Streams

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006
Data Source: Red Rock Ranger District Actual Use Records

| Road / Trail Number / Site Name | 4x4 Rd | PRIORITY | | | | | | LONG-TERM TEMPORARY | | | | | | | | | | | | | | | | | | | | | | | | | | TEMPORARY | | | | | | | | | | | | | | | | | | |

Actual Annual Use and Annual Allocations for the Red Rock Ranger District's Recreation Special Use Program Sites, Roads, Trails, and Streams

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006
Data Source: Red Rock Ranger District Actual Use Records

| Road / Trail Number / Site Name | 4x4 Rd | PRIORITY | | | | | | LONG-TERM TEMPORARY | | | | | | | | | | | | | | | | | | | | | | | | | | TEMPORARY | | | | | | | | | | | | | | | | | | |

Actual Annual Use and Annual Allocations for the Red Rock Ranger District's Recreation Special Use Program Sites, Roads, Trails, and Streams

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006
Data Source: Red Rock Ranger District Actual Use Records

| | | PRIORITY | | | | | | LONG-TERM TEMPORARY | | | | | | | | | | | | | | | | | | | | | | | | TEMPORARY | | | | | | | | | | | | | | | | | | |

Actual Annual Use and Annual Allocations for the Red Rock Ranger District's Recreation Special Use Program Recreation Use Units (RUU's)

	PRIORITY						LONG-TERM TEMPORARY																							
Recreation Use Unit (RUU)	PJT (Actual Use)	PJT (Annual Allocation)	AE (Actual Use)	AE (Annual Allocation)	SAI (Actual Use)	SAI (Annual Allocation)	CWJ (Actual Use)	CWJ (Annual Allocation)	CLC (Actual Use)	CLC (Annual Allocation)	FSPE (Actual Use)	FSPE (Annual Allocation)	EWT (Actual Use)	EWT (Annual Allocation)	GF (Actual Use)	GF (Annual Allocation)	HEI (Actual Use)	HEI (Annual Allocation)	NVHA (Actual Use)	NVHA (Annual Allocation)	NLBE (Actual Use)	NLBE (Annual Allocation)	RRBA (Actual Use)	RRBA (Annual Allocation)	RRWJT SRRJT (Actual Use)	RRWJT SRRJT (Allocated Use)	SNE (Actual Use)	SNE (Annual Allocation)	SS (Actual Use)	SS (Annual Allocation)
Apache Maid			22	300															0	200					57	600				
Beaver Creek			22	600			10	4,380					11	4,380					0	200					113	5,280				
Beaverhead																														
Broken Arrow	15411	14600																												
Cathedral			831	1,019	8	1460	95	2,396	0	8,760	9	2,214	213	5,108							0	1,235			418	2,729	6	2,918		
Cedar Flat																			0	200										
Dry Creek	0	800	2,317	4,761	66	6,836					2	520	463	15,590											1,414	4,845	41	208		
Fossil Creek Road																			0	200										
Kachina	0	400											0	4,380	50	260	24,840	7,665			994	1,235								
Lower Schnebly	4603	3600	831	1,019	1,599	6,666	49	104	0	2,190	12	1,095	243	15,330	50	260									1,783	1,735	93	2,918	14	104
Middle Verde																														
Montezuma																			322	200										
Mud Tanks																														
Oak Creek Canyon					0	35,136			0	2,190			232	4,380	50	260									11	2,190	58	1,040		
Red Cliffs	0	1600	5,234	13,589	3,056	42,478	71	206	2	2,710			580	18,300											229	4,023	108	1,092		
Savannah House Mtn																														
Schnebly Rim	3665	3600	1,438	1,019	1,598	3,842	52	208					243	15,330											1,656	1,735	84	1456	14	104
Sedona	4603	5200	2,317	4,761	1,615	8,490	49	104	0	21,900	86	730	310	21,900	50	260	44	7,665							2,221	8,844	175	10,216	41	208
Skeleton Bone	0	800																									2	104		
Soldier Pass									0	2,190			0	2,190											3,016	4,290	0	2,190		
Thirteen Mile Rock																														
Towel																			0	200										
Upper Loop	0	1600	2,317	4,196	0	1,460			0	10,950			348	572	50	260	16,820	7,665							418	539	39	2,190	42	104
VOC							3	104	0	4,380			181	2398	50	260									418	2,729	6	2,190	42	104
Wickiup			0	300									11	4380											0	300				
Windmill	0	1600	5,234	13,589	3,026	37,960			0	4,380			291	21,900							22	1,235	299	300	202	1,833	42	260		

Data Source: Red Rock Ranger District Actual Use Records

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006

Actual Annual Use and Annual Allocations for the Red Rock Ranger District's Recreation Special Use Program Recreation Use Units (RUU's) (cont.)

	TEMPORARY																											
Recreation Use Unit (RUU)	A360 (Actual Use)	A360 (Annual Allocation)	ACAT (Actual Use)	ACAT (Annual Allocation)	ADT (Actual Use)	ADT (Annual Allocation)	ADW (Actual Use)	ADW (Annual Allocation)	CWALK (Actual Use)	CWALK (Annual Allocation)	ASJT (Actual Use)	ASJT (Annual Allocation)	NAJ (Actual Use)	NAJ (Annual Allocation)	GCATV (Actual Use)	GCATV (Annual Allocation)	LUTZ (Actual Use)	LUTZ (Annual Allocation)	MDIAMOND (Actual Use)	MDIAMOND (Annual Allocation)	SMTBA (Actual Use)	SMTBA (Annual Allocation)	SRM (Actual Use)	SRM (Annual Allocation)	SSJ (Actual Use)	SSJ (Annual Allocation)	STE (Actual Use)	STE (Annual Allocation)
Apache Maid											403	17,885	5	17,885														
Beaver Creek							0	4,380			403	13,505	5	13,505					1128	2920					0	2,190	0	4,380
Beaverhead			1	4,380							0	5,475	0	5,475														
Broken Arrow	4	2,190					0	2,190	10	2,190											20	2,190						
Cathedral	11	2,190			0	2,190	0	2,190	22	2,190											103	2,190	0	2,190	10	2,190	5	2,190
Cedar Flat							0	4,380																				
Dry Creek			15	4,380	0	2,190	291	6,570			124	4,380	1	4,380							5	2,190	288	2,190	5	2,190	1	6,570
Fossil Creek Road							0	4,380			10	2,190	0	2,190													0	4,380
Kachina					0	4,380																						
Lower Schnebly			457	4,380			964	6,570	6	2,190	745	4,380	22	4,380							8	2,190	0	2,190			5	4,380
Middle Verde																											0	4,380
Montezuma																												
Mud Tanks											10	2,190	0	2,190														
Oak Creek Canyon					0	2,190	10	2,190	0	2,190											4	2,190	0	2,190				
Red Cliffs			65	4,380	0	2,190	984	4,380			396	4,380	1	4,380			1052	20440			5	2,190	288	2,190	5	2,190	1	2,190
Savannah House Mtn			771	4,380							0	5,475	0	5,475														
Schnebly Rim			388	4,380			964	4,380	6	2,190	745	4,380	22	4,380							0	2,190	0	2,190			5	4,380
Sedona			457	4,380	0	2,190	994	6,570	16	2,190	745	4,380	22	4,380							35	2,190	83	2,190	13	2,190	15	6,570
Skeleton Bone							0	4,380							2,145	20,440	1052	20440					0	2,190			0	4,380
Soldier Pass							0	2,190	0	2,190											7	2,190	0	2,190			6	2,190
Thirteen Mile Rock																												
Towel																												
Upper Loop					0	2,190	984	2,190	10	2190	49	4,380	1	4,380							9	2,190	0	2,190	10	2,190		
VOC					0	2,190	0	2,190	6	2,190											77	2,190	0	2,190	3	2,190	5	2,190
Wickiup							0	4,380											1128	2920					0	2,190	0	4,380
Windmill			65	4,380			984	4380	0	2,190	396	4,380	1	4,380	2,145	20,440	1052	20440			6	2,190	83	2,190				

Data Source: Red Rock Ranger District Actual Use Records

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006

Actual Annual Use and Annual Allocations for the Red Rock Ranger District's Recreation Special Use Program Recreation Use Units (RUU's) (cont.)

	TEMPORARY										
Recreation Use Unit (RUU)	STROLLEY (Actual Use)	STROLLEY (Annual Allocation)	SUNCA (Actual Use)	SUNCA (Annual Allocation)	HUMMER (Actual Use)	HUMMER (Annual Allocation)	VSCT (Actual Use)	VSCT (Annual Allocation)	Total Actual Use	Total Annual Allocation	% Allocation Used
Apache Maid									487	36,870	1%
Beaver Creek			2	4,380					1,694	60,100	3%
Beaverhead			0	4,380					1	19,710	0%
Broken Arrow									15,445	23,360	66%
Cathedral									1,731	45,359	4%
Cedar Flat			0	4,380					0	8,960	0%
Dry Creek			2	4,380	34	4,380			5,069	77,360	7%
Fossil Creek Road									10	13,340	0%
Kachina									25,884	18,320	141%
Lower Schnebly			122	4,380	714	4,380	17	4,380	12,337	78,821	16%
Middle Verde									0	4,380	0%
Montezuma									322	200	161%
Mud Tanks									10	4,380	0%
Oak Creek Canyon									365	56,146	1%
Red Cliffs			1	4,380	919	4,380			12,997	141,668	9%
Savannah House Mtn									771	15,330	5%
Schnebly Rim			122	4,380	639	4,380	17	4,380	11,658	68,904	17%
Sedona	29	2,190	122	4,380	714	4,380	17	4,380	14,773	142,838	10%
Skeleton Bone			0	4,380	424	4,380			3,623	61,494	6%
Soldier Pass									3,029	21,810	14%
Thirteen Mile Rock									0	0	0%
Towel									0	200	0%
Upper Loop									21,097	51,436	41%
VOC									791	27,495	3%
Wickiup			2	4,380					1,141	23,230	5%
Windmill			1	4,380	919	4,380			14,768	156,787	9%

Data Source: Red Rock Ranger District Actual Use Records

Note: Actual Use figures derived from the average of the 2 highest years of actual use between 2002 - 2006

Pink Jeep Tours, Inc.
Tour Allocations

Tour Name	Allocation	AUTHORIZED ANNUAL LIMIT (VEHICLES)		
		Annual Limit	Projected Annual Limit	Combined Allocation Annual Limit
Broken Arrow	10 veh every 2 hours - 5 veh per hour departing No Annual Limit	N/A	5 veh / hr x 8 hr day x 365 days/yr = 14600	
Broken Arrow - Scenic Rim Combo	Subject to Broken Arrow and Scenic Rim Allocations			
Schnebly Scenic Rim	15 VAOT - Annual limits not to exceed 3000 vehs	3,000		3,600
Scenic Sunset Experience	15 VAOT - Annual limits not to exceed 200 vehs (3 at saddle at one time)	200	Allocation for FR153, FR153A combined and reported as Scenic Rim Tour	
Sedona Safari	15 VAOT - Annual limits not to exceed 400 vehs (Overnight Camping & Cookouts)	400	Allocation for FR153, FR153A combined and reported as Scenic Rim Tour	
Canyon West	15 VAOT - Annual limits not to exceed 2000 vehs	2,000		2,500
Loy Canyon - Sycamore Pass	15 VAOT - Annual limits not to exceed 200 vehs	200	Allocation for FR152C combined and reported as PJT Canyon West	
Scenic West Tour	15 VAOT - Annual limits not to exceed 300 vehs	300	Allocation for FR152, 9862, 9908, 9910 combined and reported as PJT Canyon West. The remaining Roads are non-USFS jurisdiction Roads.	
Sugarloaf Expedition	2 VAOT - Annual limits not to exceed 600 vehs	600		
Red Rock Range Tour	15 VAOT - Annual limits not to exceed 800 vehs	800		
Touch the Earth	3 VAOT - Annual limits not to exceed 800 vehs (3 VAOT at Red Rock Crossing and 1 veh per day at Bell Rock)	800		
Oak Creek Canyon On Road Tour	15 VAOT - No Annual Limit -- No Stopping at heavily used National Forest Sites such as Slide Rock, Midgley Bridge, Campgrounds, Oak Creek Vista, Grasshopper Point, Call of the Canyon, and picnic areas.	NA	15 veh / hr x 8 hr day x 365 days/yr = 43,800	
	Note: Oak Creek Canyon On Road Tour only uses Hwy 89A, does not stop at Forest Service sites, and therefore does not need a FS Authorization.			

Pink Jeep Tours, Inc.
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Broken Arrow	Jeep 4x4	9,720	13,986	**14,988**	**15,834**	14,063	**15,411**	14,600	106%
Schnebly Scenic Rim	Jeep Scenic 4x4	1,030	1,253	2,324	**4,601**	**4,605**	**4,603**	3,600	128%
Sugarloaf Expedition		0	0	0	**0**	**0**	**0**	600	0%
Sedona Safari	Jeep Scenic	0	0	0	**0**	**0**	**0**	400	0%
Loy Canyon / Syc Pass		0	0	0	**0**	**0**	**0**	200	0%
Red Rock Range		0	0	0	**0**	**0**	**0**	800	0%
Touch the Earth		0	0	0	**0**	**0**	**0**	800	0%
	TOTALS:	**10,750**	**15,239**	**17,312**	**20,435**	**18,668**	**20,014**		

NOTES:

Broken Arrow - Scenic Rim Combo	Jeep Scenic 4x4	0	0	1,277	2,135	2,298	Actual Use Numbers for Combo Tour applied towards Broken Arrow and Scenic Rim		
Schnebly Scenic Rim FR153, 153A (No Closure 4/2 - 12/14)	Jeep Scenic 4x4	676	999	1,891	**3,686**	**3,644**	**3,665**		
Schnebly Scenic Rim FR153 up to rim only (Woods Canyon Closure 12/15 - 4/1)	Jeep Scenic 4x4	354	254	433	**915**	**961**	**938**		
Canyon West	Jeep Scenic 4x4	1,118	713	477	1,339	1,442	PJT reported combined actual use for PJT, AE, SAI Canyon West Tours between 4/2005 to 12/2005. To simplify this summay, the actual Use Numbers for PJT Canyon West were combined and displayed for AE Canyon West Tour.		

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Camping (Overnight)	0	0	0%
Jeep 4x4	15,411	14,600	106%
Jeep Scenic 4x4	4,603	4,200	110%
Jeep Scenic	0	2,200	0%

Camping authorized for Sedona Safari -- Allocation combined with Scenic Rim Tour
Note: Overnight Camping Use needs to be reviewed and
brought into compliance with Amendment 12

Pink Jeep Tours, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Jeep Tour 4x4		Jeep Tour - Scenic with 4x4				Jeep Tour - Scenic										
Road / Trail Number / Site Name	**4x4 Rd**	Broken Arrow (Actual Use)	Broken Arrow (Allocation)	Schnebly Hill Scenic Rim (Actual Use)	Schnebly Hill Scenic Rim (Allocation)	Sugarloaf Expedition (Actual Use)	Sugarloaf Expedition (Allocation)	Sedona Safari (Actual Use)	Sedona Safari (Allocation)	Loy Canyon / Syc Pass (Actual Use)	Loy Canyon / Syc Pass (Allocation)	Red Rock Range (Actual Use)	Red Rock Range (Allocation)	Touch the Earth (Actual Use)	Touch the Earth (Allocation)	**Actual Use Summary for each Road**	**Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
Airport Saddle Trail 126				4,603	3,600							0	800	0	800	**4,603**	**5,200**	**89%**
00089B								0	400							**0**	**400**	**0%**
00152														0	800	**0**	**800**	**0%**
00152C						0	600					0	800			**0**	**1,400**	**0%**
00153				4,603	3,600											**4,603**	**3,600**	**128%**
00153A (w/ closure)	**X**			3,655	3,600											**3,655**	**3,600**	**102%**
00179F	**X**	15,411	14,600													**15,411**	**14,600**	**106%**
258										0	200					**0**	**200**	**0%**
00258A										0	200					**0**	**200**	**0%**
00525						0	600			0	200	0	800			**0**	**1,600**	**0%**
00525A	**X**					0	600									**0**	**600**	**0%**
00525C						0	600			0	200					**0**	**800**	**0%**
00761						0	600			0	200					**0**	**800**	**0%**
00761A						0	600									**0**	**600**	**0%**
00761B	**X**					0	600									**0**	**600**	**0%**
00795										0	200					**0**	**200**	**0%**
09862												0	800	0	800	**0**	**1,600**	**0%**
09869																**0**	**0**	**0%**
09908														0	800	**0**	**800**	**0%**
09910																**0**	**0**	**0%**
09917	**X**															**0**	**0**	**0%**

Pink Jeep Tours, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Jeep 4x4	Jeep 4x4	Jeep Scenic with 4x4 Component				Jeep Scenic										
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Broken Arrow (Actual Use)	Broken Arrow (Allocation)	Schnebly Hill Scenic Rim (Actual Use)	Schnebly Hill Scenic Rim (Allocation)	Sugarloaf Expedition (Actual Use)	Sugarloaf Expedition (Allocation)	Sedona Safari (Actual Use)	Sedona Safari (Allocation)	Loy Canyon / Syc Pass (Actual Use)	Loy Canyon / Syc Pass (Allocation)	Red Rock Range (Actual Use)	Red Rock Range (Allocation)	Touch the Earth (Actual Use)	Touch the Earth (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation for each RUU**
Broken Arrow	00179F	**X**	15411	14600													**15411**	**14600**	**106%**
Dry Creek	00152														0	800	**0**	**800**	**0%**
	09908																		
	09910																		
	09917	**X**																	
Kachina	00089B								0	400							**0**	**400**	**0%**
Lower Schnebly	00153				4603	3600											**4603**	**3600**	**128%**
Red Cliffs	00761A						0	600									**0**	**1600**	**0%**
	00152C										0	200	0	800					
	00525																		
	00525C																		
	00795																		
Schnebly Rim	00153				3665	3600											**3665**	**3600**	**102%**
	00153A	**X**																	
Sedona	00153				4603	3600											**4603**	**5200**	**89%**
	Airport Saddle Trail 126												0	800	0	800			
	09869																		
Skeleton Bone	00258										0	200					**0**	**800**	**0%**
	00258A																		
	00761						0	600											
	00761A																		
Upper Loop	09862												0	800	0	800	**0**	**1600**	**0%**
Windmill	00525A	**X**					0	600									**0**	**1600**	**0%**
	00152C										0	200	0	800					
	00525																		
	00525C																		
	00761																		
	00761A																		
	00761B	**X**																	

Pink Jeep Tours, Inc. dba Ancient Expeditions
Tour Allocations

Tour Name	Allocation	AUTHORIZED ANNUAL LIMIT (VEHICLES)		
		Annual Limit	Projected Annual Limit	Combined Allocation Annual Limit
Ancient Ruins (Honanki Ruin)	4 vehicles at one time at the Ruin site - No maximum vehicles per year	N/A	4 vaot x 8 hr day x 365 days/yr = 11680	
Rock Art (Red Tank Draw Petroglyph and Sacred Mountain)	300 veh per year, 1 veh visit per day (Red Tank Draw / Sacred Mountain = 1 veh visit per day, up to 7 ppl per veh, up to 25 veh per month -- total 2100 total service days per year)	300		
FR 119 to access Montezuma's Well National Monument	1 veh visit per day, up to 7 ppl per veh, up to 25 veh per month -- total 2100 total service days per year	300		
Scenic Rim	454 veh annually - 12 vaot	454		1,019
Sacred Places	565 veh annually - Bell Rock 1 veh per day	565	Allocation for FR153 and Bell Rock combined and reported as Scenic Rim Tour	
Canyon West	Subject to AE Red Rock Range, AE Peak Experience, PJT Canyon West (Dry Creek/Sterling Canyon), PJT Loy Canyon/Sycamore Pass, PJT Scenic West, and SAI Red Rock Scenic West allocations -- Listed Below -- All of these tours were combined to be one Canyon West Tour			4,196
Red Rock Range	200 veh annually - 8 veh at one time	200	After June 2002, Red Rock Range became part of the Canyon West tour due to redundancies of tour routes. To simplify this summary, these use numbers are all combined to AE Canyon West	
Peak Experience	500 veh annually - 12 veh at one time	500	Peak Experience was renamed Canyon West and continued as a tour using both AE Red Rock Range and AE Peak Experience use limitations.To simplify this summary, these use numbers are all listed as AE Canyon West	

Pink Jeep Tours, Inc. dba Ancient Expeditions
Tour Allocations (cont.)

Tour Name	Allocation	AUTHORIZED ANNUAL LIMIT (VEHICLES)		
		Annual Limit	Projected Annual Limit	Combined Allocation Annual Limit
Pink Jeep Tours, Inc Tours combined and reported as PJT dba Ancient Expeditions				
Canyon West (Dry Creek/Sterling Canyon)	15 VAOT - Annual limits not to exceed 2000 vehs	2,000		2,500
Loy Canyon - Sycamore Pass	15 VAOT - Annual limits not to exceed 200 vehs	200	Allocation for FR152C combined and reported as PJT Canyon West	
Scenic West Tour	15 VAOT - Annual limits not to exceed 300 vehs	300	Allocation for FR152, 9862, 9908, 9910 combined and reported as PJT Canyon West	
PJT reported combined actual use for PJT, AE, SAI Canyon West Tours between 4/2005 to 12/2005. To simplify this summay, the actual Use Numbers for PJT Canyon West were combined and displayed for AE Canyon West Tour.				

PJT dba Sedona Adventures, Inc Tours combined and reported as PJT dba Ancient Expeditions			
Red Rock Scenic West	FR152 (Vultee Arch Rd) = 996 veh annually - 12 VAOT FR152C (Boynton Pass Rd) = No Annual Limit - 12 VAOT	996	FR152 from Scenic West tour on Sedona Adventures permit was combined with Ancient Expeditions to create one Canyon West tour. Use limitations were combined and summarized as Ancient Expeditions - Canyon West Tour.
Diamondback Gulch	12 Veh At One Time - No Maximum Veh per year	N/A	Ancient Expeditions combines the Sedona Adventures authorized DB Gulch Tour with Ancient Expeditions Ancient Ruins Tour. To simplify this summary, the actual use from the Ancient Ruins - DB Gulch Combo is split and summarized as use on Ancient Expeditions Ancient Ruins Tour and Sedona Adventures DB Gulch Tour.

Pink Jeep Tours, Inc. dba Ancient Expeditions
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Ancient Ruins (Honanki Ruin)	Heritage	3,353	3,607	**3,840**	**3,940**	3,224	**3,890**	11,680	33%
Rock Art (Red Tank Draw Petroglyph, Sacred Mtn)		**21**	**22**	15	19	10	**22**	300	7%
FR119 to Montezuma's Well National Monument		0	0	0	0	0	0	300	0%
Scenic Rim	Jeep Scenic 4x4	344	565	**662**	**1,000**	623	**831**	1019	82%
Sacred Places	Jeep Scenic	**0**	0	0	0	**0**	**0**	565	0%
Canyon West		**2,442**	2,093	1,682	1,379	**2,192**	**2,317**	4,196	55%
	TOTALS:	**6,160**	**6,287**	**6,199**	**6,338**	**6,049**	**7,060**	18,060	

NOTES:

Ancient Ruins - Diamondback Gulch Combo	Heritage - Jeep Scenic 4x4	824	767	751	824	972	Actual Use Numbers for Combo Tour applied towards Ancient Expeditions - Ancient Ruins and Sedona Adventures - Diamondback Gulch		
Scenic Rim FR153, 153A (No Closure 4/2 - 12/14)	Jeep Scenic 4x4	205	398	414	**737**	**476**	**607**		
Scenic Rim FR153 up to rim (Woods Canyon Closure 12/15 - 4/1)	Jeep Scenic 4x4	139	167	**248**	**263**	147	**256**		

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Heritage	3,912	12,280	32%
Jeep Scenic 4x4	831	1,019	82%
Jeep Scenic	2,317	4,761	49%

Pink Jeep Tours, Inc. dba Ancient Expeditions
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Heritage						Jeep Tour Scenic - 4x4		Jeep Tour Scenic						
Road / Trail Number / Site Name	**4x4 Rd**	Ancient Ruins (Honanki Ruin) (Actual Use)	Ancient Ruins (Honanki Ruin) (Allocation)	Rock Art (Red Tank Draw / Sacred Mountain) (Actual Use)	Rock Art (Red Tank Draw / Sacred Mountain) (Allocation)	FR 119 to Montezuma's Well (Actual Use)	FR 119 to Montezuma's Well (Allocation)	Scenic Rim (Actual Use)	Scenic Rim (Allocation)	Sacred Places (Actual Use)	Sacred Places (Allocation)	Canyon West (Actual Use)	Canyon West (Allocation)	**Actual Use Summary for each Road**	**Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
Airport Saddle Trail 126										0	565	2,317	4,196	2,317	4,761	49%
Bell Rock								831	1019					831	1,019	82%
Red Tank Draw Petroglyph				22	300									22	300	7%
00119						0	300							0	300	0%
00152										0	565	2,317	4,196	2,317	4,761	49%
00152C		3,890	11,680							0	565	2,317	4,196	6,207	16,441	38%
00153								831	1,019					831	1,019	82%
00153A	**X**							607	1,019					607	1,019	60%
00525		3,890	11,680							0	565	2,317	4,196	6,207	16,441	38%
00525D		3,890	11,680											3,890	11,680	33%
00618				22	300									22	300	7%
00645A				22	300									22	300	7%
00689				22	300									22	300	7%
09201A				22	300									22	300	7%
09206M				22	300									22	300	7%
09567 (Taylor Tank)		3,890	11,680									2,317	4,196	6,207	15,876	39%
09862 (RR Loop Rd Pullout)												2,317	4,196	2,317	4,196	55%
09908												2,317	4,196	2,317	4,196	55%
09910												2,317	4,196	2,317	4,196	55%
09917												2,317	4,196	2,317	4,196	55%

Pink Jeep Tours, Inc. dba Ancient Expeditions
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Heritage						Jeep Tour Scenic 4x4		Jeep Tour Scenic						
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Ancient Ruins (Honanki Ruin) (Actual Use)	Ancient Ruins (Honanki Ruin) (Allocation)	Rock Art (Red Tank Draw / Sacred Mountain) (Actual Use)	Rock Art (Red Tank Draw / Sacred Mountain) (Allocation)	FR 119 to Montezuma's Well (Actual Use)	FR 119 to Montezuma's Well (Allocation)	Scenic Rim (Actual Use)	Scenic Rim (Allocation)	Sacred Places (Actual Use)	Sacred Places (Allocation)	Canyon West (Actual Use)	Canyon West (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Apache Maid	00689				22	300									22	300	7%
Beaver Creek	00119						0	300							22	600	4%
	Red Tank Draw Petroglyph				22	300											
	00618																
	00645A																
	00689																
	09201A																
	09206M																
Cathedral	Bell Rock								831	1019					831	1,019	82%
Dry Creek	00152										0	565	2,317	4,196	2,317	4,761	49%
	09908																
	09910																
	09917																
Lower Schnebly	00153								831	1,019					831	1,019	82%
Red Cliffs	09567 (Taylor Tank)		3,890	11,680									1,344	1,344	5,234	13,589	39%
	00152C										0	565					
	00525																
	00525D																
Schnebly Rim	00153								831	1,019					1,438	1,019	141%
	00153A	**X**							607								
Sedona	00153								831	1,019					2,317	4,761	49%
	09862												2,317	4,196			
	Airport Saddle/Mesa										0	565					
Upper Loop	09862												2,317	4,196	2,317	4,196	55%
Wickiup	00119						0	300							0	300	0%
Windmill	00152C		3,890	11,680							0	565	1,344	1,344	5,234	13,589	39%
	00525																
	00525D																

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Tour Allocations

		AUTHORIZED ANNUAL LIMIT (VEHICLES)		
Tour Name	**Allocation**	**Annual Limit**	**Projected Annual Limit**	**Combined Allocation Annual Limit**
Diamondback Gulch	12 VAOT - No Maximum Veh per year	N/A	12 vaot x 8 hr day x 365 days/yr = 35040	
Famous Mogollon Rim (Scenic Rim)	12 VAOT - 2,274 Veh per year	2,274		
Red Rock Scenic West (Canyon West)	FR152 (Vultee Arch Rd) = 996 veh annually - 12 VAOT FR152C (Boynton Pass Rd) = No Annual Limit - 12 VAOT	996	Red Rock Scenic West tour on Sedona Adventures permit was combined with Ancient Expeditions to create one Canyon West tour. Use limitations were combined and summarized as Ancient Expeditions - Canyon West Tour.	
Vortex Adventure	12 VAOT - No Maximum Veh per year *As of Jan 7, 1999 Currently not operating this tour			
Oak Creek Canyon to Overlook Vista	12 VAOT - No Maximum Veh per year	N/A	12 vaot x 8 hr day x 365 days/yr x = 35040	

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Tour Allocations (Cont.)

Non-Wilderness - Instructional Day Hikes	Allocation	Projected Authorized Annual Limit (PARTIES)
Bear Wallow (FR 9941)	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Bear Wallow (FR 9940) to Cowpies	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Schnebly Hill Trail 158	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Cathedral Rock (Back O' Beyond Rd to Parking Lot)	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Doe Mountain Trail 60	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Van Deren Cabin - Earl's Tank via FR 9917	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
FR 9908 via FR 152	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
FR 9910 via FR 152	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Deadman's Pass Trail 110	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
FR 9587 / 9587A via FR152C	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
FR 9584 via FR 152C - West side of Doe Mtn	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Robinson Tank & Stock Tank via FR 152E, 9600, 9600A	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Chavez Ranch Rd FR 788	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr
Airport Saddle via Airport Rd (FR660)	4 groups / day -- 15 People / Group with Guide	4 groups / day x 365 days / yr = 1,460 groups or parties / yr

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Tour Allocations (cont.)

Wilderness - Instructional Day Hikes	Allocation	Projected Authorized Annual Limit (PARTIES)
Brin's Mesa Trail 119	7 groups / week - 2 groups / day 12 People / Group with Guide	7 groups / week x 52 weeks / yr = 364 groups or parties / yr
Devil's Bridge Trail 120	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Vultee Arch Trail 22 (formerly Sterling Canyon Trail 22)	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Sterling Pass Trail 46	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Dry Creek Trail 52	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Bear Sign Trail 59	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Secret Canyon Trail 121	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
HS Canyon Trail 50	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Long Canyon Trail 122	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Loy Canyon Trail 5	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr
Munds Mountain Trail 77	24 groups / quarter - 1 groups / day 12 People / Group with Guide	24 groups / quarter x 4 quarters / yr = 96 groups or parties / yr

Note: This Assessment is not analyzing capacity within Wilderness Areas.
This information is to depict the overall authorization for this company.

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Tour Allocations (cont.)

Non-Wilderness - Overnight Camping	Allocation	Projected Authorized Annual Limit (PARTIES)
Sites 1, 2, 4, 6, 7, 8, 9, via FR152	5 nights / group - 10 groups / yr at each site 15 People / Site with Guide	10 groups / year at each site x 7 sites = 70 groups or parties of 15 / yr
Site 12 via FR152D	5 nights / group - 10 groups / yr at each site 12 People / Site with Guide	10 groups / year at each site x 1 site = 10 groups or parties of 12 / yr
Site 13 via FR9587 & FR9587A	5 nights / group - 10 groups / yr at each site 12 People / Site with Guide	10 groups / year at each site x 1 site = 10 groups or parties of 12 / yr
Site 14 via FR152E	5 nights / group - 10 groups / yr at each site 12 People / Site with Guide	10 groups / year at each site x 1 site = 10 groups or parties of 12 / yr
Site 15 via FR9600	5 nights / group - 10 groups / yr at each site 12 People / Site with Guide	10 groups / year at each site x 1 site = 10 groups or parties of 12 / yr

Wilderness - Overnight Camping	Allocation	Projected Authorized Annual Limit (PARTIES)
Vultee Arch Trail 22 via FR 152	3 nights / group / month 12 People / Group with Guide for each Trail	12 People per group (One Party) x One Trip per month x 12 months per yr = 12 groups or parties of 12 per yr for each Trail
Dry Creek Trail 52 via FR 152		
Bear Sign Trail 59 via FR 152		
Secret Canyon Trail 121 via FR 152		
H.S. Canyon Trail 50 via FR 152		
Long Canyon Trail 122 via County Jurisdiction roads		
Loy Canyon Trail 5 via FR 152C, FR 525		
Munds Mountain Trail 77 via FR 153, 153A, 9494F		

Note: Overnight Camping Use needs to be reviewed and brought into compliance with Amendment 12

Note: This Assessment is not analyzing capacity within Wilderness Areas.
This information is to depict the overall authorization for this company.

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Diamondback Gulch	Jeep Scenic 4x4	**3,029**	2,941	2,479	**3,022**	4,135	**3,026**	35,040	9%
Famous Mogollon Rim (Scenic Rim)	Jeep Scenic	1,306	**1,377**	**1,818**	1,354	1,296	**1,598**	2,274	70%
Oak Creek Canyon to Overlook Vista		0	**0**	**0**	0	0	**0**	35,040	0%
	TOTALS:	**4,335**	**4,318**	**4,297**	**4,376**	**5,431**	**4,623**	72,354	

NOTES:

Ancient Ruins - Diamondback Gulch Combo	Heritage - Jeep Scenic 4x4	824	767	751	824	972	Actual Use Numbers for Combo Tour applied towards Ancient Expeditions - Ancient Ruins and Sedona Adventures - Diamondback Gulch

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Jeep Scenic 4x4	3,026	35,040	9%
Jeep Scenic	1,598	37,314	4%

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Annual Use 2002 - 2006 (cont.)

Walk the Trails Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Bear Wallow (FR 9941) via FR153	Hiking (Day-Use)	0	0	0	0	0	**0**	1,460	0%
Bear Wallow (FR 9940) to Cowpies via FR153		0	0	0	0	1	**1**	1,460	0%
Schnebly Hill Trail 158 via FR153		0	0	0	0	0	**0**	1,460	0%
Cathedral Rock (Back O' Beyond Rd to Parking Lot)		5	4	**8**	**7**	2	**8**	1,460	1%
Doe Mountain Trail 60		13	7	12	**17**	**32**	**25**	1,460	2%
Van Deren Cabin - Earl's Tank via FR 152 & 9917		0	0	0	0	0	**0**	1,460	0%
FR 9908 via FR 152		0	0	0	0	0	**0**	1,460	0%
FR 9910 via FR 152		0	0	0	0	0	**0**	1,460	0%
Deadman's Pass Trail 110		1	**4**	3	3	**6**	**5**	1,460	0%
FR 9587 / 9587A via FR152C		0	0	0	0	0	**0**	1,460	0%
FR 9584 via FR 152C - West side of Doe Mtn		0	0	0	0	0	**0**	1,460	0%
Robinson Tank & Stock Tank via FR 152E, 9600, 9600A		0	0	0	0	0	**0**	1,460	0%
Chavez Ranch Rd FR 788		0	0	0	0	0	**0**	1,460	0%
Airport Saddle via Airport Rd (FR660)		0	0	0	0	0	**0**	1,460	0%
	TOTALS:	**19**	**15**	**23**	**27**	**41**	**39**	20,440	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Hiking (Day-Use)	39	20,440	0.2%

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Annual Use 2002 - 2006 (cont.)

Walk the Trails Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Brin's Mesa Trail 119 via FR633	Hiking (Wilderness Day-Use that originates on non-wilderness Roads)	9	7	**10**	**21**	9	**16**	364	4%
Devil's Bridge Trail 120 via FR152		18	17	25	**35**	**38**	**37**	96	39%
Vultee Arch Trail 22 via FR 152		0	0	0	0	0	**0**	96	0%
Sterling Pass Trail 46		0	0	0	0	0	**0**	96	0%
Dry Creek Trail 52 via FR 152		0	0	1	**1**	**5**	**3**	96	3%
Bear Sign Trail 59 via FR 152		0	0	0	0	0	**0**	96	0%
Secret Canyon Trail 121 via FR 152		**0**	**1**	0	0	0	**1**	96	1%
H.S. Canyon Trail 50 via FR 152			0	0	0	0	**0**	96	0%
Long Canyon Trail 122 via County Jurisdiction roads		0	1	1	**1**	**6**	**4**	96	4%
Loy Canyon Trail 5 via FR 152C, FR 525		0	0	0	0	0	**0**	96	0%
Munds Mountain Trail 77 via FR 153, 153A, 9494F		0	0	0	0	0	**0**	96	0%
	TOTALS:	**27**	**26**	**37**	**58**	**58**	**61**	1324	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Hiking (Wilderness Day-Use)	61	1,324	5%

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Annual Use 2002 - 2006 (cont.)

Overnight Camping Trips	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Sites 1, 2, 4, 6, 7, 8, 9, via FR152	Overnight Camping (Non-Wilderness)	0	0	0	0	0	**0**	70	0%
Site 12 via FR152D		0	0	0	0	0	**0**	10	0%
Site 13 via FR9587 & FR9587A		0	0	0	0	0	**0**	10	0%
Site 14 via FR152E		0	0	0	0	0	**0**	10	0%
Site 15 via FR9600		0	0	0	0	0	**0**	10	0%
Vultee Arch Trail 22 via FR 152	Overnight Camping (Wilderness that originates on non-wilderness Roads)	0	0	0	0	0	**0**	12	0%
Dry Creek Trail 52 via FR 152		0	0	0	0	0	**0**	12	0%
Bear Sign Trail 59 via FR 152		0	0	0	0	0	**0**	12	0%
Secret Canyon Trail 121 via FR 152		0	0	0	0	0	**0**	12	0%
H.S. Canyon Trail 50 via FR 152		0	0	0	0	0	**0**	12	0%
Long Canyon Trail 122 via County Jurisdiction roads		0	0	0	0	0	**0**	12	0%
Loy Canyon Trail 5 via FR 152C, FR 525		0	0	0	0	0	**0**	12	0%
Munds Mountain Trail 77 via FR 153, 153A, 9494F		0	0	0	0	0	**0**	12	0%
	TOTALS:	**0**	**0**	**0**	**0**	**0**	**0**	206	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Overnight Camping	0	206	0%

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Jeep Tour Scenic 4x4		Jeep Tour Scenic				Hiking (Day-Use)		Overnight Camping				
Road / Trail Number / Site Name	**4x4 Rd**	Diamondback Gulch (Actual Use)	Diamondback Gulch (Allocation)	Famous Mogollon Rim (Actual Use)	Famous Mogollon Rim (Allocation)	Oak Creek Canyon to Overlook Vista (Actual Use)	Oak Creek Canyon to Overlook Vista (Allocation)	Walk the Trails Tour (Actual Use)	Walk the Trails Tour (Allocation)	Camping (Actual Use)	Camping (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
Oak Creek Canyon Vista						0	35,040					**0**	**35,040**	**0%**
Sites 1, 2, 4, 6, 7, 8, 9, via FR152										0	70	**0**	**70**	**0%**
Site 12 via FR152D										0	10	**0**	**10**	**0%**
Site 13 via FR9587 & FR9587A										0	10	**0**	**10**	**0%**
Site 14 via FR152E										0	10	**0**	**10**	**0%**
Site 15 via FR9600										0	10	**0**	**10**	**0%**
00152								41	4,764	0	130	**41**	**4,894**	**1%**
00152A	**X**	3,026	35,040									**3,026**	**35,040**	**9%**
00152C		3,026	35,040					0	2,920	0	12	**3,026**	**37,972**	**8%**
00152E	**X**							0	1,460	0	10	**0**	**1,470**	**0%**
00153				1,598	2,274			1	4,380	0	12	**1,599**	**6,666**	**24%**
00153A	**X**									0	12	**0**	**12**	**0%**
00153E												**0**	**0**	**0%**
00525		3,026	35,040							0	12	**3,026**	**35,052**	**9%**
00525C												**0**	**0**	**0%**
00525D												**0**	**0**	**0%**
00633								16	364			**16**	**364**	**4%**
00788								0	1,460			**0**	**1,460**	**0%**
00795												**0**	**0**	**0%**
00801												**0**	**0**	**0%**
09494F										0	12	**0**	**12**	**0%**
09495F												**0**	**0**	**0%**
09496F												**0**	**0**	**0%**
09497F												**0**	**0**	**0%**
09498F												**0**	**0**	**0%**
09499F												**0**	**0**	**0%**
09499G												**0**	**0**	**0%**
09513	**X**	3,026	35,040									**3,026**	**35,040**	**9%**
09567 (Taylor Tank)												**0**	**0**	**0%**
09584								0	1460			**0**	**1,460**	**0%**
09587								0	1460	0	10	**0**	**1,470**	**0%**
09587A								0	1460	0	10	**0**	**1,470**	**0%**
09600	**X**							0	1460	0	10	**0**	**1,470**	**0%**
09600A								0	1460			**0**	**1,460**	**0%**
09908								0	1460			**0**	**1,460**	**0%**
09910								0	1460			**0**	**1,460**	**0%**
09917	**X**							0	1460			**0**	**1,460**	**0%**
09940 to Cowpies								1	1460			**1**	**1,460**	**0%**

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Use & Annual Allocation Summary -- Tour Trails (cont.)

		Jeep Tour Scenic 4x4		Jeep Tour Scenic				Hiking (Day-Use)		Overnight Camping				
Trail Number	**4x4 Rd**	Diamondback Gulch (Actual Use)	Diamondback Gulch (Allocation)	Famous Mogollon Rim (Actual Use)	Famous Mogollon Rim (Allocation)	Oak Creek Canyon to Overlook Vista (Actual Use)	Oak Creek Canyon to Overlook Vista (Allocation)	Walk the Trails Tour (Actual Use)	Walk the Trails Tour (Allocation)	Camping (Actual Use)	Camping (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
Airport Saddle Trail 126								0	1460			**0**	**1460**	**0%**
Brins Mesa Trail 119								16	364			**16**	**364**	**4%**
Cathedral Rock Trail 170								8	1460			**8**	**1460**	**1%**
Deadmans Pass Trail 110								5	1460			**5**	**1460**	**0%**
Devils Bridge Trail 120								37	96			**37**	**96**	**39%**
Doe Mountain Trail 60								25	1460			**25**	**1460**	**2%**
Dry Creek Trail 52								3	96			**3**	**96**	**3%**
009941 (portion of Munds Wagon Trail 78)								0	1460			**0**	**1460**	**0%**
Schnebly Hill Trail 158								0	1460			**0**	**1460**	**0%**
Long Canyon Trail 122								4	96			**4**	**96**	**4%**
Loy Canyon Trail 5								0	96			**0**	**96**	**0%**
Secret Canyon Trail 121								1	96			**1**	**96**	**1%**
Sterling Pass Trail 46								0	96			**0**	**96**	**0%**
Vultee Arch Trail 22								0	96			**0**	**96**	**0%**

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Jeep Tour Scenic 4x4		Jeep Tour Scenic				Hiking (Day-Use)		Overnight Camping				
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Diamondback Gulch (Actual Use)	Diamondback Gulch (Allocation)	Famous Mogollon Rim (Actual Use)	Famous Mogollon Rim (Allocation)	Oak Creek Canyon to Overlook Vista (Actual Use)	Oak Creek Canyon to Overlook Vista (Allocation)	Walk the Trails Tour (Actual Use)	Walk the Trails Tour (Allocation)	Camping (Actual Use)	Camping (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Cathedral	Cathedral Rock Trail 170								8	1460			8	1460	1%
Dry Creek	Sites 1, 2, 4, 6, 7, 8, 9, via FR152										0	70	66	6,836	1%
	Site 12 via FR152D										0	10			
	00152								0	1460					
	09908														
	00152								0	1460					
	09910														
	00152								0	1460					
	09917	X													
	00152										0	12			
	Bear Sign Trail 59														
	Brins Mesa Trail 119								16	364					
	Deadmans Pass Trail 110								5	1460					
	00152								37	96					
	Devils Bridge Trail 120														
	00152								3	96	0	12			
	Dry Creek Trail 52														
	00152										0	12			
	HS Canyon Trail 50														
	Long Canyon Trail 122								4	96	0	12			
	00152								0	96	0	12			
	Vultee Arch Trail 22														
	00152								1	96	0	12			
	Secret Canyon Trail 121														
Lower Schnebly	00153				1,598	2,274			1	4,380	0	12	1,599	6,666	24%
	09940 to Cowpies														
	009941 (portion of Munds Wagon Trail 78)								0						
	Schnebly Hill Trail 158								0						
Oak Creek Canyon	Oak Creek Canyon Vista						0	35040					0	35136	0%
	Sterling Pass Trail 46								0	96					

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Jeep Tour Scenic 4x4		Jeep Tour Scenic				Hiking (Day-Use)		Overnight Camping				
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Diamondback Gulch (Actual Use)	Diamondback Gulch (Allocation)	Famous Mogollon Rim (Actual Use)	Famous Mogollon Rim (Allocation)	Oak Creek Canyon to Overlook Vista (Actual Use)	Oak Creek Canyon to Overlook Vista (Allocation)	Walk the Trails Tour (Actual Use)	Walk the Trails Tour (Allocation)	Camping (Actual Use)	Camping (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Red Cliffs	Site 13 via FR9587 & FR9587A										0	10	3,056	42,478	7%
	Site 14 via FR152E										0	10			
	Site 15 via FR9600										0	10			
	00152C		3,026	35,040											
	00525														
	00525D														
	00795														
	09567 (Taylor Tank)														
	00152C								0	1,460					
	09584														
	00152C								0	1,460					
	09587														
	09587A														
	00152E	X							0	1,460					
	09600	X													
	09600A														
	Deadmans Pass Trail 110								5	1460					
	Doe Mountain Trail 60								25	1460					
	00152C								0	96	0	12			
	00525														
	Loy Canyon Trail 5														
Schnebly Rim	00153				1,598	2,274							1,598	3,842	42%
	00153A	X													
	00153E														
	00801														
	09495F														
	09496F														
	09497F														
	09498F														
	09499F														
	09499G														
	00153								0	96	0	12			
	00153A	X													
	09494F														
	Munds Mountain Trail 77														
	00153								0	1,460					
	Schnebly Hill Trail 158														

Pink Jeep Tours, Inc. dba Sedona Adventures, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Jeep Tour Scenic 4x4		Jeep Tour Scenic				Hiking (Day-Use)		Overnight Camping				
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Diamondback Gulch (Actual Use)	Diamondback Gulch (Allocation)	Famous Mogollon Rim (Actual Use)	Famous Mogollon Rim (Allocation)	Oak Creek Canyon to Overlook Vista (Actual Use)	Oak Creek Canyon to Overlook Vista (Allocation)	Walk the Trails Tour (Actual Use)	Walk the Trails Tour (Allocation)	Camping (Actual Use)	Camping (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Sedona	00153				1,598	2,274			1	4,380	0	12	1,615	8,490	19%
	Airport Saddle Trail 126								0	1460					
	00633								16	364					
	Brins Mesa Trail 119														
Upper Loop	00788								0	1,460			0	1,460	0%
Windmill	00152A	X	3,026	35,040									3,026	37,960	8%
	00152C								0	2,920					
	00525														
	09513	X													
	00525C														
	00525D														

Crossing Worlds Journeys
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)
Munds Mountain Trail 77 and Hot Loop Trail 40 and 40A	2 trps/wk; 12 ppl /trp (Overnight Camping in approved areas of Munds Mtn Trail & Hot Loop Trail)	2 trips / week x 52 weeks / yr = 104 veh/parties/yr
Cathedral Rock TR 170	4 trps/wk; 12 ppl/ trp	4 trips / week x 52 weeks / yr = 206 veh/parties/yr
FR 9586	4 trps/wk; 12 ppl/ trp	4 trips / week x 52 weeks / yr = 206 veh/parties/yr
Indian Point Trail FR9457R	2 trps/wk; 12 ppl /trp	2 trips / week x 52 weeks / yr = 104 veh/parties/yr

Tour Allocations -- Amended for Temporary Use from March 2005

		Projected Annual Authorized Limit	
Tour Name	**Allocation**	**VEHICLES - ROADS**	**PARTIES - TRAILS**
Bell Rock Pathway Trail 96	Restricted RUU Allocation Listed Below ***		2190
FR 618, 121, 9202L, 618G	No Allocation -- Not within a Restricted RUU (Allocation for this analysis will be based on Restricted RUU allocation)	4380	
In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).		12 veh / day x 365 days / yr = 4380 veh per yr	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC			

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Crossing Worlds Journeys
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Munds Mountain Trail 77 and Hot Loop Trail 40 / 40A	Camping	1	1	**2**	1	**4**	**3**	104	3%
Cathedral Rock TR 170	Metaphysical	59	61	**67**	**63**	61	**65**	206	32%
FR 9586		69	**73**	**69**	57	61	**71**	206	34%
Indian Point Trail FR9457R		35	**48**	40	**50**	39	**49**	104	47%
Bell Rock Pathway Trail 96		NA	NA	NA	**20**	**39**	**30**	2,190	1%
FR 618, 121, 9202L, 618G		NA	NA	NA	**8**	**12**	**10**	4,380	0%
	TOTALS:	**164**	**183**	**178**	**199**	**216**	**228**	7,190	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Overnight Camping	3	104	3%
Metaphysical	225	7,086	3%

Crossing Worlds Journeys
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Metaphysical														
Road / Trail Number / Site Name	**4x4 Rd**	Munds Mountain Trail 77 and Hot Loop Trail 40 / 40A (Actual Use)	Munds Mountain Trail 77 and Hot Loop Trail 40 / 40A (Allocation)	Cathedral Rock TR 170 (Actual Use)	Cathedral Rock TR 170 (Allocation)	FR 9586 (Actual Use)	FR 9586 (Allocation)	Indian Point Trail FR9457R (Actual Use)	Indian Point Trail FR9457R (Allocation)	Bell Rock Pathway Trail 96 (Actual Use)	Bell Rock Pathway Trail 96 (Allocation)	FR 618, 121, 9202L, 618G (Actual Use)	FR 618, 121, 9202L, 618G (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00121												10	4,380	**10**	**4,380**	**0%**
00153 (Schnebly Hill Rd)								49	104					**49**	**104**	**47%**
00618												10	4,380	**10**	**4,380**	**0%**
00618G												10	4,380	**10**	**4,380**	**0%**
09202L												10	4,380	**10**	**4,380**	**0%**
09501		3	104											**3**	**104**	**3%**
Bell Rock Pathway Trail 96										30	2190			**30**	**2,190**	**1%**
Cathedral Rock Trail 170				65	206									**65**	**206**	**32%**
Cockscomb Trail 167						71	206							**71**	**206**	**34%**
Hot Loop Trail 40 and 40A		3	104											**3**	**104**	**3%**
Indian Point Trail FR 9457R								49	104					**49**	**104**	**47%**
Woods Canyon Trail 93		3	104											**3**	**104**	**3%**

Crossing Worlds Journeys
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Metaphysical														
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Munds Mountain Trail 77 and Hot Loop Trail 40 / 40A (Actual Use)	Munds Mountain Trail 77 and Hot Loop Trail 40 / 40A (Allocation)	Cathedral Rock TR 170 (Actual Use)	Cathedral Rock TR 170 (Allocation)	FR 9586 (Actual Use)	FR 9586 (Allocation)	Indian Point Trail FR9457R (Actual Use)	Indian Point Trail FR9457R (Allocation)	Bell Rock Pathway Trail 96 (Actual Use)	Bell Rock Pathway Trail 96 (Allocation)	FR 618, 121, 9202L, 618G (Actual Use)	FR 618, 121, 9202L, 618G (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00121												10	4,380	**10**	**4,380**	**0%**
	00618																
	00618G																
	09202L																
Cathedral	Bell Rock Pathway Trail 96										30	2190			**95**	**2396**	**4%**
	Cathedral Rock Trail 170				65	206											
Lower Schnebly	00153 (Schnebly Hill Rd)								49	104					**49**	**104**	**47%**
Red Cliffs	Cockscomb Trail 167						71	206							**71**	**206**	**34%**
Schnebly Rim	00153 (Schnebly Hill Rd)								49	104					**52**	**208**	**25%**
	Indian Point Trail FR 9457R																
	Hot Loop Trail 40 and 40A		3	104													
Sedona	00153 (Schnebly Hill Rd)								49	104					**49**	**104**	**47%**
VOC	09501		3	104											**3**	**104**	**3%**
	Hot Loop Trail 40 and 40A																
	Woods Canyon Trail 93																

Crystal Light Center
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Doe Mountain Trail 60	10 trips per week, 2 trips per day, 14 people and 1 vehicle per trip	10 trips / week x 52 weeks / yr = 520 parties / yr

Tour Allocations -- Amended for Temporary Use from March 2005

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Airport Loop Trail 210	Restricted RUU Allocation Listed Below ***	2,190
Baldwin Trail 191		2,190
Bandit Trail 209		2,190
Bell Rock Pathway Trail 96		2,190
Cockscomb Trail 167		2,190
Girdner Trail 162		2,190
Herkenham Trail 202		2,190
HT Trail 197		2,190
Huckaby Trail 161		2,190
Jim Thompson Trail 124		2,190
Munds Wagon Trail 78		2,190
Old Post Trail 206		2,190
Ridge Trail 208		2,190
Teacup Trail 183		2,190
Templeton Trail 156		2,190
Thunder Mountain Trail 165		2,190
Red Rock Loop Road	No Permit Needed -- County Jurisdiction Road	

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Crystal Light Center
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Airport Loop Trail 210	Hiking (Day Use)	NA	NA	NA	0	0	**0**	2,190	0%
Baldwin Trail 191		NA	NA	NA	0	0	**0**	2,190	0%
Bandit Trail 209		NA	NA	NA	0	0	**0**	2,190	0%
Bell Rock Pathway Trail 96		NA	NA	NA	0	0	**0**	2,190	0%
Cockscomb Trail 167		NA	NA	NA	0	0	**0**	2,190	0%
Doe Mountain Trail 60		**2**	1	**2**	0	0	**2**	520	0%
Girdner Trail 162		NA	NA	NA	0	0	**0**	2,190	0%
Herkenham Trail 202		NA	NA	NA	0	0	**0**	2,190	0%
HT Trail 197		NA	NA	NA	0	0	**0**	2,190	0%
Huckaby Trail 161		NA	NA	NA	0	0	**0**	2,190	0%
Jim Thompson Trail 124		NA	NA	NA	0	0	**0**	2,190	0%
Munds Wagon Trail 78		NA	NA	NA	0	0	**0**	2,190	0%
Old Post Trail 206		NA	NA	NA	0	0	**0**	2,190	0%
Ridge Trail 208		NA	NA	NA	0	0	**0**	2,190	0%
Teacup Trail 183		NA	NA	NA	0	0	**0**	2,190	0%
Templeton Trail 156		NA	NA	NA	0	0	**0**	2,190	0%
Thunder Mountain Trail 165		NA	NA	NA	0	0	**0**	2,190	0%
	TOTALS:	**2**	**1**	**2**	**0**	**0**	**2**	35,560	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Hiking (Day-Use)	2	35,560	0%

Crystal Light Center
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Hiking (Day-Use)				
Road / Trail Number / Site Name	**4x4 Rd**	Trail Tours (Actual Use)	Trail Tours (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00153 (Schnebly Hill Rd)		0	4,380	**0**	**4,380**	**0%**
09904 to Teacup/Jordan Trail		0	2,190	**0**	**2,190**	**0%**
09934 (Huckaby / Munds Wagon Trailhead)		0	4,380	**0**	**4,380**	**0%**
Airport Loop Trail 210		0	2,190	**0**	**2,190**	**0%**
Baldwin Trail 191		0	2,190	**0**	**2,190**	**0%**
Bandit Trail 209		0	2,190	**0**	**2,190**	**0%**
Bell Rock Pathway Trail 96		0	2,190	**0**	**2,190**	**0%**
Cockscomb Trail 167		0	2,190	**0**	**2,190**	**0%**
Doe Mountain Trail 60		2	520	**2**	**520**	**0%**
Girdner Trail 162		0	2,190	**0**	**2,190**	**0%**
Herkenham Trail 202		0	2,190	**0**	**2,190**	**0%**
HT Trail 197		0	2,190	**0**	**2,190**	**0%**
Huckaby Trail 161		0	2,190	**0**	**2,190**	**0%**
Jim Thompson Trail 124		0	2190	**0**	**2,190**	**0%**
Munds Wagon Trail 78		0	2,190	**0**	**2,190**	**0%**
Old Post Trail 206		0	2,190	**0**	**2,190**	**0%**
Ridge Trail 208		0	2,190	**0**	**2,190**	**0%**
Teacup Trail 183		0	2,190	**0**	**2,190**	**0%**
Templeton Trail 156		0	2,190	**0**	**2,190**	**0%**
Thunder Mountain Trail 165		0	2190	**0**	**2,190**	**0%**

Crystal Light Center
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Hiking (Day-Use)				
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Trail Tours (Actual Use)	Trail Tours (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Cathedral	Baldwin Trail 191		0	2,190	**0**	**8,760**	**0%**
	Bell Rock Pathway Trail 96		0	2,190			
	HT Trail 197		0	2,190			
	Templeton Trail 156		0	2,190			
Lower Schnebly	Munds Wagon Trail 78		0	2,190	**0**	**2,190**	**0%**
Oak Creek Canyon	Huckaby Trail 161		0	2,190	**0**	**2,190**	**0%**
Red Cliffs	Cockscomb Trail 167		0	2,190	**2**	**2,710**	**0%**
	Doe Mountain Trail 60		2	520			
Sedona	00153 (Schnebly Hill Rd)		0	2,190	**0**	**21,900**	**0%**
	09934 (Huckaby / Munds Wagon Trailhead)		0				
	Huckaby Trail 161		0				
	00153 (Schnebly Hill Rd)		0	2,190			
	09934 (Huckaby / Munds Wagon Trailhead)		0				
	Munds Wagon Trail 78		0				
	Airport Loop Trail 210		0	2,190			
	Bandit Trail 209		0	2,190			
	Girdner Trail 162		0	2,190			
	Herkenham Trail 202		0	2,190			
	Jim Thompson Trail 124		0	2190			
	Ridge Trail 208		0	2,190			
	Teacup Trail 183		0	2,190			
	Thunder Mountain Trail 165		0	2190			
Soldier Pass	09904 to Teacup Trail		0	2,190	**0**	**2,190**	**0%**
	Teacup Trail 183						
Upper Loop	Airport Loop Trail 210		0	2,190	**0**	**10,950**	**0%**
	Bandit Trail 209		0	2,190			
	Herkenham Trail 202		0	2,190			
	Old Post Trail 206		0	2,190			
	Ridge Trail 208		0	2,190			
VOC	Baldwin Trail 191		0	2,190	**0**	**4,380**	**0%**
	Templeton Trail 156		0	2,190			
Windmill	Cockscomb Trail 167		0	2,190	**0**	**4,380**	**0%**
	Girdner Trail 162		0	2,190			

Free Soul Public Education
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)
Airport Mesa Vortex Area - lower mounds and turnout before top	10 ppl / 2 vehs - once per day	2 veh / day x 365 days / yr = 730 veh/parties/yr
Long Cyn Mesa - Rachel Lunts Property at mesa tip	20 ppl / 5 vehs - twice per week	10 veh / week x 52 weeks / yr = 520 veh/parties/yr
Merry-Go-Round - 4 miles up Schnebly Hill Rd	15 ppl / 3 vehs - once per day	3 veh / day x 365 days / yr = 1095 veh/parties/yr
Cathedral Rock TR 170 - Saddle of Cathedral Rock	10 ppl / 2 vehs - once per month	2 veh / month x 12 months / yr = 24 veh/parties/yr

Tour Allocations -- Amended for Temporary Use from March

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Bell Rock Pathway TR 96	Restricted RUU Allocation Listed Below ***	2,190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Free Soul Public Education
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Airport Mesa Vortex Area - lower mounds and turnout before top	Metaphysical	34	62	44	**92**	**80**	**86**	730	12%
Long Cyn Mesa - Rachel Lunts Property at mesa tip		2	0	0	0	0	**2**	520	0%
Merry-Go-Round - 4 miles up Schnebly Hill Rd		3	8	9	**12**	**12**	**12**	1,095	1%
Cathedral Rock TR 170 - Saddle of Cathedral Rock		6	6	6	**8**	**10**	**9**	24	38%
Bell Rock Pathway Trail 96		NA	NA	NA	0	0	**0**	2,190	0%
	TOTALS:	**45**	**76**	**59**	**112**	**102**	**109**	4,559	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Metaphysical	109	4,559	2%

Free Soul Public Education
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites and RUU's

		Metaphysical												
Road / Trail Number / Site Name	**4x4 Rd**	Airport Mesa Vortex Area - lower mounds and turnout before top (Actual Use)	Airport Mesa Vortex Area - lower mounds and turnout before top (Allocation)	Long Cyn Mesa - Rachel Lunts Property at mesa tip (Actual Use)	Long Cyn Mesa - Rachel Lunts Property at mesa tip (Allocateion)	Merry-Go-Round - 4 miles up Schnebly Hill Rd (Actual Use)	Merry-Go-Round - 4 miles up Schnebly Hill Rd (Allocation)	Cathedral Rock TR 170 - Saddle of Cathedral Rock (Actual Use)	Cathedral Rock TR 170 - Saddle of Cathedral Rock (Allocation)	Bell Rock Pathway Trail 96 (Actual Use)	Bell Rock Pathway Trail 96 (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00153 (Schnebly Hill Rd)						12	1095					**12**	**1095**	**1%**
09926 (Long Canyon Mesa)				2	520							**2**	**520**	**0%**
Airport Saddle Trail 126		86	730									**86**	**730**	**12%**
Bell Rock Pathway Trail 96										0	2190	**0**	**2190**	**0%**
Cathedral Rock Trail 170								9	24			**9**	**24**	**38%**

			Metaphysical												
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Airport Mesa Vortex Area - lower mounds and turnout before top (Actual Use)	Airport Mesa Vortex Area - lower mounds and turnout before top (Allocation)	Long Cyn Mesa - Rachel Lunts Property at mesa tip (Actual Use)	Long Cyn Mesa - Rachel Lunts Property at mesa tip (Allocateion)	Merry-Go-Round - 4 miles up Schnebly Hill Rd (Actual Use)	Merry-Go-Round - 4 miles up Schnebly Hill Rd (Allocation)	Cathedral Rock TR 170 - Saddle of Cathedral Rock (Actual Use)	Cathedral Rock TR 170 - Saddle of Cathedral Rock (Allocation)	Bell Rock Pathway Trail 96 (Actual Use)	Bell Rock Pathway Trail 96 (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Cathedral	Bell Rock Pathway Trail 96										0	2190	**9**	**2214**	**0%**
	Cathedral Rock Trail 170								9	24					
Dry Creek	09926 (Long Canyon Mesa)				2	520							**2**	**520**	**0%**
Lower Schnebly	00153 (Schnebly Hill Rd)						12	1095					**12**	**1095**	**1%**
Sedona	Airport Saddle Trail 126		86	730									**86**	**730**	**12%**

GANESH 108 dba Earth Wisdom Tours
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)	
Hikes Du Jour Tour 1 (Doe Mountain TR 60)	2 vehs per day, 5 vehs per week, 9 ppl per veh, 1170 ppl per year	5 veh / week x 52 weeks / yr = 260 veh/parties/yr	
Hikes Du Jour Tour 2 (Fay Cayon TR 53)	1 vehs per day, 3 vehs per week, 6 ppl per veh, 468 ppl per year	3 veh / week x 52 weeks / yr = 156 veh/parties/yr	
Hikes Du Jour Tour 3 (Long Canyon TR 122 to Deadmans Pass TR 110)	2 vehs per day, 5 vehs per week, 9 ppl per veh, 1170 ppl per year	5 veh / week x 52 weeks / yr = 260 veh/parties/yr	
Hikes Du Jour Tour 4 (Northern Bell Travelway)	2 vehs per day, 5 vehs per week, 9 ppl per veh, 1170 ppl per year	5 veh / week x 52 weeks / yr = 260 veh/parties/yr	
Hikes Du Jour Tour 5 (Little Horse TR 61)	2 vehs per day, 5 vehs per week, 9 ppl per veh, 1170 ppl per year	5 veh / week x 52 weeks / yr = 260 veh/parties/yr	
Cathedral Rock Area	1 vehs per day, 4 vehs per week,6 ppl per veh, 624 ppl per year	4 veh / week x 52 weeks / yr = 208 veh/parties/yr	
FR 788 to Crescent Moon Gate Turnaround	2 vehs per day, 7 vehs per week, 9 ppl per veh, 820 ppl per year	7 veh / week x 52 weeks / yr = 364 veh/parties/yr	
FR 9587	2 vehs per day, 7 vehs per week, 9 ppl per veh, 820 ppl per year	7 veh / week x 52 weeks / yr = 364 veh/parties/yr	
Easy Rider Cyn Tour 6 (Long Cyn Trail and FR788)	Long Canyon Trail - 2 vehs / day, 5 vehs / week; FR788 - 2 vehs / day, 7 vehs / wk Actual Use will be spit between Long Canyon Trail and FR788	Long Canyon Trail	5 veh / week x 52 weeks / yr = 260 veh/parties/yr
Hikes Du Jour Tour 9 (FR788 and Long Cyn Trail)		FR788	7 veh / week x 52 weeks / yr = 364 veh/parties/yr

GANESH 108 dba Earth Wisdom Tours
Tour Allocations -- Amended for Temporary Use from March 2005 Solicitation

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)
Easy Rider Rim	Restricted RUU Allocation Listed Below ***	4,380
Easy Rider Canyon Tour 1 (Vultee Arch, Airport Mesa)		4,380
Easy Rider Canyon Tour 2 (Vultee Arch, Red Rock Loop Rd)		4,380
Easy Rider Canyon Tour 3 (Airport Mesa, Red Rock Loop, Rd to Enchantment)		4,380
Easy Rider Canyon Tour 4 (Vultee Arch, Rd to Enchantment, Airport Mesa)		4,380
Easy Rider Canyon Tour 5 (Red Rock Loop Rd, Girdner Trail, Rd to Enchantment)		2,190
Sacred Wheel - Mason Property - T17N R4E Sec1		4,380
Rough Rider Canyon Tour 1		4,380
Rough Rider Canyon Tour 2		4,380
Rough Rider Canyon Tour 3		4,380
Rim - N - Ruins		4,380
Walk About Tour 1 (Schnebly Hill Rd and Huckaby Trail)		2,190
Walk About Tour 2 (Vultee Arch and Teacup Trail)		2,190
Walk About Tour 3 (Schnebly Hill, Jordan Trail)		2,190
Walk About Tour 4 (Red Rock Loop Rd, Girdner Trail)		2,190
Hikes Du Jour Tour 6 (Baldwin Trail)		2,190
Hikes Du Jour Tour 7 (Huckaby Trail)		2,190
Hikes Du Jour Tour 8 (Bell Rock Pathway Trail)		2,190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC		

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

GANESH 108 dba Earth Wisdom Tours -- Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Cathedral Rock Area	Hiking	**173**	**189**	114	145	167	**181**	208	87%
FR788 to Crescent Moon		**193**	101	60	141	**141**	**167**	364	46%
FR 9587		**297**	174	112	124	**195**	**246**	364	68%
Hikes Du Jour Tour 1		**106**	15	14	3	**21**	**64**	260	24%
Hikes Du Jour Tour 2		**59**	**32**	24	8	18	**46**	156	29%
Hikes Du Jour Tour 3		17	6	52	**141**	**141**	**141**	260	54%
Hikes Du Jour Tour 4		**42**	3	5	**16**	15	**29**	260	11%
Hikes Du Jour Tour 5		0	1	1	**1**	**5**	**3**	260	1%
Hikes Du Jour Tour 6		NA	NA	NA	0	0	**0**	2,190	0%
Hikes Du Jour Tour 7		NA	NA	NA	0	0	**0**	2,190	0%
Hikes Du Jour Tour 8		NA	NA	NA	0	0	**0**	2,190	0%
Walk About Tour 1		NA	NA	NA	**146**	**318**	**232**	2,190	11%
Walk About Tour 2		NA	NA	NA	0	0	**0**	2,190	0%
Walk About Tour 3		NA	NA	NA	0	0	**0**	2,190	0%
Walk About Tour 4		NA	NA	NA	**1**	0	**1**	2,190	0%
Easy Rider Canyon Tour 5		NA	NA	NA	**40**	**92**	**66**	2,190	3%
Rough Rider Canyon Tour 1	Jeep Scenic 4x4	NA	NA	NA	**55**	**44**	**50**	4,380	1%
Rough Rider Canyon Tour 2		NA	NA	NA	**52**	**85**	**69**	4,380	2%
Rough Rider Canyon Tour 3	Jeep Scenic	NA	NA	NA	0	0	**0**	4,380	0%
Easy Rider Canyon Tour 1		NA	NA	NA	**67**	**119**	**93**	4,380	2%
Easy Rider Canyon Tour 2		NA	NA	NA	**115**	**169**	**142**	4,380	3%
Easy Rider Canyon Tour 3		NA	NA	NA	**49**	**50**	**50**	4,380	1%
Easy Rider Canyon Tour 4		NA	NA	NA	**66**	**108**	**87**	4,380	2%
Easy Rider Rim		NA	NA	NA	0	0	**0**	4,380	0%
Rim - N - Ruins		NA	NA	NA	**6**	**15**	**11**	4,380	0%
Sacred Wheel	Metaphysical	NA	NA	NA	**39**	**171**	**105**	4,380	2%
	TOTALS:	**887**	**521**	**382**	**1,215**	**1,874**	**1,780**	**63,452**	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	% of Allocation Used
Hiking	1,175	19,652	6%
Jeep Scenic 4x4	118	8,760	1%
Jeep Scenic	382	30,660	1%
Metaphysical	105	4,380	2%

GANESH 108 dba Earth Wisdom Tours --- Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Hiking (Day-Use)																															
Road / Trail Number / Name Site	**4x4 Rd**	Cathedral Rock Area (Actual Use)	Cathedral Rock Area (Allocation)	FR788 to Crescent Moon (Actual Use)	FR788 to Crescent Moon (Allocation)	FR 9587 (Actual Use)	FR 9587 (Allocation)	Hikes Du Jour Tour 1 (Actual Use)	Hikes Du Jour Tour 1 (Allocation)	Hikes Du Jour Tour 2 (Actual Use)	Hikes Du Jour Tour 2 (Allocation)	Hikes Du Jour Tour 3 (Actual Use)	Hikes Du Jour Tour 3 (Allocation)	Hikes Du Jour Tour 4 (Actual Use)	Hikes Du Jour Tour 4 (Allocation)	Hikes Du Jour Tour 5 (Actual Use)	Hikes Du Jour Tour 5 (Allocation)	Hikes Du Jour Tour 6 (Actual Use)	Hikes Du Jour Tour 6 (Allocation)	Hikes Du Jour Tour 7 (Actual Use)	Hikes Du Jour Tour 7 (Allocation)	Hikes Du Jour Tour 8 (Actual Use)	Hikes Du Jour Tour 8 (Allocation)	Walk About Tour 1 (Actual Use)	Walk About Tour 1 (Allocation)	Walk About Tour 2 (Actual Use)	Walk About Tour 2 (Allocation)	Walk About Tour 3 (Actual Use)	Walk About Tour 3 (Allocation)	Walk About Tour 4 (Actual Use)	Walk About Tour 4 (Allocation)	Easy Rider Canyon Tour 5 (Actual Use)	Easy Rider Canyon Tour 5 (Allocation)
00089B																																	
00119 (to Montezuma's Well)																																	
00152																										0	2190						
00152C (Unpaved portion from Marshall Tank)																																	
00153 (Schnebly Hill Rd)																				0	2190			232	2190			0	2190				
00525																																	
00525C																																	
00525D																																	
00618																																	
00633																												0	2190				
00788				167	364																												
00788A				167	364																												
09549	X																																
09549B	X																																
09551	X																																
09587						246	364																										
09587A						246	364																										
09881 (N. Bell Trvlwy Access)														29	260																		
09904 to Teacup/Jordan Trail																										0	2190						
09934 (Huckaby / Munds Wagon Trailhead)																				0	2190			232	2190								
Cathedral Rock Area		181	208																														
Red Rock Crossing		181	208																														
Baldwin Trail 191		181	208															0	2190														
Bell Rock Pathway Trail 96														29	260							0	2190										
Deadmans Pass Trail 110												141	260																				
Doe Mountain Trail 60								64	260																								
Fay Canyon Trail 53										46	156																						
Girdner Trail 162																														1	2190	66	2190
Huckaby Trail 161																				0	2190			232	2190								
Jordan Trail 186																												0	2190				
Little Horse Trail 61																3	260																
Long Canyon Trail 122												141	260																				
Northern Bell Travelway														29	260																		
Teacup Trail 183																										0	2190						

GANESH 108 dba Earth Wisdom Tours --- Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites (cont.)

	Jeep Scenic 4x4				Jeep Scenic														Metaphysical				
Road / Trail Number / Name Site	Rough Rider Canyon Tour 1 (Actual Use)	Rough Rider Canyon Tour 1 (Allocation)	Rough Rider Canyon Tour 2 (Actual Use)	Rough Rider Canyon Tour 2 (Allocation)	Rough Rider Canyon Tour 3 (Actual Use)	Rough Rider Canyon Tour 3 (Allocation)	Easy Rider Canyon Tour 1 (Actual Use)	Easy Rider Canyon Tour 1 (Allocation)	Easy Rider Canyon Tour 2 (Actual Use)	Easy Rider Canyon Tour 2 (Allocation)	Easy Rider Canyon Tour 3 * (Actual Use)	Easy Rider Canyon Tour 3 * (Allocation)	Easy Rider Canyon Tour 4 (Actual Use)	Easy Rider Canyon Tour 4 (Allocation)	Easy Rider Rim (Actual Use)	Easy Rider Rim (Allocation)	Rim - N - Ruins (Actual Use)	Rim - N - Ruins (Allocation)	Sacred Wheel (Actual Use)	Sacred Wheel (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00089B					0	4380															**0**	**4,380**	**0%**
00119 (to Montezuma's Well)																	11	4380			**11**	**4,380**	**0%**
00152							93	4380	142	4380			87	4380							**322**	**15,330**	**2%**
00152C (Unpaved portion from Marshall Tank)																			105	4380	**105**	**4,380**	**2%**
00153 (Schnebly Hill Rd)															0	4380	11	4380			**243**	**15,330**	**2%**
00525	50	4380	69	4380	0	4380													105	4380	**224**	**17,520**	**1%**
00525C	50	4380	69	4380																	**119**	**8,760**	**1%**
00525D			69	4380	0	4380															**69**	**8,760**	**1%**
00618																	11	4380			**11**	**4,380**	**0%**
00633																					**0**	**2,190**	**0%**
00788																					**167**	**364**	**46%**
00788A																					**167**	**364**	**46%**
09549	50	4380	69	4380																	**119**	**8,760**	**1%**
09549B	50	4380	69	4380																	**119**	**8,760**	**1%**
09551	50	4380																			**50**	**4,380**	**1%**
09587																					**246**	**364**	**68%**
09587A																					**246**	**364**	**68%**
09881 (N. Bell Trvlwy Access)																					**29**	**260**	**11%**
09904 to Teacup/Jordan Trail																					**0**	**2,190**	**0%**
09934 (Huckaby / Munds Wagon Trailhead)																					**232**	**4,380**	**5%**
Cathedral Rock Area																					**181**	**208**	**87%**
Red Rock Crossing																					**181**	**208**	**87%**
Baldwin Trail 191																					**181**	**2,398**	**8%**
Bell Rock Pathway Trail 96																					**29**	**2,450**	**1%**
Deadmans Pass Trail 110																					**141**	**260**	**54%**
Doe Mountain Trail 60																					**64**	**260**	**25%**
Fay Canyon Trail 53																					**46**	**156**	**29%**
Girdner Trail 162																					**67**	**4,380**	**2%**
Huckaby Trail 161																					**232**	**4,380**	**5%**
Jordan Trail 186																					**0**	**2,190**	**0%**
Little Horse Trail 61																					**3**	**260**	**1%**
Long Canyon Trail 122																					**141**	**260**	**54%**
Northern Bell Travelway																					**29**	**260**	**11%**
Teacup Trail 183																					**0**	**2,190**	**0%**

* Easy Rider Canyon Tour 3 -- No permit required to travel on the roads listed in tour route

GANESH 108 dba Earth Wisdom Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Hiking (Day-Use)																															
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	4x4 Rd	Cathedral Rock Area (Actual Use)	Cathedral Rock Area (Allocation)	FR788 to Crescent Moon (Actual Use)	FR788 to Crescent Moon (Allocation)	FR 9587 (Actual Use)	FR 9587 (Allocation)	Hikes Du Jour Tour 1 (Actual Use)	Hikes Du Jour Tour 1 (Allocation)	Hikes Du Jour Tour 2 (Actual Use)	Hikes Du Jour Tour 2 (Allocation)	Hikes Du Jour Tour 3 (Actual Use)	Hikes Du Jour Tour 3 (Allocation)	Hikes Du Jour Tour 4 (Actual Use)	Hikes Du Jour Tour 4 (Allocation)	Hikes Du Jour Tour 5 (Actual Use)	Hikes Du Jour Tour 5 (Allocation)	Hikes Du Jour Tour 6 (Actual Use)	Hikes Du Jour Tour 6 (Allocation)	Hikes Du Jour Tour 7 (Actual Use)	Hikes Du Jour Tour 7 (Allocation)	Hikes Du Jour Tour 8 (Actual Use)	Hikes Du Jour Tour 8 (Allocation)	Walk About Tour 1 (Actual Use)	Walk About Tour 1 (Allocation)	Walk About Tour 2 (Actual Use)	Walk About Tour 2 (Allocation)	Walk About Tour 3 (Actual Use)	Walk About Tour 3 (Allocation)	Walk About Tour 4 (Actual Use)	Walk About Tour 4 (Allocation)	Easy Rider Canyon Tour 5 (Actual Use)	Easy Rider Canyon Tour 5 (Allocation)
Beaver Creek	00119 (to Montezuma's Well)																																	
	00618																																	
Cathedral	Cathedral Rock Area		181	208																														
	Baldwin Trail 191																		0	2190														
	Bell Rock Pathway Trail 96																						0	2190										
	Northern Bell Travelway														29	260																		
	09881 (N. Bell Trvlwy Access)																																	
	Little Horse Trail 61																3	260																
Dry Creek	00152																										0	2190						
	Deadmans Pass Trail 110												141	260																				
	Long Canyon Trail 122																																	
Kachina	00089B																																	
Lower Schnebly	00153 (Schnebly Hill Rd)																				0	2190			232	2190			0	2190				
Oak Creek Canyon	Huckaby Trail 161																				0	2190			232	2190								
Red Cliffs	00152C (Unpaved portion from Marshall Tank)																																	
	00525																																	
	00525D																																	
	09549	X																																
	09549B	X																																
	09551	X																																
	09587						246	364																										
	09587A																																	
	Doe Mountain Trail 60								64	260																								
	Fay Canyon Trail 53										46	156																						
Schnebly Rim	00153 (Schnebly Hill Rd)																				0	2190			232	2190			0	2190				
Sedona	00633																																	
	Jordan Trail 186																												0	2190				
	00153 (Schnebly Hill Rd)																																	
	09934 (Huckaby / Munds Wagon Trailhead)																				0	2190			232	2190								
	Huckaby Trail 161																																	
	Girdner Trail 162																														1	2190	66	2190
	Teacup Trail 183																										0	2190						

GANESH 108 dba Earth Wisdom Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Hiking (Day-Use)																															
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Cathedral Rock Area (Actual Use)	Cathedral Rock Area (Allocation)	FR788 to Crescent Moon (Actual Use)	FR788 to Crescent Moon (Allocation)	FR 9587 (Actual Use)	FR 9587 (Allocation)	Hikes Du Jour Tour 1 (Actual Use)	Hikes Du Jour Tour 1 (Allocation)	Hikes Du Jour Tour 2 (Actual Use)	Hikes Du Jour Tour 2 (Allocation)	Hikes Du Jour Tour 3 (Actual Use)	Hikes Du Jour Tour 3 (Allocation)	Hikes Du Jour Tour 4 (Actual Use)	Hikes Du Jour Tour 4 (Allocation)	Hikes Du Jour Tour 5 (Actual Use)	Hikes Du Jour Tour 5 (Allocation)	Hikes Du Jour Tour 6 (Actual Use)	Hikes Du Jour Tour 6 (Allocation)	Hikes Du Jour Tour 7 (Actual Use)	Hikes Du Jour Tour 7 (Allocation)	Hikes Du Jour Tour 8 (Actual Use)	Hikes Du Jour Tour 8 (Allocation)	Walk About Tour 1 (Actual Use)	Walk About Tour 1 (Allocation)	Walk About Tour 2 (Actual Use)	Walk About Tour 2 (Allocation)	Walk About Tour 3 (Actual Use)	Walk About Tour 3 (Allocation)	Walk About Tour 4 (Actual Use)	Walk About Tour 4 (Allocation)	Easy Rider Canyon Tour 5 (Actual Use)	Easy Rider Canyon Tour 5 (Allocation)
Soldier Pass	09904 to Teacup/Jordan Trail																										0	2190						
	Teacup Trail 183																																	
	Jordan Trail 186																																	
Upper Loop	00788				167	364																												
	00788A																																	
	Red Rock Crossing		181	208																														
VOC	Baldwin Trail 191		181	208															0	2190														
	Red Rock Crossing																																	
Wickiup	00119 (to Montezuma's Well)																																	
Windmill	00152C (Unpaved portion from Marshall Tank)																																	
	00525D																																	
	00525																																	
	00525C																																	
	09549	X																																
	09549B	X																																
	09551	X																																
	Girdner Trail 162																														1	2190	66	2190

GANESH 108 dba Earth Wisdom Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

		Jeep Scenic 4x4				Jeep Scenic														Metaphysical				
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	Rough Rider Canyon Tour 1 (Actual Use)	Rough Rider Canyon Tour 1 (Allocation)	Rough Rider Canyon Tour 2 (Actual Use)	Rough Rider Canyon Tour 2 (Allocation)	Rough Rider Canyon Tour 3 (Actual Use)	Rough Rider Canyon Tour 3 (Allocation)	Easy Rider Canyon Tour 1 (Actual Use)	Easy Rider Canyon Tour 1 (Allocation)	Easy Rider Canyon Tour 2 (Actual Use)	Easy Rider Canyon Tour 2 (Allocation)	Easy Rider Canyon Tour 3 * (Actual Use)	Easy Rider Canyon Tour 3 * (Allocation)	Easy Rider Canyon Tour 4 (Actual Use)	Easy Rider Canyon Tour 4 (Allocation)	Easy Rider Rim (Actual Use)	Easy Rider Rim (Allocation)	Rim - N - Ruins (Actual Use)	Rim - N - Ruins (Allocation)	Sacred Wheel (Actual Use)	Sacred Wheel (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00119 (to Montezuma's Well)																	11	4380			**11**	**4380**	**0%**
	00618																							
Cathedral	Cathedral Rock Area																					**213**	**5108**	**4%**
	Baldwin Trail 191																							
	Bell Rock Pathway Trail 96																							
	Northern Bell Travelway																							
	09881 (N. Bell Trvlwy Access)																							
	Little Horse Trail 61																							
Dry Creek	00152							93	4380	142	4380			87	4380							**463**	**15590**	**3%**
	Deadmans Pass Trail 110																							
	Long Canyon Trail 122																							
Kachina	00089B					0	4380															**0**	**4380**	**0%**
Lower Schnebly	00153 (Schnebly Hill Rd)															0	4380	11	4380			**243**	**15330**	**2%**
Oak Creek Canyon	Huckaby Trail 161																					**232**	**4380**	**5%**
Red Cliffs	00152C (Unpaved portion from Marshall Tank)																			105	4380	**580**	**18300**	**3%**
	00525	50	4380			0	4380																	
	00525D			69	4380																			
	09549																							
	09549B	50	4380																					
	09551																							
	09587																							
	09587A																							
	Doe Mountain Trail 60																							
	Fay Canyon Trail 53																							
Schnebly Rim	00153 (Schnebly Hill Rd)															0	4380	11	4380			**243**	**15330**	**2%**
Sedona	00633																					**310**	**21900**	**1%**
	Jordan Trail 186																							
	00153 (Schnebly Hill Rd)															0	4380	11	4380					
	09934 (Huckaby / Munds Wagon Trailhead)																							
	Huckaby Trail 161																							
	Girdner Trail 162																							
	Teacup Trail 183																							

GANESH 108 dba Earth Wisdom Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

		Jeep Scenic 4x4				Jeep Scenic														Metaphysical				
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	Rough Rider Canyon Tour 1 (Actual Use)	Rough Rider Canyon Tour 1 (Allocation)	Rough Rider Canyon Tour 2 (Actual Use)	Rough Rider Canyon Tour 2 (Allocation)	Rough Rider Canyon Tour 3 (Actual Use)	Rough Rider Canyon Tour 3 (Allocation)	Easy Rider Canyon Tour 1 (Actual Use)	Easy Rider Canyon Tour 1 (Allocation)	Easy Rider Canyon Tour 2 (Actual Use)	Easy Rider Canyon Tour 2 (Allocation)	Easy Rider Canyon Tour 3 * (Actual Use)	Easy Rider Canyon Tour 3 * (Allocation)	Easy Rider Canyon Tour 4 (Actual Use)	Easy Rider Canyon Tour 4 (Allocation)	Easy Rider Rim (Actual Use)	Easy Rider Rim (Allocation)	Rim - N - Ruins (Actual Use)	Rim - N - Ruins (Allocation)	Sacred Wheel (Actual Use)	Sacred Wheel (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Soldier Pass	09904 to Teacup/Jordan Trail																					**0**	**2190**	**0%**
	Teacup Trail 183																							
	Jordan Trail 186																							
Upper Loop	00788																					**348**	**572**	**61%**
	00788A																							
	Red Rock Crossing																							
VOC	Baldwin Trail 191																					**181**	**2398**	**8%**
	Red Rock Crossing																							
Wickiup	00119 (to Montezuma's Well)																	11	4380			**11**	**4380**	**0%**
Windmill	00152C (Unpaved portion from Marshall Tank)																			105	4380	**291**	**21900**	**1%**
	00525D					0	4380																	
	00525																			105	4380			
	00525C			69	4380																			
	09549	50	4380																					
	09549B																							
	09551																							
	Girdner Trail 162																							

* Easy Rider Canyon Tour 3 -- No permit required to travel on the roads listed in tour route

Gon' Fishen
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)
Coconino NF - Oak Creek Canyon Hwy 89A	5 ppl per trip, 5 trips per wk, 1 veh per trip, Max 900 srv days per yr	5 veh / week x 52 weeks / yr = 260 veh/parties/yr
Prescott NF - Prairie Lane	5 ppl per trip, 5 trips per wk, 1 veh per trip, Max 450 srv days per yr	5 veh / week x 52 weeks / yr = 260 veh/parties/yr
Prescott NF - Black Canyon		
Prescott NF - Bignott		
Prescott NF - White Bridge		
Prescott NF - Clear Creek		
Prescott NF - Beasley Flat		
Prescott NF - Gap Creek		

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Gon' Fishen
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Coconino NF - Oak Creek Canyon Hwy 89A	Fishing	**42**	**57**	38	40	40	**50**	260	19%
Prescott NF - Prairie Lane		0	0	0	0	0	**0**	260	0%
Prescott NF - Black Canyon		0	0	0	0	0	**0**		0%
Prescott NF - Bignott		0	0	0	0	0	**0**		0%
Prescott NF - White Bridge		0	0	0	0	0	**0**		0%
Prescott NF - Clear Creek		0	0	0	0	0	**0**		0%
Prescott NF - Beasley Flat		0	0	0	0	0	**0**		0%
Prescott NF - Gap Creek		0	0	0	0	0	**0**		0%
	TOTALS:	**42**	**57**	**38**	**40**	**40**	**50**	520	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Fishing - Coconino NF	50	260	19%
Fishing - Prescott NF	0	260	0%

This assessment will only use the Coconino NF Authorized areas and Use Numbers

Gon' Fishen

Actual Use & Annual Allocation Summary -- Tour Roads, Streams

Road Number / Stream Name	4x4 Rd	Fishing: Coconino NF - Oak Creek Canyon Hwy 89A (Actual Use)	Fishing: Coconino NF - Oak Creek Canyon Hwy 89A (Allocation)	Actual Use Summary for each Road / Stream	Annual Allocation Summary for each Road / Stream	% Annual Allocation Used for each Road / Stream
00089B		50	260	**50**	**260**	**19%**
00623		50	260	**50**	**260**	**19%**
Oak Creek		50	260	**50**	**260**	**19%**

Actual Use & Annual Allocation Summary -- Tour Roads / Streams within RUU's

Recreation Use Unit (RUU)	Road Number / Stream Name	4x4 Rd	Fishing: Coconino NF - Oak Creek Canyon Hwy 89A (Actual Use)	Fishing: Coconino NF - Oak Creek Canyon Hwy 89A (Allocation)	Actual Use Summary for each RUU	Annual Allocation Summary for each RUU	% Annual Allocation Used for each RUU
Kachina	00089B		50	260	**50**	**260**	**19%**
	Oak Creek						
Lower Schnebly	Oak Creek		50	260	**50**	**260**	**19%**
Oak Creek Canyon	Oak Creek		50	260	**50**	**260**	**19%**
Sedona	00623		50	260	**50**	**260**	**19%**
	Oak Creek						
Upper Loop	Oak Creek		50	260	**50**	**260**	**19%**
VOC	Oak Creek		50	260	**50**	**260**	**19%**

Horsecents Entertainments, Inc. dba Trail Horse Adventures F.N.
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
C - One-hour - Dry Creek	21 Riders per Group Outside Wilderness; Max Total 126 Riders per Day; Max Total 21 Riders per Group on any Non-Wilderness Trail	[126 riders / day divided by 6 = 21 parties per day] x 365 days / yr = 7665 parties/yr
PLC - One Hour - Stage Coach		
A1, R, A6 - Two Hour - Lazy Creek		
A - Two Hour - Indian Head		
E - Alternate 2 hour E		
PL - Long C - Alternate Under Flooding		
PC - One Hour - Alt Flooding		
A-PC - Alt Under Flooding		
A1, R, S - Half Day - Sheurman Mtn		
R, A - Half Day - Cathedral Rock		
ASRA - All Day Ride		
A - Breakfast Ride		
R - Lunch Ride		
E - Lunch Ride - Flooding		
A - Lunch Ride		
A - Dinner Ride		
R - Lunch Swim Ride		
R - Swim Ride		
Rev R to A - Cliffhanger		
A1, R, S, A - Overnight		
PCRA - Overnight		
Creek Crossing Pictures - 5x7		
Creek Crossing Pictures - 3.5x5		

Horsecents Entertainments, Inc. dba Trail Horse Adventures F.N. --- Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
C - One-hour - Dry Creek	Equestrian (Day-Use)	**50**	**44**	17	0	1	**47**	7,665	1%
PLC - 1 Hr - Stage Coach		204	**513**	**637**	420	487	**575**		8%
A1, R, A6 - 2 Hr - Lazy Crk		1,232	**1,852**	**2,704**	1,684	377	**2,278**		30%
A - Two Hour - Indian Head		285	**388**	**297**	18	1	**343**		4%
E - Alternate 2 hour E		10	**134**	**195**	63	0	**165**		2%
PL - Long C - Alt Flooding		3	0	**5**	**155**	1	**80**		1%
PC - 1 Hr - Alt Flooding		0	0	**2**	0	0	**2**		0%
A-PC - Alt Under Flooding		0	0	**11**	**38**	0	**25**		0%
A1, R, S - Sheurman Mtn		3	**5**	2	**3**	1	**4**		0%
R, A - Cathedral Rock		**19**	**13**	7	3	1	**16**		0%
ASRA - All Day Ride		3	2	2	**6**	**4**	**5**		0%
A - Breakfast Ride		**14**	**3**	0	0	0	**9**		0%
R - Lunch Ride		0	0	21	**77**	**29**	**53**		1%
E - Lunch Ride - Flooding		0	0	3	0	0	**3**		0%
A - Lunch Ride		**28**	14	**16**	12	0	**22**		0%
A - Dinner Ride		53	22	**107**	**52**	0	**80**		1%
R - Lunch Swim Ride		3	2	**3**	**7**	1	**5**		0%
R - Swim Ride		0	0	0	0	**1**	**1**		0%
Rev R to A - Cliffhanger		**22**	**4**	0	0	0	**13**		0%
Creek Xing Pictures - 5x7		**274**	**156**	0	0	0	**215**		3%
Creek Xing Pictures - 3.5x5		**200**	**238**	0	0	0	**219**		3%
A1, R, S, A - Overnight	Equestrian (Overnight)	1	**2**	**1**	0	0	**2**		0%
PCRA - Overnight		0	0	0	**8**	0	**8**		0%
	TOTALS:	**2,404**	**3,392**	**4,030**	**2,546**	**904**	**4,167**		

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	% of Allocation Used
Equestrian (Day-Use)	4,158	7,665	54%
Equestrian (Overnight-Use)	10		0.1%

Note: Actual use for number of riders per tour per quarter was divided by 6 to generate the total number of parties per tour per quarter. This was then summarized into number of parties per year.

Horsecents Entertainments, Inc. dba Trail Horse Adventures F.N.
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Equestrian (Day-Use)																					Equestrian (Overnight)				
Road / Trail Number / Site Name	**4x4 Rd**	C - One-hour - Dry Creek	PLC - 1 Hr - Stage Coach	A1, R, A6 - 2 Hr - Lazy Crk	A - Two Hour - Indian Head	E - Alternate 2 hour E	PL - Long C - Alt Flooding	PC - 1 Hr - Alt Flooding	A-PC - Alt Under Flooding	A1, R, S - Sheurman Mtn	R, A - Cathedral Rock	ASRA - All Day Ride	A - Breakfast Ride	R - Lunch Ride	E - Lunch Ride - Flooding	A - Lunch Ride	A - Dinner Ride	R - Lunch Swim Ride	R - Swim Ride	Rev R to A - Cliffhanger	Creek Xing Pictures - 5x7	Creek Xing Pictures - 3.5x5	A1, R, S, A - Overnight	PCRA - Overnight	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
Elmerville Spur A Trail 115A		265		13656	2045	983	477	7	143	20	86	20	44	309	14	127	472	28	6	70	1275	1298	4	48	**21,397**		**279%**
Elmerville Spur B Trail 115B		265	3443	13656	2045	983	477	7	143	20	86	20	44	309	14	127	472	28	6	70	1275	1298	4	48	**24,840**		**324%**
Elmerville Spur C Trail 115C		265	3443			983	477	7	143						14									48	**5,380**		**70%**
Elmerville Spur E Trail 115E						983									14										**997**		**13%**
Elmerville Spur K Trail 115K																									**0**		**0%**
Elmerville Spur L Trail 115L			3443																						**3,443**	**7,665**	**45%**
Elmerville Spur M Trail 115M																									**0**		**0%**
Elmerville Spur R Trail 115R				13656						20	86	20		309				28	6	70	1275	1298	4	48	**16,820**		**219%**
Elmerville Spur S Trail 115S				13656						20	86	20		309				28	6	70	1275	1298	4	48	**16,820**		**219%**
Red Rock Loop Trail 118										20		20											4		**44**		**1%**
Scheurman Mtn Trail 56										20		20											4		**44**		**1%**

Horsecents Entertainments, Inc. dba Trail Horse Adventures F.N.
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites within RUU's

			Equestrian (Day-Use)																				Equestrian (Overnight)				
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	C - One-hour - Dry Creek	PLC - 1 Hr - Stage Coach	A1, R, A6 - 2 Hr - Lazy Crk	A - Two Hour - Indian Head	E - Alternate 2 hour E	PL - Long C - Alt Flooding	PC - 1 Hr - Alt Flooding	A-PC - Alt Under Flooding	A1, R, S - Sheurman Mtn	R, A - Cathedral Rock	ASRA - All Day Ride	A - Breakfast Ride	R - Lunch Ride	E - Lunch Ride - Flooding	A - Lunch Ride	A - Dinner Ride	R - Lunch Swim Ride	R - Swim Ride	Rev R to A - Cliffhanger	Creek Xing Pictures - 5x7	Creek Xing Pictures - 3.5x5	A1, R, S, A - Overnight	PCRA - Overnight	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Kachina	Elmerville Spur L Trail 115L			3443																						**24,840**	**7,665**	**324%**
	Elmerville Spur E Trail 115E						983									14												
	Elmerville Spur C Trail 115C		265	3443				477	7	143															48			
	Elmerville Spur B Trail 115B				13656	2045					20	86	20	44	309		127	472	28	6	70	1275	1298	4				
	Elmerville Spur A Trail 115A																											
	Elmerville Spur R Trail 115R																											
	Elmerville Spur S Trail 115S																											
	Red Rock Loop Trail 118																											
	Elmerville Spur K Trail 115K																											
	Elmerville Spur M Trail 115M																											
Sedona	Scheurman Mtn Trail 56										20		20											4		**44**	**7,665**	**1%**
Upper Loop	Elmerville Spur R Trail 115R				13656						20	86	20		309				28	6	70	1275	1298	4	48	**16,820**	**7,665**	**219%**
	Elmerville Spur S Trail 115S																											
	Red Rock Loop Trail 118																											
	Scheurman Mtn Trail 56																											

Yavapai-Apache Nation dba Native Visions Horseback Adventures
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Map 1 of 4	Coconino NF: Up to three overnight rides per month; A total of 1200 people (service days) per year; Maximum group size both in and out of wilderness is 12 people (including guide)	1200 riders / year divided by 6 = 200 parties per year
Map 2 of 4 (1 hr)		
Map 2 of 4 (1.5 hr)		
Map 2 of 4 (2 hr)		
Map 2 of 4 (2.5 hr)		
Map 2 of 4 (4 hr)		
Map 4 of 4		
Map 3 of 4 (Prescott NF)	Prescott NF: A total of 500 people (service days) per year; Maximum group size both in and out of wilderness is 12 people (including guide)	500 riders / year divided by 6 = 83 parties per year

Yavapai-Apache Nation dba Native Visions Horseback Adventures
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Map 1 of 4	Equestrian (Day-Use)	0	0	0	0	0	**0**	200	0%
Map 2 of 4 (1 hr)		**75**	**36**	5	3	0	**56**		28%
Map 2 of 4 (1.5 hr)		0	**91**	**148**	0	0	**120**		60%
Map 2 of 4 (2 hr)		**42**	**26**	0	0	0	**34**		17%
Map 2 of 4 (2.5 hr)		0	**25**	**195**	0	0	**110**		55%
Map 2 of 4 (4 hr)		**2**	**1**	0	0	0	**2**		1%
Map 4 of 4		0	0	0	0	0	**0**		0%
Map 3 of 4 (Prescott NF)		0	0	0	0	0	**0**	83	0%
	TOTALS:	**119**	**179**	**348**	**3**	**0**	**322**	283	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	% of Allocation Used
Equestrian (Day-Use) (Coconino NF)	322	200	161%
Equestrian (Overnight-Use) (Coconino NF)	0		0%
Equestrian (Day-Use) Prescott NF)	0	83	0%

Yavapai-Apache Nation dba Native Visions Horseback
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Equestrian (Day-Use) (Coconino NF)									
Road / Trail Number / Site Name	**4x4 Rd**	Map 1 of 4	Map 2 of 4 (1 hr)	Map 2 of 4 (1.5 hr)	Map 2 of 4 (2 hr)	Map 2 of 4 (2.5 hr)	Map 2 of 4 (4 hr)	Map 4 of 4	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00213F	**X**	0							**0**	**200**	**0%**
00214		0							**0**		**0%**
00214B		0							**0**		**0%**
00618		0							**0**		**0%**
00618C		0							**0**		**0%**
00618D		0							**0**		**0%**
00644		0							**0**		**0%**
00644H		0							**0**		**0%**
00645A		0							**0**		**0%**
00645A - Connector		0							**0**		**0%**
00689		0							**0**		**0%**
00708								0	**0**		**0%**
09139J								0	**0**		**0%**
09201C		0							**0**		**0%**
Native Visions Horse Trails in T14N R5E Sec 16 - 21			56	120	34	110	2		**322**		**161%**
Towel Creek Trail 67								0	**0**		**0%**
Walker Basin Trail 81		0							**0**		**0%**

Yavapai-Apache Nation dba Native Visions Horseback Adventures
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites within RUU's

			Equestrian (Day-Use) (Coconino NF)									
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Map 1 of 4	Map 2 of 4 (1 hr)	Map 2 of 4 (1.5 hr)	Map 2 of 4 (2 hr)	Map 2 of 4 (2.5 hr)	Map 2 of 4 (4 hr)	Map 4 of 4	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Apache Maid	00213F	**X**	0							**0**	**200**	**0%**
	00644											
	00644H											
	00689											
Beaver Creek	00618		0							**0**	**200**	**0%**
	00618D											
	00644H											
	00645A											
	00645A - Connector											
	00689											
	09201C											
	Walker Basin Trail 81											
Cedar Flat	00214		0							**0**	**200**	**0%**
	00214B											
	Walker Basin Trail 81											
Fossil Creek Road	00708								0	**0**	**200**	**0%**
	09139J											
	Towel Creek Trail 67											
Montezuma	00618C		0							**322**	**200**	**161%**
	Native Visions Horse Trails in T14N R5E Sec 16 - 21			56	120	34	110	2				
Towel	Towel Creek Trail 67								0	**0**	**200**	**0%**

Northern Light Balloon Expeditions, Sedona Balloon Flights, Inc.
Tour Allocations

Tour Name (Launch Sites in the Lower Red Rock Loop Road Area)	Allocation	AUTHORIZED ANNUAL LIMIT (VEHICLES / BALLOONS)
FR 9851B	Combined Allocation with all launch sites - 1235 balloons/yr; 5 balloons at one time; 7092 Srvc Dys/year	1,235
Verde Valley School Rd FR 216A x FR 9886		
Dad Jones Tank on FR 525		

Frequent Landing Areas: FR's 120, 9120A, 216, 89B, 9845, 9542C, 9843, 9570, 9871, 525, 525A, 525C, 761, 152C, 152A, 9549, 9551, 9553, 9513, 9573, 9575, 9576

Northern Light Balloon Expeditions, Sedona Balloon Flights, Inc.
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / BALLOONS 2002	Annual Actual Use VEHICLES / BALLOONS 2003	Annual Actual Use VEHICLES / BALLOONS 2004	Annual Actual Use VEHICLES / BALLOONS 2005	Annual Actual Use VEHICLES / BALLOONS 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / BALLOONS)	Percentage of Allocation Used
FR 9851B	Hot Air Balloon	835	**961**	**1,026**	951	896	**994**	1,235	80%
Verde Valley School Rd FR 216A x FR 9886		0	0	0	0	0	**0**		0%
Dad Jones Tank on FR 525		**13**	**30**	1	0	3	**22**		2%
	TOTALS:	**848**	**991**	**1,027**	**951**	**899**	**1,015**	1,235	

Activity Category	Sum of Two Highest Years (VEHICLES / BALLOONS)	Authorized Annual Limit (VEHICLES / BALLOONS)	Percentage of Allocation Used
Hot Air Balloon	1,015	1,235	82%

Northern Light Balloon Expeditions, Sedona Balloon Flights, Inc.
Actual Use & Annual Allocation Summary -- Tour Launch Sites

Road Number	4x4 Rd	Hot Air Balloon Launch Sites	Actual Use Summary for each Road	Annual Allocation Summary for each Road	% Annual Allocation Used for each Road
00525		22	**22**	**1235**	**2%**
09851B		994	**994**		**80%**
09886		0	**0**		**0%**

Actual Use & Annual Allocation Summary -- Tour Launch Sites within RUU's

Recreation Use Unit (RUU)	Road Number	4x4 Rd	Hot Air Balloon Launch Sites	Actual Use Summary for each RUU	Annual Allocation Summary for each RUU	% Annual Allocation Used for each RUU
Cathedral	09886		0	**0**	**1235**	**0%**
Kachina	09851B		994	**994**	**1235**	**80%**
Windmill	525		22	**22**	**1235**	**2%**

P-Marks Plus, Inc. Red Rock Balloon Adventures
Tour Allocations

Tour Name (Launch Sites in the Lower Red Rock Loop Road Area)	Allocation	AUTHORIZED ANNUAL Limit (VEHICLES / BALLOONS)
FR 9589 - Dry Creek Gravel Pit	300 balloons/yr; 3 balloons at one time; 4705 Srvc Dys/year	300

P-Marks Plus, Inc. Red Rock Balloon Adventures
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / BALLOONS 2002	Annual Actual Use VEHICLES / BALLOONS 2003	Annual Actual Use VEHICLES / BALLOONS 2004	Annual Actual Use VEHICLES / BALLOONS 2005	Annual Actual Use VEHICLES / BALLOONS 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / BALLOONS)	Percentage of Allocation Used
FR 9589 - Dry Creek Gravel Pit	Hot Air Balloon	235	237	223	**295**	**302**	**299**	300	100%
	TOTALS:	**235**	**237**	**223**	**295**	**302**	**299**	300	

Activity Category	Sum of Two Highest Years (VEHICLES / BALLOONS)	Authorized Annual Limit (VEHICLES / BALLOONS)	Percentage of Allocation Used
Hot Air Balloon	299	300	100%

P-Marks Plus, Inc. Red Rock Balloon Adventures
Actual Use & Annual Allocation Summary -- Tour Launch Sites and Launch Sites within RUU's

			Hot Air Balloon			
Recreation Use Unit (RUU)	Road Number	**4x4 Rd**	Launch Sites	**Actual Use Summary for each Road / RUU**	**Annual Allocation Summary for each Road / RUU**	**% Annual Allocation Used for each Road / RUU**
Windmill	09589		299	299	300	100%

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006)
Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (9/21/2006 - 12/31/2006)
Tour Allocations

Tour Name	Allocation	AUTHORIZED ANNUAL LIMIT (VEHICLES)
Soldier Pass	10 VAOT, with a total of 2100 vehicles per year	2,100
Canyons & Cowboys	12 VAOT, with a total of 2655 vehicles per year	2,655
Old Bear Wallow	12 VAOT, with a total of 1735 vehicles per year Bear Wallow Limited to 100 jeeps per year on FR 153A FR153A is closed seasonally Dec 15 - April 1 each year	1,735
Red Rock Range	10 VAOT, with a total of 1883 vehicles per year	1,883
Sedona's Original Vortex Tour	3 VAOT, with a total of 539 vehicles per year Bell Rock Limited to 1 jeep per day and Red Rock Crossing limited to 3 jeeps at one time	539

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006)
Red Rock Western Jeep Tours dba Sedona Red Rock Jeep Tours, Inc. (9/21/2006 - 12/31/2006)
Tour Allocations (cont.)

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)
Cave Dwellings of the Ancients (Mindeleff's Cavate Lodge -- within Verde Scenic River RUU -- Not analyzed in this assessment)	1 veh visit per day, 5 ppl per veh, 20 veh per month (total 1200 svc dys per yr) - 2 addtl visits per month for up to 15 ppl per visit (360 total srv dys per yr allowed for large groups) - Total service days per year for site = 1560	22 veh / month x 12 months / yr = 264 veh/parties per yr
Hidden Springs (Red Tank Draw Petroglyph)	1 veh visit per day, up to 10 ppl per veh, up to 25 veh per month -- max total of 1200 srv days	25 veh / month x 12 months / yr = 300 veh/parties per yr
Spirit Hunters (Rarick Canyon Petroglyph)	1 veh visit per day, up to 10 ppl per veh, up to 25 veh per month -- max total of 1200 srv days	25 veh / month x 12 months / yr = 300 veh/parties per yr
Arch Combo (Hidden Springs & Spirit Hunters)	1 veh visit per day, up to 10 ppl per veh, up to 25 veh per month -- max total of 1200 srv days	25 veh / month x 12 months / yr = 300 veh/parties per yr
FR 119 to Montezuma Castle / Well National Monument	1 veh visit per day, up to 10 ppl per veh, up to 25 veh per month -- max total of 1200 srv days	25 veh / month x 12 months / yr = 300 veh/parties per yr

Assumption -- One Vehicle driving on a road carries One Party of People visiting a heritage site

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006)
Red Rock Western Jeep Tours dba Sedona Red Rock Jeep Tours, Inc. (9/21/2006 - 12/31/2006)
Tour Allocations -- Amended for Temporary Use from March 2005 Solicitation

		Projected Annual Authorized Limit	
Tour Name	**Allocation**	**VEHICLES - ROADS**	**PARTIES - TRAILS**
Montezuma Well (FR618, 121, 618G, 119)	No Allocation -- Not within a Restricted RUU (Allocation for this analysis will be based on Restricted RUU allocation)	4380	
Huckaby Trail 161	Restricted RUU Allocation Listed Below ***		2190
Jordan Trail 186			2190
Jim Thompson Trail 124			2190
Baldwin Trail 191 and Templeton Trail 156			2190
Deadman's Pass Trail 110			2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties / yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC		

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006)
Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (9/21/2006 - 12/31/2006)
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Soldier Pass	Jeep 4x4	2,205	2,207	2,100	**3,521**	**2,511**	**3,016**	2,100	144%
Canyons & Cowboys	Jeep Scenic 4x4	1,169	**1,362**	1,123	928	**1,411**	**1,387**	2,655	52%
Old Bear Wallow 2 hr		275	494	353	**602**	**632**	**617**	1,735	36%
Old Bear Wallow 3 hr		41	81	**264**	**118**	55	**191**		11%
Red Rock Range		**387**	0	0	3	**16**	**202**	1,833	11%
Sedona's Original Vortex Tour	Metaphysical	367	361	304	**468**	**430**	**418**	539	77%
Cave Dwellings of the Ancients (Note **)	Heritage	3	**8**	**9**	3	5	**9**	264	3%
Hidden Springs (Red Tank Draw Petroglyph)		6	**13**	6	**8**	6	**11**	300	4%
Spirit Hunters (Rarick Canyon Petroglyph)		**41**	31	22	**33**	29	**37**	300	12%
Arch Combo (Spirit Hunters & Hidden Springs)		**19**	16	12	**21**	11	**20**	300	7%
FR119 to Montezuma's Castle		**0**	0	0	**0**	0	**0**	300	0%
	TOTALS:	**4,513**	**4,573**	**4,193**	**5,705**	**5,106**	**5,906**	10,326	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Jeep 4x4	3,016	2,100	144%
Jeep Scenic 4x4	2,396	6,223	39%
Metaphysical	418	539	77%
Heritage	76	1,464	5%

Note**: Cave Dwellings of the Ancients uses roads outside the project area.

Note: Heritage Tours are reported as Vehicles on the road and Parties visiting the heritage site. One Vehicle carries One Party of People.

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006)
Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (9/21/2006 - 12/31/2006)
Actual Annual Use 2002 - 2006 (cont.)

Tour Names	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Old Bear Wallow 1 hr	Jeep Scenic	63	130	90	**134**	**119**	**127**	1,735	7%
Old Bear Wallow 1.5 hr		301	567	478	**733**	**962**	**848**		49%
Montezuma Well Tour		NA	NA	NA	0	**45**	**45**	4,380	1%
Huckaby Trail 161	Hiking (Day-Use)	NA	NA	NA	0	**11**	**11**	2,190	1%
Jordan Trail 186		NA	NA	NA	0	0	**0**	2,190	0%
Jim Thompson Trail 124		NA	NA	NA	0	**9**	**9**	2,190	0%
Baldwin Trail 191 and Templeton Trail 156		NA	NA	NA	0	0	**0**	2,190	0%
Deadman's Pass Trail 110		NA	NA	NA	0	27	**27**	2,190	1%
	TOTALS:	**0**	**0**	**0**	**0**	**47**	**47**	17,065	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Jeep Scenic	1020	1735	59%
Hiking (Day-Use)	47	10,950	0%

Note: Hiking Tours are reported as Parties on the trail

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006)
Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (9/21/2006 - 12/31/2006)
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Jeep Tour 4x4		Jeep Tour Scenic 4x4						Jeep Scenic		Metaphysical		Heritage								Hiking				
Road / Trail Number / Site Name	**4x4 Rd**	Soldier Pass (Actual Use)	Soldier Pass (Allocation)	Canyons & Cowboys (Actual Use)	Canyons & Cowboys (Allocation)	Old Bear Wallow (Actual Use)	Old Bear Wallow (Allocation)	Red Rock Range (Actual Use)	Red Rock Range (Allocation)	Montezuma Well (Actual Use)	Montezuma Well (Allocation)	Sedona's Original Vortex (Actual Use)	Sedona's Original Vortex (Allocation)	Hidden Springs (Actual Use)	Hidden Springs (Allocation)	Spirit Hunters (Actual Use)	Spirit Hunters (Allocation)	Arch Combo (Actual Use)	Arch Combo (Allocation)	FR119 to Montezuma Castle (Actual Use)	FR119 to Montezuma Castle (Allocation)	Trail Tours (Actual Use)	Trail Tours (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
Bell Rock												418	539											**418**	**539**	**78%**
Rarick Canyon Petroglyph																37	300	20	300					**57**	**600**	**10%**
Red Rock Crossing												418	539											**418**	**539**	**78%**
Red Tank Draw Petroglyph														11	300			20	300					**31**	**600**	**5%**
00119 (to Montezuma Well)										45	4,380									0	300			**45**	**4,680**	**1%**
00121										45	4,380													**45**	**4,380**	**1%**
00152				1,387	2,655																			**1,387**	**2,655**	**52%**
00152A	X							202	1,833															**202**	**1,833**	**11%**
00152C (Unpaved portion from Marshall Tank)								202	1,833															**202**	**1,833**	**11%**
00153 (Schnebly Hill Rd)						1,783	1,735															11	2,190	**1,794**	**3,925**	**46%**
00153A	X					808	1,735																	**808**	**1,735**	**47%**
00525								202	1,833															**202**	**1,833**	**11%**
00618										45	4,380			11	300	37	300	20	300					**113**	**5,280**	**2%**
00618G										45	4,380													**45**	**4,380**	**1%**
00633																						9	2,190	**9**	**2,190**	**0%**
00645A														11	300	37	300	20	300					**68**	**900**	**8%**
00689																37	300	20	300					**57**	**600**	**10%**
00801						191	1,735																	**191**	**1,735**	**11%**
09494F						191	1,735																	**191**	**1,735**	**11%**
09495F						191	1,735																	**191**	**1,735**	**11%**
09904 (Soldier Pass Rd)	X	3,016	2,100																					**3,016**	**2,100**	**144%**
09908				1,387	2,655																			**1,387**	**2,655**	**52%**
09917	X			1,387	2,655																			**1,387**	**2,655**	**52%**
09934 (Huckaby Trailhead)																						11	2,190	**11**	**2,190**	**1%**
Airport Saddle Trail 126												418	539											**418**	**539**	**78%**
Baldwin Trail 191																						0	2,190	**0**	**2,190**	**0%**
Deadmans Pass Trail 110																						27	2,190	**27**	**2,190**	**1%**
Huckaby Trail 161																						11	2,190	**11**	**2,190**	**1%**
Jim Thompson Trail 124																						9	2,190	**9**	**2,190**	**0%**
Jordan Trail 186																						0	2,190	**0**	**2,190**	**0%**
Templeton Trail 156																						0	2,190	**0**	**2,190**	**0%**

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006) & Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (9/21/2006 - 12/31/2006)
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Jeep Tour 4x4		Jeep Tour Scenic 4x4						Jeep Scenic		Metaphysical		Heritage							
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Soldier Pass (Actual Use)	Soldier Pass (Allocation)	Canyons & Cowboys (Actual Use)	Canyons & Cowboys (Allocation)	Old Bear Wallow (Actual Use)	Old Bear Wallow (Allocation)	Red Rock Range (Actual Use)	Red Rock Range (Allocation)	Montezuma Well (Actual Use)	Montezuma Well (Allocation)	Sedona's Original Vortex (Actual Use)	Sedona's Original Vortex (Allocation)	Hidden Springs (Actual Use)	Hidden Springs (Allocation)	Spirit Hunters (Actual Use)	Spirit Hunters (Allocation)	Arch Combo (Actual Use)	Arch Combo (Allocation)	FR119 to Montezuma Castle (Actual Use)	FR119 to Montezuma Castle (Allocation)
Apache Maid	00689																37	300	20	300		
	Rarick Canyon Petroglyph																					
Beaver Creek	00119 (to Montezuma Well)										45	4,380									0	300
	00121																					
	00618G																					
	00618														11	300	37	300	20	300		
	00645A																					
	00689																					
	Red Tank Draw Petroglyph														11	300						
Cathedral	Bell Rock												418	539								
	Baldwin Trail 191																					
	Templeton Trail 156																					
Dry Creek	00152																					
	09908				1,387	2,655																
	09917	X																				
	Deadmans Pass Trail 110																					
Lower Schnebly	00153 (Schnebly Hill Rd)						1,783	1,735														
Oak Creek Canyon	Huckaby Trail 161																					
Red Cliffs	00152C (Unpaved portion from Marshall Tank)								202	1,833												
	00525																					
	Deadmans Pass Trail 110																					
Schnebly Rim	00153 (Schnebly Hill Rd)																					
	00153A	X																				
	00801						1,656	1,735														
	09494F																					
	09495F																					
Sedona	00153 (Schnebly Hill Rd)						1,783	1,735														
	09934 (Huckaby / Munds Wagon Trailhead)																					
	Airport Saddle Trail 126												418	539								
	Huckaby Trail 161																					
	00633																					
	Jim Thompson Trail 124																					
	Jordan Trail 186																					
Soldier Pass	09904 (Soldier Pass Rd)	X	3,016	2,100																		
	Jordan Trail 186																					
Upper Loop	Red Rock Crossing												418	539								
VOC	Red Rock Crossing												418	539								
	Baldwin Trail 191																					
	Templeton Trail 156																					
Wickiup	00119 (to Montezuma Well)																				0	300
Windmill	00152A	X							202	1,833												
	00152C (Unpaved portion from Marshall Tank)																					
	00525																					

Sedona Red Rock Jeep Tours, Inc. (1/1/2002 - 9/21/2006) & Red Rock Western Jeep Tours, Inc. dba Sedona Red Rock Jeep Tours (9/21/2006 - 12/31/2006)
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Hiking				
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Trail Tours (Actual Use)	Trail Tours (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Apache Maid	00689				**57**	**600**	**10%**
	Rarick Canyon Petroglyph						
Beaver Creek	00119 (to Montezuma Well)				**113**	**5,280**	**2%**
	00121						
	00618G						
	00618						
	00645A						
	00689						
	Red Tank Draw Petroglyph						
Cathedral	Bell Rock				**418**	**2,729**	**15%**
	Baldwin Trail 191		0	2,190			
	Templeton Trail 156						
Dry Creek	00152				**1,414**	**4,845**	**29%**
	09908						
	09917	**X**					
	Deadmans Pass Trail 110		27	2,190			
Lower Schnebly	00153 (Schnebly Hill Rd)				**1,783**	**1,735**	**103%**
Oak Creek Canyon	Huckaby Trail 161		11	2190	**11**	**2190**	**1%**
Red Cliffs	00152C (Unpaved portion from Marshall Tank)				**229**	**4,023**	**6%**
	00525						
	Deadmans Pass Trail 110		27	2,190			
Schnebly Rim	00153 (Schnebly Hill Rd)				**1,656**	**1,735**	**95%**
	00153A	**X**					
	00801						
	09494F						
	09495F						
Sedona	00153 (Schnebly Hill Rd)		11	2,190	**2,221**	**8,844**	**25%**
	09934 (Huckaby Trailhead)						
	Airport Saddle Trail 126						
	Huckaby Trail 161						
	00633		9	2,190			
	Jim Thompson Trail 124						
	Jordan Trail 186		0	2,190			
Soldier Pass	09904 (Soldier Pass Rd)	**X**			**3,016**	**4,290**	**70%**
	Jordan Trail 186		0	2,190			
Upper Loop	Red Rock Crossing				**418**	**539**	**78%**
VOC	Red Rock Crossing				**418**	**2,729**	**15%**
	Baldwin Trail 191		0	2,190			
	Templeton Trail 156						
Wickiup	00119 (to Montezuma Well)				**0**	**300**	**0%**
Windmill	00152A	**X**			**202**	**1,833**	**11%**
	00152C (Unpaved portion from Marshall Tank)						
	00525						

Sedona Nature Excursions
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)
Casner Canyon TR 11	7 trips per week, 2 vehs per trip, 15 ppl per trip	14 veh / week x 52 weeks / yr = 728 veh/parties/yr
Sterling Pass TR 46 ***	1 trip per day, 2 trips per week, 12 ppl per trip	2 veh / week x 52 weeks / yr = 104 veh/parties/yr
Bear Mountain TR 54 ***	1 trip per day, 2 trips per week, 12 ppl per trip	2 veh / week x 52 weeks / yr = 104 veh/parties/yr
Schnebly Hill TR 158	2 trips per day, 7 trips per week, 12 ppl per trip	14 veh / week x 52 weeks / yr = 728 veh/parties/yr
Allens Bend TR 111	1 trip per day, 4 trips per week, 12 ppl per trip	4 veh / week x 52 weeks / yr = 208 veh/parties/yr
Parsons TR 144	1 trip per day, 2 trips per week, 12 ppl per trip	2 veh / week x 52 weeks / yr = 104 veh/parties/yr
FR152A to the Cockscomb (FR9586A, 9586 and 9586B)	1 trip per day, 5 trips per week, 15 ppl per trip (Hiking & Overnight Outings)	5 veh / week x 52 weeks / yr = 260 veh/parties/yr
Robinsons Tank	2 trips per day, 5 trips per week, 12 ppl per trip, 2 vehs per trip	10 veh / week x 52 weeks / yr = 520 veh/parties/yr
FR 9867	7 trips per week, 2 vehs per trip	14 veh / week x 52 weeks / yr = 728 veh/parties/yr
Deadmans Pass TR 110	2 trips per week, 2 vehs per trip	4 veh / week x 52 weeks / yr = 208 veh/parties/yr
FR 9876	7 trips per week, 2 vehs per trip	14 veh / week x 52 weeks / yr = 728 veh/parties/yr

Sedona Nature Excursions
Tour Allocations -- Amended for Temporary Use from March 2005

Tour Name	Allocation	Projected Annual Usage (PARTIES)
Baldwin Trail 191 and Templeton Trail 156	Restricted RUU Allocation Listed Below ***	2190
Munds Wagon Trail 78		2190
Airport Loop Trail 210		2190
Thunder Mountain Trail 165		2190
Teacup Trail 183		2190
Deadman's Pass Trail 110	(Already authorized on original authorization)	

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days/yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

*** Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Sedona Nature Excursions
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
FR152A to the Cockscomb	Camping	**59**	**25**	6	1	2	**42**	260	16%
Casner Canyon TR 11	Hiking (Day-Use)	**2**	1	0	**3**	1	**3**	728	0%
Sterling Pass Trail 46		**4**	**1**	0	1	0	**3**	104	2%
Bear Mountain Trail 54		**4**	2	0	0	**6**	**5**	104	5%
Schnebly Hill TR 158		0	1	2	**3**	**158**	**81**	728	11%
Allens Bend TR 111		2	0	22	**52**	**51**	**52**	208	25%
Parsons TR 144		**2**	0	0	0	0	**2**	104	2%
Robinsons Tank		**30**	4	**10**	0	3	**20**	520	4%
FR 9867		5	5	18	**21**	**27**	**24**	728	3%
Deadmans Pass TR 110		21	20	**37**	**44**	10	**41**	208	19%
FR 9876		0	0	0	0	0	**0**	728	0%
Baldwin Trail 191 and Templeton Trail 156		NA	NA	NA	**6**	**6**	**6**	2,190	0%
Munds Wagon Trail 78		NA	NA	NA	**5**	**19**	**12**	2,190	1%
Airport Loop Trail 210		NA	NA	NA	**15**	**63**	**39**	2,190	2%
Thunder Mountain Trail 165		NA	NA	NA	**13**	**24**	**19**	2,190	1%
Teacup Trail 183		NA	NA	NA	0	0	**0**	2,190	0%
	TOTALS:	**70**	**34**	**89**	**163**	**368**	**304**	15,110	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Camping (Overnights)	42	260	16%
Hiking (Day-Use)	304	15,110	2%

Sedona Nature Excursions
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Camping		Hiking (Day-Use)																																
Road / Trail Number / Site Name	**4x4 Rd**	FR152A to the Cockscomb (Actual Use)	FR152A to the Cockscomb (Allocation)	Casner Canyon TR 11 (Actual Use)	Casner Canyon TR 11(Allocation)	Sterling Pass Trail 46 (Actual Use)	Sterling Pass Trail 46 (Allocation)	Bear Mountain Trail 54 (Actual Use)	Bear Mountain Trl 54 (Allocation)	Schnebly Hill TR 158 (Actual Use)	Schnebly Hill TR 158 (Allocation)	Allens Bend TR 111 (Actual Use)	Allens Bend TR 111(Allocation)	Parsons TR 144 (Actual Use)	Parsons TR 144 (Allocation)	Robinsons Tank (Actual Use)	Robinsons Tank (Allocation)	FR 9867 (Actual Use)	FR 9867 (Allocation)	Deadmans Pass TR 110 (Actual Use)	Deadmans Pass TR 110 (Allocation)	FR 9876 (Actual Use)	FR 9876 (Allocation)	Baldwin Trl 191 / Templeton Trl 156 (Actual Use)	Baldwin Trl 191 / Templeton Trl 156 (Allocation)	Munds Wagon Trail 78 (Actual Use)	Munds Wagon Trail 78 (Allocation)	Airport Loop Trail 210 (Actual Use)	Airport Loop Trail 210 (Allocation)	Thunder Mountain Trail 165 (Actual Use)	Thunder Mountain Trail 165 (Allocation)	Teacup Trail 183 (Actual Use)	Teacup Trail 183 (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00131														2	104																			**2**	**104**	**2%**
00152A	**X**	42	260																															**42**	**260**	**16%**
00152C (Unpaved portion from Marshall Tank)		42	260																															**42**	**260**	**16%**
00152E	**X**															20	520																	**20**	**520**	**4%**
00153 (Schnebly Hill Rd)										81	728															12	2190							**93**	**2,918**	**3%**
09586H		42	260																															**42**	**260**	**16%**
09600	**X**															20	520																	**20**	**520**	**4%**
09600A																20	520																	**20**	**520**	**4%**
09867																		24	728															**24**	**728**	**3%**
09876																						0	728											**0**	**728**	**0%**
09904 to Teacup/Jordan Trail																																0	2190	**0**	**2,190**	**0%**
09934 (Huckaby / Munds Wagon Trailhead)																										12	2190							**12**	**2,190**	**1%**
Airport Loop Trail 210																												39	2190					**39**	**2,190**	**2%**
Allens Bend Trail 111												52	208																					**52**	**208**	**25%**
Baldwin Trail 191																								6	2190									**6**	**2,190**	**0%**
Bear Mountain Trail 54								5	104																									**5**	**104**	**5%**
Casner Canyon Trail 11				3	728																													**3**	**728**	**0%**
Cockscomb Trail 167 (FR9586, 9586A, 9586B)		42	260																															**42**	**260**	**16%**
Dawa Trail 188 (FR9586, 9586B)		42	260																															**42**	**260**	**16%**
Dawa Trail 188B (FR9586H)		42	260																															**42**	**260**	**16%**
Deadmans Pass Trail 110																				41	208													**41**	**208**	**20%**
Munds Wagon Trail 78																										12	2190							**12**	**2,190**	**1%**
Parsons Trail 144														2	104																			**2**	**104**	**2%**
Schnebly Hill Trail 158										81	728																							**81**	**728**	**11%**
Sterling Pass Trail 46						3	104																											**3**	**104**	**3%**
Teacup Trail 183																																0	2190	**0**	**2,190**	**0%**
Templeton Trail 156																								6	2190									**6**	**2,190**	**0%**
Thunder Mountain Trail 165																														19	2190			**19**	**2,190**	**1%**

Sedona Nature Excursions

Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites within RUU's

			Camping		Hiking (Day-Use)																														
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	FR152A to the Cockscomb (Actual Use)	FR152A to the Cockscomb (Allocation)	Casner Canyon TR 11 (Actual Use)	Casner Canyon TR 11(Allocation)	Sterling Pass Trail 46 (Actual Use)	Sterling Pass Trail 46 (Allocation)	Bear Mountain Trail 54 (Actual Use)	Bear Mountain Trl 54 (Allocation)	Schnebly Hill TR 158 (Actual Use)	Schnebly Hill TR 158 (Allocation)	Allens Bend TR 111 (Actual Use)	Allens Bend TR 111(Allocation)	Parsons TR 144 (Actual Use)	Parsons TR 144 (Allocation)	Robinsons Tank (Actual Use)	Robinsons Tank (Allocation)	FR 9867 (Actual Use)	FR 9867 (Allocation)	Deadmans Pass TR 110 (Actual Use)	Deadmans Pass TR 110 (Allocation)	FR 9876 (Actual Use)	FR 9876 (Allocation)	Baldwin Trl 191 / Templeton Trl 156 (Actual Use)	Baldwin Trl 191 / Templeton Trl 156 (Allocation)	Munds Wagon Trail 78 (Actual Use)	Munds Wagon Trail 78 (Allocation)	Airport Loop Trail 210 (Actual Use)	Airport Loop Trail 210 (Allocation)	Thunder Mountain Trail 165 (Actual Use)	Thunder Mountain Trail 165 (Allocation)	Teacup Trail 183 (Actual Use)	Teacup Trail 183 (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Cathedral	09876																						0	728											**6**	**2918**	**0%**
	Baldwin Trail 191																								6	2190											
	Templeton Trail 156																																				
Dry Creek	Deadmans Pass Trail 110																				41	208													**41**	**208**	**20%**
Lower Schnebly	Schnebly Hill Trail 158										81	728																							**93**	**2918**	**3%**
	00153 (Schnebly Hill Rd)																										12	2190									
	Munds Wagon Trail 78																																				
Oak Creek Canyon	Allens Bend Trail 111												52	208																					**58**	**1040**	**6%**
	Casner Canyon Trail 11				3	728																															
	Sterling Pass Trail 46						3	104																													
Red Cliffs	00152C (Unpaved portion from Marshall Tank)		42	260																															**108**	**1092**	**10%**
	Cockscomb Trail 167 (FR9586, 9586A, 9586B)																																				
	00152E	**X**																																			
	09600	**X**															20	520																			
	09600A																																				
	Bear Mountain Trail 54								5	104																											
	Deadmans Pass Trail 110																				41	208															
Schnebly Rim	Schnebly Hill Trail 158										81	728																							**84**	**1456**	**6%**
	Casner Canyon Trail 11				3	728																															
Sedona	09867																		24	728															**175**	**10216**	**2%**
	00153 (Schnebly Hill Rd)										81	728																									
	09934 (Huckaby / Munds Wagon Trailhead)																										12	2190									
	Munds Wagon Trail 78																																				
	Airport Loop Trail 210																												39	2190							
	Teacup Trail 183																																0	2190			
	Thunder Mountain Trail 165																														19	2190					

Sedona Nature Excursions

Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites within RUU's (cont.)

			Camping		Hiking (Day-Use)																														
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	FR152A to the Cockscomb (Actual Use)	FR152A to the Cockscomb (Allocation)	Casner Canyon TR 11 (Actual Use)	Casner Canyon TR 11(Allocation)	Sterling Pass Trail 46 (Actual Use)	Sterling Pass Trail 46 (Allocation)	Bear Mountain Trail 54 (Actual Use)	Bear Mountain Trl 54 (Allocation)	Schnebly Hill TR 158 (Actual Use)	Schnebly Hill TR 158 (Allocation)	Allens Bend TR 111 (Actual Use)	Allens Bend TR 111(Allocation)	Parsons TR 144 (Actual Use)	Parsons TR 144 (Allocation)	Robinsons Tank (Actual Use)	Robinsons Tank (Allocation)	FR 9867 (Actual Use)	FR 9867 (Allocation)	Deadmans Pass TR 110 (Actual Use)	Deadmans Pass TR 110 (Allocation)	FR 9876 (Actual Use)	FR 9876 (Allocation)	Baldwin Trl 191 / Templeton Trl 156 (Actual Use)	Baldwin Trl 191 / Templeton Trl 156 (Allocation)	Munds Wagon Trail 78 (Actual Use)	Munds Wagon Trail 78 (Allocation)	Airport Loop Trail 210 (Actual Use)	Airport Loop Trail 210 (Allocation)	Thunder Mountain Trail 165 (Actual Use)	Thunder Mountain Trail 165 (Allocation)	Teacup Trail 183 (Actual Use)	Teacup Trail 183 (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Skeleton Bone	00131														2	104																			**2**	**104**	**2%**
	Parsons Trail 144																																		
Soldier Pass	09904 to Teacup/Jordan Trail																																0	2190	**0**	**2190**	**0%**
	Teacup Trail 183																																		
Upper Loop	Airport Loop Trail 210																												39	2190					**39**	**2190**	**2%**
VOC	Baldwin Trail 191																								6	2190									**6**	**2190**	**0%**
	Templeton Trail 156																																		
Windmill	00152A	**X**	42	260																															**42**	**260**	**16%**
	00152C (Unpaved portion from Marshall Tank)																																		
	09586H																																		
	Cockscomb Trail 167 (FR9586, 9586A, 9586B)																																		
	Dawa Trail 188 (FR9586, 9586B)																																		
	Dawa Trail 188B (FR9586H)																																		

Spirit Steps, a subsidiary of Aquarian Concepts
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES / PARTIES)
Airport Saddle / Mesa	1 trip per day, 2 trips per wk, 6 ppl per trip	2 veh / week x 52 weeks / yr = 104 veh/parties/yr
Merry-Go-Round Rock and Schnebly Hill Vista Lookout	1 trip per day, 2 trips per wk, 6 ppl per trip	2 veh / week x 52 weeks / yr = 104 veh/parties/yr
Red Rock Crossing / Cathedral Rock	1 trip per day, 2 trips per wk, 6 ppl per trip	2 veh / week x 52 weeks / yr = 104 veh/parties/yr

*** Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Spirit Steps, a subsidiary of Aquarian Concepts
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Airport Saddle / Mesa	Metaphysical	23	**30**	**24**	23	23	**27**	104	26%
Merry-Go-Round Rock and Schnebly Hill Vista Lookout		**16**	8	7	**12**	10	**14**	104	13%
Red Rock Crossing / Cathedral Rock		**42**	**41**	28	24	30	**42**	104	40%
	TOTALS:	**81**	**79**	**59**	**59**	**63**	**83**	312	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Metaphysical	83	312	26%

Spirit Steps, a subsidiary of Aquarian Concepts
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites and Tour Roads, Trails, Sites within RUU's

		Metaphysical								
Road / Trail Number / Site Name	**4x4 Rd**	Airport Saddle / Mesa (Actual Use)	Airport Saddle / Mesa (Allocation)	Merry-Go-Round Rock and Schnebly Hill Vista Lookout (Actual Use)	Merry-Go-Round Rock and Schnebly Hill Vista Lookout (Allocation)	Red Rock Crossing / Cathedral Rock (Actual Use)	Red Rock Crossing / Cathedral Rock (Allocation)	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00153 (Schnebly Hill Rd)				14	104			**14**	**104**	**13%**
09940 to Cowpies				14	104			**14**	**104**	**13%**
Airport Saddle Trail 126		27	104					**27**	**104**	**26%**
Red Rock Crossing						42	104	**42**	**104**	**40%**

			Metaphysical								
Recreation Use Unit (RUU)	Road / Trail Number / Site Name	**4x4 Rd**	Airport Saddle / Mesa (Actual Use)	Airport Saddle / Mesa (Allocation)	Merry-Go-Round Rock and Schnebly Hill Vista Lookout (Actual Use)	Merry-Go-Round Rock and Schnebly Hill Vista Lookout (Allocation)	Red Rock Crossing / Cathedral Rock (Actual Use)	Red Rock Crossing / Cathedral Rock (Allocation)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Lower Schnebly	00153 (Schnebly Hill Rd)				14	104			**14**	**104**	**13%**
	09940 to Cowpies										
Schnebly Rim	00153 (Schnebly Hill Rd)				14	104			**14**	**104**	**13%**
Sedona	00153 (Schnebly Hill Rd)				14	104			**41**	**208**	**20%**
	Airport Saddle Trail 126		27	104							
Upper Loop	Red Rock Crossing						42	104	**42**	**104**	**40%**
VOC	Red Rock Crossing						42	104	**42**	**104**	**40%**

360 Adventures, LLC.
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Bell Rock Pathway Trail 96	1 guide for up to 5 clients for a total of 6 ppl at one time; Total of 30 service days split 20 hiking and 10 mtn biking Restricted RUU Allocation Listed Below ***	2190
Broken Arrow Trail 125		2190
Little Horse Trail 161		2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking / biking on a trail

360 Adventures, LLC.
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Bell Rock Pathway Trail 96	Hiking (Day-Use)	NA	NA	NA	**1**	**2**	**2**	1,095	0%
Broken Arrow Trail 125		NA	NA	NA	0	**2**	**2**	1,095	0%
Little Horse Trail 161		NA	NA	NA	0	**2**	**2**	1,095	0%
Bell Rock Pathway Trail 96	Mountain Bike	NA	NA	NA	**3**	**7**	**5**	1,095	0%
Broken Arrow Trail 125		NA	NA	NA	0	**2**	**2**	1,095	0%
Little Horse Trail 161		NA	NA	NA	0	**2**	**2**	1,095	0%
	TOTALS:	**0**	**0**	**0**	**4**	**17**	**15**	6,570	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Hiking (Day-Use)	6	3,285	0.2%
Mountain Bike	9	3,285	0.3%

360 Adventures, LLC.
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites and Tour Roads, Trails, Sites within RUU's

Road / Trail Number	Hiking (Day-Use)	Mountain Bike	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
Bell Rock Pathway Trail 96	2	5	**7**	**2190**	**0%**
Broken Arrow Trail 125	2	2	**4**	**2190**	**0%**
Little Horse Trail 61	2	2	**4**	**2190**	**0%**

Recreation Use Unit (RUU)	Road / Trail Number	Hiking (Day-Use)	Mountain Bike	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Broken Arrow	Broken Arrow Trail 125	2	2	**4**	**2190**	**0%**
	Little Horse Trail 61					
Cathedral	Bell Rock Pathway Trail 96	2	5	**11**	**2190**	**1%**
	Little Horse Trail 61	2	2			

Adventure Company at Tlaquepaque, LLC
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
Old Bear Wallow	Restricted RUU Allocation Listed Below ***	4380
Red Rock Outback		4380
Lost Canyon	No Allocation -- Not within a Restricted RUU (Allocation for this analysis will be based on Restricted RUU allocation)	4380
House Mountain		4380

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Adventure Company at Tlaquepaque LLC
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Old Bear Wallow 1hr	Jeep Scenic	NA	NA	NA	**57**	**80**	**69**	4380	2%
Old Bear Wallow 1.5 hr		NA	NA	NA	**55**	**223**	**139**		3%
Old Bear Wallow 2 hr		NA	NA	NA	**133**	**336**	**235**		5%
Old Bear Wallow 2.5 hr		NA	NA	NA	**14**	**0**	**14**		0%
Lost Canyon		NA	NA	NA	**341**	**1,199**	**770**	4380	18%
Red Rock Outback 1.5 hr		NA	NA	NA	**0**	**15**	**15**	4380	0%
Red Rock Outback 2 hr	Jeep Scenic 4x4	NA	NA	NA	**51**	**78**	**65**	4380	1%
House Mountain 3 hr		NA	NA	NA	**0**	**1**	**1**	4380	0%
	TOTALS:	**0**	**0**	**0**	**406**	**1,293**	**865**	17,520	

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Jeep Scenic	1,241	13,140	9%
Jeep Scenic 4x4	66	8,760	1%

Adventure Company at Tlaquepaque LLC
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites

		Jeep Scenic						Jeep Scenic 4x4				
Road / Trail Number	**4x4 Rd**	Old Bear Wallow 1hr	Old Bear Wallow 1.5 hr	Old Bear Wallow 2 hr	Old Bear Wallow 2.5 hr	Lost Canyon	Red Rock Outback 1.5 hr	Red Rock Outback 2 hr	House Mountain 3 hr	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00120A	**X**								1	**1**	**4380**	**0%**
00152							15			**15**	**4380**	**0%**
00153 (Schnebly Hill Rd)		69	139	235	14					**457**	**4380**	**10%**
00525								65		**65**	**4380**	**1%**
09500A									1	**1**	**4380**	**0%**
09500L						770				**770**	**4380**	**18%**
09500M						770				**770**	**4380**	**18%**
09500N						770				**770**	**4380**	**18%**
09500P						770				**770**	**4380**	**18%**
09549	**X**							65		**65**	**4380**	**1%**
09549B	**X**							65		**65**	**4380**	**1%**
09549E								65		**65**	**4380**	**1%**
09549F								65		**65**	**4380**	**1%**
09549G								65		**65**	**4380**	**1%**
09549H								65		**65**	**4380**	**1%**
09551	**X**							65		**65**	**4380**	**1%**
09952	**X**								1	**1**	**4380**	**0%**
09952B	**X**								1	**1**	**4380**	**0%**
09953									1	**1**	**4380**	**0%**
09960	**X**								1	**1**	**4380**	**0%**
09960A	**X**								1	**1**	**4380**	**0%**

Adventure Company at Tlaquepaque LLC
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites within RUU's

			Jeep Scenic						Jeep Scenic 4x4				
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Old Bear Wallow 1hr	Old Bear Wallow 1.5 hr	Old Bear Wallow 2 hr	Old Bear Wallow 2.5 hr	Lost Canyon	Red Rock Outback 1.5 hr	Red Rock Outback 2 hr	House Mountain 3 hr	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaverhead	00120A	**X**								1	**1**	**4380**	**0%**
	09952	**X**											
	09500A												
Dry Creek	00152							15			**15**	**4380**	**0%**
Lower Schnebly	00153 (Schnebly Hill Rd)		69	139	235	14					**457**	**4380**	**10%**
Red Cliffs	00525								65		**65**	**4380**	**1%**
	09549	**X**											
	09549B	**X**											
	09551	**X**											
Savannah House Mountain	00120A	**X**								1	**771**	**4380**	**18%**
	09500A												
	09952	**X**											
	09952B	**X**											
	09953												
	09960	**X**											
	09960A	**X**											
	09500L						770						
	09500M												
	09500N												
	09500P												
Schnebly Rim	00153 (Schnebly Hill Rd)			139	235	14					**388**	**4380**	**9%**
Sedona	00153 (Schnebly Hill Rd)		69	139	235	14					**457**	**4380**	**10%**
Windmill	00525								65		**65**	**4380**	**1%**
	09549	**X**											
	09549B	**X**											
	09549E												
	09549F												
	09549G												
	09549H												
	09551	**X**											

American Dream Tours, Inc.
Tour Allocations

		Projected Annual Authorized Limit	
Tour Name	**Allocation**	**VEHICLES - ROADS**	**PARTIES - TRAILS**
Airport Loop Trail 210	Restricted RUU Allocation Listed Below ***		2190
Baldwin Trail 191 and Templeton Trail 156			2190
Bell Rock Pathway Trail 96			2190
Deadman's Pass Trail 110			2190
Huckaby Trail 161			2190
Deer Pass Ranch Rd 89B		4380	

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC		

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

American Dream Tours, Inc.
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Airport Loop Trail 210	Hiking (Day-Use)	NA	NA	NA	**0**	**0**	**0**	2,190	0%
Baldwin Trail 191 and Templeton Trail 156		NA	NA	NA	**0**	**0**	**0**	2,190	0%
Bell Rock Pathway Trail 96		NA	NA	NA	**0**	**0**	**0**	2,190	0%
Deadman's Pass Trail 110		NA	NA	NA	**0**	**0**	**0**	2,190	0%
Huckaby Trail 161		NA	NA	NA	**0**	**0**	**0**	2,190	0%
Deer Pass Ranch Rd 89B	Jeep Scenic	NA	NA	NA	**0**	**0**	**0**	4,380	0%
	TOTALS:	**0**	**0**	**0**	**0**	**0**	**0**	15,330	

Activity Category	Sum of Two Highest Years (VEHICLES / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Hiking (Day-Use)	0	10,950	0%
Jeep Scenic	0	4,380	0%

American Dream Tours, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites and Tour Roads, Trails, Sites within RUU's

Road / Trail Number	**4x4 Rd**	Hiking (Day-Use) (Actual Use)	Jeep Scenic (Actual Use)	Allocation	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
Airport Loop Trail 210		0		2190	**0**	**2190**	**0%**
Baldwin Trail 191 and Templeton Trail 156		0		2190	**0**	**2190**	**0%**
Bell Rock Pathway Trail 96		0		2190	**0**	**2190**	**0%**
Deadman's Pass Trail 110		0		2190	**0**	**2190**	**0%**
Huckaby Trail 161		0		2190	**0**	**2190**	**0%**
Deer Pass Ranch Rd 89B			0	4380	**0**	**4380**	**0%**

Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Hiking (Day-Use) (Actual Use)	Jeep Scenic (Actual Use)	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Cathedral	Bell Rock Pathway Trail 96		0		**0**	**2190**	**0%**
	Baldwin Trail 191 and Templeton Trail 156						
Dry Creek	Deadman's Pass Trail 110		0		**0**	**2190**	**0%**
Kachina	Deer Pass Ranch Rd 89B			0	**0**	**4380**	**0%**
Oak Creek Canyon	Huckaby Trail 161		0		**0**	**2190**	**0%**
Red Cliffs	Deadman's Pass Trail 110		0		**0**	**2190**	**0%**
Sedona	Airport Loop Trail 210		0		**0**	**2190**	**0%**
	Huckaby Trail 161						
Upper Loop	Airport Loop Trail 210		0		**0**	**2190**	**0%**
VOC	Templeton Trail 156		0		**0**	**2190**	**0%**

Bradshaw Bros., LLC dba A Day In The West
Tour Allocations

		Projected Annual Authorized Limit	
Tour Name	**Allocation**	**VEHICLES - ROADS**	**PARTIES - TRAILS**
Diamondback Gulch (1*) (Aug 2005 - Jan 2006)	Restricted RUU Allocation Listed Below ***	4380	
Outlaw Trail (1*)		4380	
Red Rock West (1*) (Aug 2005 - Jan 2006) Name Changed to Diamondback Trail (Feb 2006 to present)		4380	
Schnebly Hill "Pioneer Trail" 1 hr, 1.5 hr		4380	
Schnebly Hill Pioneer Trail - Mogollon Rim 2 hr		4380	
Loy Canyon - Sycamore Pass - Sugarloaf (1*)		4380	
Fossil Creek Day Trip (1*)		4380	
Dry Creek Basin - Vultee Arch (Aug 2005 to Jan 2006) -- Name Changed to Red Rock West (Feb 2006 to present)		4380	
Canyon Cruise			2190
Broken Arrow			2190
Schnebly Hill, Munds Wagon, Huckaby			2190
Cathedral Rock			2190
Jordan Trail			2190
The Rugged Pioneer 1 hr, 1.5 hr, 2 hr			2190
Deadmans Pass			2190
Jim Thompson			2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC		

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail
(1*) These Tour Routes have roads that are not within Restricted RUU's. For this analysis, the Allocation for these roads will be based on Restricted RUU allocation.

Bradshaw Bros., LLC dba A Day In The West
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES / PARTIES 2002	Annual Actual Use VEHICLES / PARTIES 2003	Annual Actual Use VEHICLES / PARTIES 2004	Annual Actual Use VEHICLES / PARTIES 2005	Annual Actual Use VEHICLES / PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES / PARTIES)	Percentage of Allocation Used
Diamondback Gulch (Aug 2005 - Jan 2006)	Jeep Scenic with 4x4	NA	NA	NA	**483**	**60**	**272**	4380	6%
Outlaw Trail		NA	NA	NA	**72**	**149**	**111**	4380	3%
Red Rock West (Aug 2005 - Jan 2006) Name Changed to Diamondback Trail (Feb 2006 to present)		NA	NA	NA	**300**	**901**	**601**	4380	14%
Schnebly Hill "Pioneer Trail" 1 hr	Jeep Scenic	NA	NA	NA	**29**	**90**	**60**	4380	1%
Schnebly Hill "Pioneer Trail" 1.5 hr					**163**	**515**	**339**		8%
Schnebly Hill Pioneer Trail - Mogollon Rim 2 hr		NA	NA	NA	**395**	**735**	**565**		13%
Loy Cyn - Syc Pass - Sugarloaf		NA	NA	NA	**0**	**0**	**0**	4380	0%
Fossil Creek Day Trip		NA	NA	NA	**0**	**0**	**0**	4380	0%
Dry Creek Basin - Vultee Arch (Aug 2005 to Jan 2006) -- Name Changed to Red Rock West (Feb 2006 to present)		NA	NA	NA	**57**	**524**	**291**	4380	7%
Canyon Cruise	Hiking and Mtn Biking (Day-Use)	NA	NA	NA	**19**	**1**	**10**	2190	0%
The Rugged Pioneer 1 hr		NA	NA	NA	**0**	**0**	**0**	2190	0%
The Rugged Pioneer 1.5 hr		NA	NA	NA	**0**	**0**	**0**		0%
The Rugged Pioneer 2 hr		NA	NA	NA	**0**	**0**	**0**		0%
Broken Arrow		NA	NA	NA	**0**	**0**	**0**	2190	0%
Schnebly Hill, Munds Wagon, Huckaby		NA	NA	NA	**0**	**0**	**0**	2190	0%
Cathedral Rock		NA	NA	NA	**0**	**0**	**0**	2190	0%
Jordan Trail		NA	NA	NA	**0**	**0**	**0**	2190	0%
Deadmans Pass		NA	NA	NA	**0**	**0**	**0**	2190	0%
Jim Thompson		NA	NA	NA	**0**	**0**	**0**	2190	0%
	TOTALS:	**0**	**0**	**0**	**1,518**	**2,975**	**2,247**	48,180	

Bradshaw Bros., LLC dba A Day In The West
Actual Annual Use 2002 - 2006 (cont.)

Activity Category	Sum of Two Highest Years (VEH / PARTIES)	Authorized Annual Limit (VEHICLES / PARTIES)	% of Allocation Used
Jeep Scenic w/ 4x4	983	13,140	7%
Jeep Scenic	1,254	17,520	7%
Hiking (Day-Use)	10	8,760	0%
Mtn Biking	0	8,760	0%

Bradshaw Bros., LLC dba A Day In The West
Actual Use & Annual Allocation Summary -- Tour Roads,

		Jeep Scenic with 4x4			Jeep Scenic						Hiking and Mountain Biking (Day-Use)												
Road / Trail Number	**4x4 Rd**	Diamondback Gulch (Aug 2005 - Jan 2006)	Outlaw Trail	Red Rock West (Aug 2005 - Jan 2006) Name Changed to Diamondback Trail (Feb 2006 to present)	Schnebly Hill "Pioneer Trail" 1 hr	Schnebly Hill "Pioneer Trail" 1.5hr	Schnebly Hill Pioneer Trail - Mogollon Rim 2 hr	Loy Cyn - Syc Pass - Sugarloaf	Fossil Creek Day Trip	Dry Creek Basin - Vultee Arch (Aug 2005 to Jan 2006) -- Name Changed to Red Rock West (Feb 2006 to present)	Canyon Cruise	The Rugged Pioneer 1 hr	The Rugged Pioneer 1.5 hr	The Rugged Pioneer 2 hr	Broken Arrow	Schnebly Hill, Munds Wagon, Huckaby	Cathedral Rock	Jordan Trail	Deadmans Pass	Jim Thompson	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00121																					**0**	**4,380**	**0%**
00152										291											**291**	**4,380**	**7%**
00153 (Schnebly Hill Rd)					60	339	565				10	0	0	0		0					**974**	**4,380**	**22%**
00214																					**0**	**4,380**	**0%**
00258								0													**0**	**4,380**	**0%**
00258A								0													**0**	**4,380**	**0%**
00502									0												**0**	**4,380**	**0%**
00525		272	111	601				0													**984**	**4,380**	**22%**
00525C			111	601				0													**712**	**4,380**	**16%**
00525D																					**0**	**4,380**	**0%**
00618									0												**0**	**4,380**	**0%**
00618G																					**0**	**4,380**	**0%**
00633																		0		0	**0**	**4,380**	**0%**
00708									0												**0**	**4,380**	**0%**
00761								0													**0**	**4,380**	**0%**
00795								0													**0**	**4,380**	**0%**
09201J																					**0**	**4,380**	**0%**
09549	**X**		111	601																	**712**	**4,380**	**16%**
09549B	**X**		111	601																	**712**	**4,380**	**16%**
09549G																					**0**	**4,380**	**0%**
09549M			111																		**111**	**4,380**	**3%**
09551	**X**		111																		**111**	**4,380**	**3%**
09558																					**0**	**4,380**	**0%**
09559	**X**	272																			**272**	**4,380**	**6%**
09559A																					**0**	**4,380**	**0%**
09904 to Teacup/Jordan Trail																		0			**0**	**2,190**	**0%**
09934 (Huckaby / Munds Wagon Trailhead)											10	0	0	0		0					**10**	**2,190**	**0%**
Bell Rock Pathway Trail 96																	0				**0**	**2,190**	**0%**
Broken Arrow Trail 125															0						**0**	**2,190**	**0%**
Deadmans Pass Trail 110										0									0		**0**	**2,190**	**0%**
Herkenham Trail 202		0	0	0																	**0**	**2,190**	**0%**
Huckaby Trail 161											10					0					**10**	**2,190**	**0%**
Jim Thompson Trail 124																		0		0	**0**	**2,190**	**0%**
Jordan Trail 186																		0			**0**	**2,190**	**0%**
Little Horse Trail 61															0						**0**	**2,190**	**0%**
Munds Wagon Trail 78												0	0	0		0					**0**	**2,190**	**0%**
Teacup Trail 183																		0			**0**	**2,190**	**0%**
Templeton Trail 156																	0				**0**	**2,190**	**0%**
Thunder Mountain Trail 165																		0			**0**	**2,190**	**0%**

Bradshaw Bros., LLC dba A Day In The West
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites within RUU's

			Jeep Scenic with 4x4			Jeep Scenic						Hiking and Mountain Biking (Day-Use)													
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Diamondback Gulch (Aug 2005 - Jan 2006)	Outlaw Trail	Red Rock West (Aug 2005 - Jan 2006) Name Changed to Diamondback Trail (Feb 2006 to present)	Schnebly Hill "Pioneer Trail" 1 hr	Schnebly Hill "Pioneer Trail" 1.5hr	Schnebly Hill Pioneer Trail - Mogollon Rim 2 hr	Loy Cyn - Syc Pass - Sugarloaf	Fossil Creek Day Trip	Dry Creek Basin - Vultee Arch (Aug 2005 to Jan 2006) -- Name Changed to Red Rock West (Feb 2006 to present)	Canyon Cruise	The Rugged Pioneer 1 hr	The Rugged Pioneer 1.5 hr	The Rugged Pioneer 2 hr	Broken Arrow	Schnebly Hill, Munds Wagon, Huckaby	Cathedral Rock	Jordan Trail	Deadmans Pass	Jim Thompson	**Annual Allocation for each Road / Trail**	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00121																					4380	**0**	**4380**	**0%**
	00618									0															
	00618G																								
	09201J																								
Broken Arrow	Broken Arrow Trail 125															0						2190	**0**	**2190**	**0%**
	Little Horse Trail 61																								
Cathedral	Bell Rock Pathway Trail 96																	0				2190	**0**	**2190**	**0%**
	Templeton Trail 156																								
	Little Horse Trail 61															0									
Cedar Flat	00214																					4380	**0**	**4380**	**0%**
	09201J																								
Dry Creek	00152										291											4380	**291**	**6570**	**4%**
	Deadmans Pass Trail 110										0									0		2190			
Fossil Creek Road	00502									0												4380	**0**	**4380**	**0%**
	00708																								
Lower Schnebly	00153 (Schnebly Hill Rd)					60	339	565					0	0	0		0					4380	**964**	**6570**	**15%**
	Munds Wagon Trail 78																					2190			
Oak Creek Canyon	Huckaby Trail 161											10					0					2190	**10**	**2190**	**0%**
Red Cliffs	00525D																					4380	**984**	**4380**	**22%**
	00795								0																
	00525		272																						
	09549	X		111	601																				
	09549B	X																							
	09551	X																							
	Deadmans Pass Trail 110										0									0					
Schnebly Rim	00153 (Schnebly Hill Rd)					60	339	565														4380	**964**	**4380**	**22%**
Sedona	00153 (Schnebly Hill Rd)					60	339	565														4380	**994**	**6570**	**15%**
	Herkenham Trail 202		272	111	601																	2190			
	Huckaby Trail 161																								
	00153 (Schnebly Hill Rd)											10					0								
	09934 (Huckaby / Munds Wagon Trailhead)												0	0	0										
	Munds Wagon Trail 78																								
	00633																				0				
	Jim Thompson Trail 124																								
	Jordan Trail 186																		0						
	Teacup Trail 183																								
	Thunder Mountain Trail 165																								

Bradshaw Bros., LLC dba A Day In The West
Actual Use & Annual Allocation Summary -- Tour Roads, Trails, Sites within RUU's (cont.)

			Jeep Scenic with 4x4			Jeep Scenic						Hiking and Mountain Biking (Day-Use)												
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Diamondback Gulch (Aug 2005 - Jan 2006)	Outlaw Trail	Red Rock West (Aug 2005 - Jan 2006) Name Changed to Diamondback Trail (Feb 2006 to present)	Schnebly Hill "Pioneer Trail" 1 hr	Schnebly Hill "Pioneer Trail" 1.5hr	Schnebly Hill Pioneer Trail - Mogollon Rim 2 hr	Loy Cyn - Syc Pass - Sugarloaf	Fossil Creek Day Trip	Dry Creek Basin - Vultee Arch (Aug 2005 to Jan 2006) -- Name Changed to Red Rock West (Feb 2006 to present)	Canyon Cruise	The Rugged Pioneer 1 hr	The Rugged Pioneer 1.5 hr	The Rugged Pioneer 2 hr	Broken Arrow	Schnebly Hill, Munds Wagon, Huckaby	Cathedral Rock	Jordan Trail	Deadmans Pass	Jim Thompson	**Annual Allocation for each Road / Trail**	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Skeleton Bone	00258								0													4380	**0**	**4380**	**0%**
	00258A																								
	00761																								
Soldier Pass	09904 to Teacup/Jordan Trail																					2190	**0**	**2190**	**0%**
	Jordan Trail 186																		0						
	Teacup Trail 183																								
Upper Loop	Herkenham Trail 202		272	111	601																	2190	**984**	**2190**	**45%**
VOC	Templeton Trail 156																	0				2190	**0**	**2190**	**0%**
Wickiup	00214																					4380	**0**	**4380**	**0%**
	00618									0															
Windmill	00258								0													4380	**984**	**4380**	**22%**
	00761																								
	09551	X		111																					
	09549M																								
	09549	X			601																				
	09549B	X																							
	00525C								0																
	00525		272																						
	09559	X																							
	00525D																								
	09549G																								
	09558																								
	09559A																								

Country Walkers, Inc. of Grand Canyon Expeditions, LLC
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Airport Loop Trail 210	Restricted RUU Allocation Listed Below ***	2190
Arizona Cypress Trail 203		2190
Bell Rock Pathway Trail 96		2190
Broken Arrow Trail 125		2190
Cockscomb Trail 167 (FR9586, 9586A, 9586B)		2190
Dawa Trail 188 (FR9586, 9586B)		2190
Girdner Trail 162		2190
Huckaby Trail 161		2190
Jim Thompson Trail 124		2190
Jordan Trail 186		2190
Little Horse Trail 61		2190
Rupp Trail 204		2190
Schnebly Hill Rd - Bear Wallow Canyon		2190
Teacup Trail 183		2190
Templeton Trail 156		2190
Thunder Mountain Trail 165		2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Country Walkers, Inc. of Grand Canyon Expeditions, LLC
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Airport Vortex	Hiking (Day-Use)	NA	NA	NA	0	**10**	**10**	2190	0%
Arizona Cypress Trail 203		NA	NA	NA	0	0	**0**	2190	0%
Bell Rock Pathway Trail 96		NA	NA	NA	**6**	0	**6**	2190	0%
Broken Arrow Trail 125		NA	NA	NA	0	0	**0**	2190	0%
Cockscomb Trail 167 (FR9586, 9586A, 9586B)		NA	NA	NA	0	0	**0**	2190	0%
Dawa Trail 188 (FR9586, 9586B)		NA	NA	NA	0	0	**0**	2190	0%
Girdner Trail 162		NA	NA	NA	0	0	**0**	2190	0%
Huckaby Trail 161		NA	NA	NA	0	0	**0**	2190	0%
Jim Thompson Trail 124		NA	NA	NA	0	0	**0**	2190	0%
Jordan Trail 186		NA	NA	NA	0	0	**0**	2190	0%
Little Horse Trail		NA	NA	NA	0	**10**	**10**	2190	0%
Rupp Trail 204		NA	NA	NA	0	0	**0**	2190	0%
Schnebly Hill Rd - Bear Wallow Canyon		NA	NA	NA	**6**	**5**	**6**	2190	0%
Teacup Trail 183		NA	NA	NA	0	0	**0**	2190	0%
Templeton Trail 156		NA	NA	NA	**6**	**5**	**6**	2190	0%
Thunder Mountain Trail 165		NA	NA	NA	0	0	**0**	2190	0%
	TOTALS:	**0**	**0**	**0**	**18**	**30**	**37**	35,040	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Hiking (Day-Use)	37	35,040	0.1%

Country Walkers, Inc. of Grand Canyon
Actual Use & Annual Allocation Summary -- Tour Roads / Trails

Road / Trail Number	4x4 Rd	Hiking Day Use Actual Use Summary for each Road / Trail	Annual Allocation Summary for each Road / Trail	% Annual Allocation Used for each Road / Trail
00153 (Schnebly Hill Rd)		6	2190	**0%**
00633			2190	**0%**
09904 to Teacup/Jordan Trail			2190	**0%**
09934 (Huckaby / Munds Wagon Trailhead)			2190	**0%**
Airport Loop Trail 210		10	2190	**0%**
Arizona Cypress Trail 203			2190	**0%**
Bell Rock Pathway Trail 96		6	2190	**0%**
Broken Arrow Trail 125			2190	**0%**
Cockscomb Trail 167 (FR9586, 9586A, 9586B)			2190	**0%**
Dawa Trail 188 (FR9586, 9586B)			2190	**0%**
Girdner Trail 162			2190	**0%**
Huckaby Trail 161			2190	**0%**
Jim Thompson Trail 124			2190	**0%**
Jordan Trail 186			2190	**0%**
Little Horse Trail 61		10	2190	**0%**
Rupp Trail 204			2190	**0%**
Teacup Trail 183			2190	**0%**
Templeton Trail 156		6	2190	**0%**
Thunder Mountain Trail 165			2190	**0%**

Country Walkers, Inc. of Grand Canyon Expeditions, LLC
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

Recreation Use Unit (RUU)	Road / Trail Number	4x4 Rd	Hiking (Day-Use)	Actual Use Summary for each RUU	Annual Allocation Summary for each RUU	% Annual Allocation Used for each RUU
Broken Arrow	Broken Arrow Trail 125			**10**	**2190**	**0%**
	Little Horse Trail 61		10			
Cathedral	Bell Rock Pathway Trail 96		6	**22**	**2190**	**1%**
	Little Horse Trail 61		10			
	Templeton Trail 156		6			
Lower Schnebly	00153 (Schnebly Hill Rd)		6	**6**	**2190**	**0%**
Oak Creek Canyon	Huckaby Trail 161			**0**	**2190**	**0%**
Schnebly Rim	00153 (Schnebly Hill Rd)		6	**6**	**2190**	**0%**
Sedona	00153 (Schnebly Hill Rd)		6	**16**	**2190**	**1%**
	00633					
	Airport Loop Trail 210		10			
	Arizona Cypress Trail 203					
	Dawa Trail 188 (FR9586, 9586B)					
	Girdner Trail 162					
	09934 (Huckaby / Munds Wagon Trailhead)					
	Huckaby Trail 161					
	Jim Thompson Trail 124					
	Jordan Trail 186					
	Teacup Trail 183					
	Thunder Mountain Trail 165					
Soldier Pass	09904 to Teacup/Jordan Trail			**0**	**2190**	**0%**
	Jordan Trail 186					
	Teacup Trail 183					
Upper Loop	Airport Loop Trail 210		10	**10**	**2190**	**0%**
VOC	Templeton Trail 156		6	**6**	**2190**	**0%**
Windmill	Arizona Cypress Trail 203			**0**	**2190**	**0%**
	Cockscomb Trail 167 (FR9586, 9586A, 9586B)					
	Dawa Trail 188 (FR9586, 9586B)					
	Girdner Trail 162					
	Rupp Trail 204					

Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
Apache Maid Wildlife	15 Vehicles / day	15 veh / day x 365 days / yr = 5475 veh per yr
Stoneman Lake Jeep Tour	12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr
Cockscomb (1*)	Mixed -- Will Use 12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr
Seven Canyons (1*)	12 Vehicles / day; 2 VAOT	12 veh / day x 365 days / yr = 4380 veh per yr
Outlaw Trail (1*)	Mixed -- Will Use 12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr
Red Tank Jeep Tour	10 Vehicles / day	10 veh / day x 365 days / yr = 3650 veh per yr
House Mountain	15 Vehicles / day	15 veh / day x 365 days / yr = 5475 veh per yr
Mud Tanks	6 Vehicles / day	6 veh / day x 365 days / yr = 2190 veh per yr
Schnebly Hill -- Rim Run Extreme (1*)	12 Vehicles / day; 2 VAOT	12 veh / day x 365 days / yr = 4380 veh per yr
Mogollon Rim Run	12 Vehicles / day; 2 VAOT	12 veh / day x 365 days / yr = 4380 veh per yr
Vortex	Not on Operating Plan -- Will Use 12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

(1*) These Tour Routes have roads that are not within Restricted RUU's. For this analysis, the Allocation for these roads will be based on Restricted RUU allocation.

Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Apache Maid Wildlife	Jeep Scenic 4x4	NA	NA	NA	**69**	**144**	**107**	5475	2%
Stoneman Lake Jeep Tour		NA	NA	NA	0	0	**0**	4380	0%
Cockscomb		NA	NA	NA	0	0	**0**	4380	0%
Seven Canyons		NA	NA	NA	**68**	**180**	**124**	4380	3%
Outlaw Trail		NA	NA	NA	**260**	**284**	**272**	4380	6%
Red Tank Jeep Tour		NA	NA	NA	0	0	**0**	3650	0%
House Mountain		NA	NA	NA	0	0	**0**	5475	0%
Mud Tanks		NA	NA	NA	**2**	**18**	**10**	2190	0%
Schnebly Hill -- Rim Run Extreme		NA	NA	NA	**151**	**441**	**296**	4380	5%
Mogollon Rim Run	Jeep Scenic	NA	NA	NA	**234**	**663**	**449**	4380	8%
Vortex		NA	NA	NA	**30**	**67**	**49**	4380	1%
	TOTALS:	**0**	**0**	**0**	**814**	**1,797**	**497**	47,450	

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Jeep Scenic 4x4	809	38,690	2%
Jeep Scenic	497	8,760	6%

Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails

		Jeep Scenic 4x4														Jeep Scenic					
Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake Jeep Tour (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00009D	**X**												10	2190					**10**	**2190**	**0%**
00009E													10	2190					**10**	**2190**	**0%**
00080				0	4380														**0**	**4380**	**0%**
00120A	**X**										0	5475							**0**	**5475**	**0%**
00152							124											4380	**124**	**4380**	**3%**
00153 (Schnebly Hill Rd)															296	449		4380	**745**	**4380**	**17%**
00213				0	4380														**0**	**4380**	**0%**
00213A				0	4380														**0**	**4380**	**0%**
00213F	**X**	107	5475						0	3650									**107**	**9125**	**1%**
00229		107	5475																**107**	**5475**	**2%**
00229E		107	5475																**107**	**5475**	**2%**
00229F		107	5475																**107**	**5475**	**2%**
00525						0	124	272										4380	**396**	**4380**	**9%**
00525A	**X**					0												4380	**0**	**4380**	**0%**
00525C						0		272										4380	**272**	**4380**	**6%**
00525D						0	124	272										4380	**396**	**4380**	**9%**
00618									0	3650									**0**	**3650**	**0%**
00620		107	5475																**107**	**5475**	**2%**
00620A		107	5475																**107**	**5475**	**2%**
00620C		107	5475																**107**	**5475**	**2%**
00620D		107	5475																**107**	**5475**	**2%**
00620E		107	5475																**107**	**5475**	**2%**
Portions of 00620E = Apache Maid Trail 15		107	5475																**107**	**5475**	**2%**
00620F		107	5475																**107**	**5475**	**2%**
00620G		107	5475																**107**	**5475**	**2%**
00644		107	5475						0	3650									**107**	**9125**	**1%**
00644A		107	5475																**107**	**5475**	**2%**
00644B		107	5475																**107**	**5475**	**2%**
00644E		107	5475																**107**	**5475**	**2%**
00644G		107	5475																**107**	**5475**	**2%**
00644H									0	3650									**0**	**3650**	**0%**
00645A		107	5475						0	3650					296			4380	**403**	**13505**	**3%**
00647 (Rattlesnake)	**X**			0	4380										296			4380	**296**	**8760**	**3%**
00665				0	4380														**0**	**4380**	**0%**
00665A				0	4380														**0**	**4380**	**0%**
00665B				0	4380														**0**	**4380**	**0%**

Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails (cont.)

		Jeep Scenic 4x4														Jeep Scenic					
Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake Jeep Tour (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00689		107	5475						0	3650					296			4380	**403**	**13505**	**3%**
00689A		107	5475																**107**	**5475**	**2%**
00788																	49	4380	**49**	**4380**	**1%**
00788A																	49	4380	**49**	**4380**	**1%**
09206T	**X**												10	2190					**10**	**2190**	**0%**
09235	**X**												10	2190					**10**	**2190**	**0%**
09235A	**X**												10	2190					**10**	**2190**	**0%**
09235C	**X**												10	2190					**10**	**2190**	**0%**
09236C		107	5475																**107**	**5475**	**2%**
09236D		107	5475																**107**	**5475**	**2%**
09238M		107	5475																**107**	**5475**	**2%**
09238S		107	5475																**107**	**5475**	**2%**
09240A				0	4380														**0**	**4380**	**0%**
09240D				0	4380														**0**	**4380**	**0%**
09240G				0	4380														**0**	**4380**	**0%**
09240W		107	5475																**107**	**5475**	**2%**
09242E				0	4380														**0**	**4380**	**0%**
09242H		107	5475																**107**	**5475**	**2%**
09243E				0	4380														**0**	**4380**	**0%**
09243H		107	5475																**107**	**5475**	**2%**
09244E				0	4380														**0**	**4380**	**0%**
09247C													10	2190					**10**	**2190**	**0%**
09247D													10	2190					**10**	**2190**	**0%**
09248D		107	5475																**107**	**5475**	**2%**
09248G		107	5475																**107**	**5475**	**2%**
09513	**X**					0												4380	**0**	**4380**	**0%**
09532						0												4380	**0**	**4380**	**0%**
09543						0												4380	**0**	**4380**	**0%**
09549	**X**					0		272										4380	**272**	**4380**	**6%**
09549A						0		272										4380	**272**	**4380**	**6%**
09549B	**X**					0		272										4380	**272**	**4380**	**6%**
09549E						0		272										4380	**272**	**4380**	**6%**
09549F						0		272										4380	**272**	**4380**	**6%**
09549G						0		272										4380	**272**	**4380**	**6%**
09549H						0		272										4380	**272**	**4380**	**6%**
09549M						0		272										4380	**272**	**4380**	**6%**
09549N						0		272										4380	**272**	**4380**	**6%**

Destination Marketing Group, LLC, dba Arizona Safari Jeep Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails (cont.)

		Jeep Scenic 4x4														Jeep Scenic					
Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake Jeep Tour (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
09551	**X**					0		272										4380	**272**	**4380**	**6%**
09551B						0												4380	**0**	**4380**	**0%**
09552						0		272										4380	**272**	**4380**	**6%**
09553						0												4380	**0**	**4380**	**0%**
09554						0												4380	**0**	**4380**	**0%**
09555						0												4380	**0**	**4380**	**0%**
09558						0												4380	**0**	**4380**	**0%**
09559	**X**					0	124	272										4380	**396**	**4380**	**9%**
09559A						0	124	272										4380	**396**	**4380**	**9%**
09573							124	272										4380	**396**	**4380**	**9%**
09573C							124	272										4380	**396**	**4380**	**9%**
09573F							124											4380	**124**	**4380**	**3%**
09574						0	124											4380	**124**	**4380**	**3%**
09952	**X**										0	5475							**0**	**5475**	**0%**
09952A											0	5475							**0**	**5475**	**0%**
09952B	**X**										0	5475							**0**	**5475**	**0%**
09952C											0	5475							**0**	**5475**	**0%**
09953											0	5475							**0**	**5475**	**0%**
09954											0	5475							**0**	**5475**	**0%**
09957											0	5475							**0**	**5475**	**0%**
09958											0	5475							**0**	**5475**	**0%**
09960	**X**										0	5475							**0**	**5475**	**0%**
09960A	**X**										0	5475							**0**	**5475**	**0%**
09965											0	5475							**0**	**5475**	**0%**

Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Jeep Scenic 4x4														Jeep Scenic					
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Apache Maid	00229		107	5475																**403**	**17885**	**2%**
	00229E																					
	00229F																					
	00620																					
	00620A																					
	00620C																					
	00620D																					
	00620E																					
	Portions of 00620E = Apache Maid Trail 15																					
	00620F																					
	00620G																					
	00644A																					
	00644B																					
	00644E																					
	00644G																					
	00689A																					
	09236C																					
	09236D																					
	09238M																					
	09238S																					
	09240W																					
	09242H																					
	09243H																					
	09248D																					
	09248G																					
	00213F	**X**																				
	00644									0	3650											
	00689															296			4380			
	00647 (Rattlesnake)	**X**			0	4380																
	00080																					
	00213																					
	00213A																					
	00665																					
	00665A																					
	00665B																					
	09240A																					
	09240D																					
	09240G																					
	09242E																					
	09243E																					
	09244E																					
	00644H									0	3650											

Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Jeep Scenic 4x4														Jeep Scenic					
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00618									0	3650					296			4380	**403**	**13505**	**3%**
	00644H																					
	00645A		107	5475																		
	00689																					
Beaverhead	00120A	X										0	5475							**0**	**5475**	**0%**
	09952	X																				
	09952C																					
Dry Creek	00152							124											4380	**124**	**4380**	**3%**
Fossil Creek Road	00009D	X												10	2190					**10**	**2190**	**0%**
Lower Schnebly	00153 (Schnebly Hill Rd)															296	449		4380	**745**	**4380**	**17%**
Mud Tanks	00009D	X												10	2190					**10**	**2190**	**0%**
	00009E																					
	09206T	X																				
	09235	X																				
	09235A	X																				
	09235C	X																				
	09247C																					
	09247D																					
Red Cliffs	00525						0	124	272										4380	**396**	**4380**	**9%**
	00525D																					
	00525C																					
	09549	X																				
	09549B	X																				
	09551	X																				
Savannah House Mountain	00120A	X										0	5475							**0**	**5475**	**0%**
	09952	X																				
	09952A																					
	09952B	X																				
	09952C																					
	09953																					
	09954																					
	09957																					
	09958																					
	09960	X																				
	09960A	X																				
	09965																					
Schnebly Rim	00153 (Schnebly Hill Rd)															296	449		4380	**745**	**4380**	**17%**
Sedona	00153 (Schnebly Hill Rd)															296	449		4380	**745**	**4380**	**17%**
Upper Loop	00788																	49	4380	**49**	**4380**	**1%**
	00788A																					

Destination Marketing Group, LLC dba Arizona Safari Jeep Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Jeep Scenic 4x4															Jeep Scenic					
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Windmill	00525A	X					0		272										4380	**396**	**4380**	**9%**
	09513	X																				
	09532																					
	09543																					
	09551B																					
	09553																					
	09554																					
	09555																					
	09558																					
	00525C																					
	09549	X																				
	09549A																					
	09549B	X																				
	09549E																					
	09549F																					
	09549G																					
	09549H																					
	09549M																					
	09549N																					
	09551	X																				
	09552																					
	09559	X						124														
	09559A																					
	00525																					
	00525D																					
	09573																					
	09573C																					
	09573F																					
	09574						0															

Destination Marketing Group, LLC dba Native American Journeys
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
Apache Maid Wildlife	15 Vehicles / day	15 veh / day x 365 days / yr = 5475 veh per yr
Stoneman Lake Jeep Tour	12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr
Cockscomb (1*)	Mixed -- Will Use 12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr
Seven Canyons (1*)	12 Vehicles / day; 2 VAOT	12 veh / day x 365 days / yr = 4380 veh per yr
Outlaw Trail (1*)	Mixed -- Will Use 12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr
Red Tank Jeep Tour	10 Vehicles / day	10 veh / day x 365 days / yr = 3650 veh per yr
House Mountain	15 Vehicles / day	15 veh / day x 365 days / yr = 5475 veh per yr
Mud Tanks	6 Vehicles / day	6 veh / day x 365 days / yr = 2190 veh per yr
Schnebly Hill -- Rim Run Extreme (1*)	12 Vehicles / day; 2 VAOT	12 veh / day x 365 days / yr = 4380 veh per yr
Mogollon Rim Run	12 Vehicles / day; 2 VAOT	12 veh / day x 365 days / yr = 4380 veh per yr
Vortex	Not on Operating Plan -- Will Use 12 Vehicles / day	12 veh / day x 365 days / yr = 4380 veh per yr

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

(1*) These Tour Routes have roads that are not within Restricted RUU's. For this analysis, the Allocation for these roads will be based on Restricted RUU allocation.

Destination Marketing Group, LLC dba Native American Journeys
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Apache Maid Wildlife	Jeep Scenic 4x4	NA	NA	NA	0	**1**	**1**	5475	0%
Stoneman Lake Jeep Tour		NA	NA	NA	0	0	**0**	4380	0%
Cockscomb		NA	NA	NA	0	0	**0**	4380	0%
Seven Canyons		NA	NA	NA	**1**	**1**	**1**	4380	0%
Outlaw Trail		NA	NA	NA	0	0	**0**	4380	0%
Red Tank Jeep Tour		NA	NA	NA	0	0	**0**	3650	0%
House Mountain		NA	NA	NA	0	0	**0**	5475	0%
Mud Tanks		NA	NA	NA	0	0	**0**	2190	0%
Schnebly Hill -- Rim Run Extreme		NA	NA	NA	**1**	**6**	**4**	4380	0%
Mogollon Rim Run	Jeep Scenic	NA	NA	NA	**7**	**28**	**18**	4380	0%
Vortex		NA	NA	NA	**1**	**1**	**1**	4380	0%
	TOTALS:	**0**	**0**	**0**	**10**	**37**	**19**	47,450	

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Jeep Scenic 4x4	5	38,690	0.01%
Jeep Scenic	19	8,760	0.2%

Destination Marketing Group, LLC dba Native American Journeys
Actual Use & Annual Allocation Summary -- Tour Roads / Trails

		Jeep Scenic 4x4														Jeep Scenic					
Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake Jeep Tour (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00009D	**X**												0	2190					**0**	**2190**	**0%**
00009E													0	2190					**0**	**2190**	**0%**
00080				0	4380														**0**	**4380**	**0%**
00120A	**X**										0	5475							**0**	**5475**	**0%**
00152							1											4380	**1**	**4380**	**0%**
00153 (Schnebly Hill Rd)															4	18		4380	**22**	**4380**	**1%**
00213				0	4380														**0**	**4380**	**0%**
00213A				0	4380														**0**	**4380**	**0%**
00213F	**X**	1	5475						0	3650									**1**	**9125**	**0%**
00229		1	5475																**1**	**5475**	**0%**
00229E		1	5475																**1**	**5475**	**0%**
00229F		1	5475																**1**	**5475**	**0%**
00525						0	1	0										4380	**1**	**4380**	**0%**
00525A	**X**					0												4380	**0**	**4380**	**0%**
00525C						0		0										4380	**0**	**4380**	**0%**
00525D						0	1	0										4380	**1**	**4380**	**0%**
00618									0	3650									**0**	**3650**	**0%**
00620		1	5475																**1**	**5475**	**0%**
00620A		1	5475																**1**	**5475**	**0%**
00620C		1	5475																**1**	**5475**	**0%**
00620D		1	5475																**1**	**5475**	**0%**
00620E		1	5475																**1**	**5475**	**0%**
Portions of 00620E = Apache Maid Trail 15		1	5475																**1**	**5475**	**0%**
00620F		1	5475																**1**	**5475**	**0%**
00620G		1	5475																**1**	**5475**	**0%**
00644		1	5475						0	3650									**1**	**9125**	**0%**
00644A		1	5475																**1**	**5475**	**0%**
00644B		1	5475																**1**	**5475**	**0%**
00644E		1	5475																**1**	**5475**	**0%**
00644G		1	5475																**1**	**5475**	**0%**
00644H									0	3650									**0**	**3650**	**0%**
00645A		1	5475						0	3650					4			4380	**5**	**13505**	**0%**
00647 (Rattlesnake)	**X**			0	4380										4			4380	**4**	**8760**	**0%**
00665				0	4380														**0**	**4380**	**0%**
00665A				0	4380														**0**	**4380**	**0%**
00665B				0	4380														**0**	**4380**	**0%**

Destination Marketing Group, LLC dba Native American Journeys
Actual Use & Annual Allocation Summary -- Tour Roads / Trails (cont.)

		Jeep Scenic 4x4														Jeep Scenic					
Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake Jeep Tour (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00689		1	5475						0	3650					4			4380	**5**	**13505**	**0%**
00689A		1	5475																**1**	**5475**	**0%**
00788																	1	4380	**1**	**4380**	**0%**
00788A																	1	4380	**1**	**4380**	**0%**
09206T	**X**												0	2190					**0**	**2190**	**0%**
09235	**X**												0	2190					**0**	**2190**	**0%**
09235A	**X**												0	2190					**0**	**2190**	**0%**
09235C	**X**												0	2190					**0**	**2190**	**0%**
09236C		1	5475																**1**	**5475**	**0%**
09236D		1	5475																**1**	**5475**	**0%**
09238M		1	5475																**1**	**5475**	**0%**
09238S		1	5475																**1**	**5475**	**0%**
09240A				0	4380														**0**	**4380**	**0%**
09240D				0	4380														**0**	**4380**	**0%**
09240G				0	4380														**0**	**4380**	**0%**
09240W		1	5475																**1**	**5475**	**0%**
09242E				0	4380														**0**	**4380**	**0%**
09242H		1	5475																**1**	**5475**	**0%**
09243E				0	4380														**0**	**4380**	**0%**
09243H		1	5475																**1**	**5475**	**0%**
09244E				0	4380														**0**	**4380**	**0%**
09247C													0	2190					**0**	**2190**	**0%**
09247D													0	2190					**0**	**2190**	**0%**
09248D		1	5475																**1**	**5475**	**0%**
09248G		1	5475																**1**	**5475**	**0%**
09513	**X**					0												4380	**0**	**4380**	**0%**
09532						0												4380	**0**	**4380**	**0%**
09543						0												4380	**0**	**4380**	**0%**
09549	**X**					0		0										4380	**0**	**4380**	**0%**
09549A						0		0										4380	**0**	**4380**	**0%**
09549B	**X**					0		0										4380	**0**	**4380**	**0%**
09549E						0		0										4380	**0**	**4380**	**0%**
09549F						0		0										4380	**0**	**4380**	**0%**
09549G						0		0										4380	**0**	**4380**	**0%**
09549H						0		0										4380	**0**	**4380**	**0%**
09549M						0		0										4380	**0**	**4380**	**0%**
09549N						0		0										4380	**0**	**4380**	**0%**

Destination Marketing Group, LLC, dba Arizona Safari Jeep Tours
Actual Use & Annual Allocation Summary -- Tour Roads / Trails (cont.)

		Jeep Scenic 4x4														Jeep Scenic					
Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake Jeep Tour (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
09551	**X**					0		0										4380	**0**	**4380**	**0%**
09551B						0												4380	**0**	**4380**	**0%**
09552						0		0										4380	**0**	**4380**	**0%**
09553						0												4380	**0**	**4380**	**0%**
09554						0												4380	**0**	**4380**	**0%**
09555						0												4380	**0**	**4380**	**0%**
09558						0												4380	**0**	**4380**	**0%**
09559	**X**					0	1	0										4380	**1**	**4380**	**0%**
09559A						0	1	0										4380	**1**	**4380**	**0%**
09573							1	0										4380	**1**	**4380**	**0%**
09573C							1	0										4380	**1**	**4380**	**0%**
09573F							1											4380	**1**	**4380**	**0%**
09574						0	1											4380	**1**	**4380**	**0%**
09952	**X**										0	5475							**0**	**5475**	**0%**
09952A											0	5475							**0**	**5475**	**0%**
09952B	**X**										0	5475							**0**	**5475**	**0%**
09952C											0	5475							**0**	**5475**	**0%**
09953											0	5475							**0**	**5475**	**0%**
09954											0	5475							**0**	**5475**	**0%**
09957											0	5475							**0**	**5475**	**0%**
09958											0	5475							**0**	**5475**	**0%**
09960	**X**										0	5475							**0**	**5475**	**0%**
09960A	**X**										0	5475							**0**	**5475**	**0%**
09965											0	5475							**0**	**5475**	**0%**

Destination Marketing Group, LLC dba Native American Journeys
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Jeep Scenic 4x4														Jeep Scenic					
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Apache Maid	00229		1	5475																**5**	**17885**	**0%**
	00229E																					
	00229F																					
	00620																					
	00620A																					
	00620C																					
	00620D																					
	00620E																					
	Portions of 00620E = Apache Maid Trail 15																					
	00620F																					
	00620G																					
	00644A																					
	00644B																					
	00644E																					
	00644G																					
	00689A																					
	09236C																					
	09236D																					
	09238M																					
	09238S																					
	09240W																					
	09242H																					
	09243H																					
	09248D																					
	09248G																					
	00213F	**X**																				
	00644									0	3650											
	00689															4			4380			
	00647 (Rattlesnake)	**X**			0	4380																
	00080																					
	00213																					
	00213A																					
	00665																					
	00665A																					
	00665B																					
	09240A																					
	09240D																					
	09240G																					
	09242E																					
	09243E																					
	09244E																					
	00644H									0	3650											

Destination Marketing Group, LLC dba Native American Journeys
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Jeep Scenic 4x4														Jeep Scenic					
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00618									0	3650					4			4380	**5**	**13505**	**0%**
	00644H																					
	00645A		1	5475																		
	00689																					
Beaverhead	00120A	X										0	5475							**0**	**5475**	**0%**
	09952	X																				
	09952C																					
Dry Creek	00152							1											4380	**1**	**4380**	**0%**
Fossil Creek Road	00009D	X												0	2190					**0**	**2190**	**0%**
Lower Schnebly	00153 (Schnebly Hill Rd)															4	18		4380	**22**	**4380**	**1%**
Mud Tanks	00009D	X												0	2190					**0**	**2190**	**0%**
	00009E																					
	09206T	X																				
	09235	X																				
	09235A	X																				
	09235C	X																				
	09247C																					
	09247D																					
Red Cliffs	00525						0	1	0										4380	**1**	**4380**	**0%**
	00525D																					
	00525C																					
	09549	X																				
	09549B	X																				
	09551	X																				
Savannah House Mountain	00120A	X										0	5475							**0**	**5475**	**0%**
	09952	X																				
	09952A																					
	09952B	X																				
	09952C																					
	09953																					
	09954																					
	09957																					
	09958																					
	09960	X																				
	09960A	X																				
	09965																					
Schnebly Rim	00153 (Schnebly Hill Rd)															4	18		4380	**22**	**4380**	**1%**
Sedona	00153 (Schnebly Hill Rd)															4	18		4380	**22**	**4380**	**1%**
Upper Loop	00788																	1	4380	**1**	**4380**	**0%**
	00788A																					

Destination Marketing Group, LLC dba Native American Journeys
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

			Jeep Scenic 4x4															Jeep Scenic					
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Apache Maid Wildlife (Actual Use)	Apache Maid Wildlife (Allocation)	Stoneman Lake Jeep Tour (Actual Use)	Stoneman Lake (Allocation)	Cockscomb (Actual Use -- Restricted RUU Allocation)	Seven Canyons (Actual Use -- Restricted RUU Allocation)	Outlaw Trail (Actual Use -- Restricted RUU Allocation)	Red Tank Jeep Tour (Actual Use)	Red Tank Jeep Tour (Allocation)	House Mountain (Actual Use)	House Mountain (Allocation)	Mud Tanks (Actual Use)	Mud Tanks (Allocation)	Schnebly Hill -- Rim Run Extreme (Actual Use -- Restricted RUU Allocation)	Mogollon Rim Run (Actual Use -- Restricted RUU Allocation)	Vortex (Actual Use -- Restricted RUU Allocation)	Restricted RUU Allocation	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Windmill	00525A	X					0		0										4380	**1**	**4380**	**0%**
	09513	X																				
	09532																					
	09543																					
	09551B																					
	09553																					
	09554																					
	09555																					
	09558																					
	00525C																					
	09549	X																				
	09549A																					
	09549B	X																				
	09549E																					
	09549F																					
	09549G																					
	09549H																					
	09549M																					
	09549N																					
	09551	X																				
	09552																					
	09559	X						1														
	09559A																					
	00525																					
	00525D																					
	09573																					
	09573C																					
	09573F																					
	09574						0															

Grand Canyon ATV Adventures, Inc. dba
Sedona ATV Adventures & FAT CAT ATV Tours

Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
Tour 1 - Beginner 1 hour Tour	Up to 7 ATV's per Guide Use does not occur within restricted RUU's Assumption: 7 ATV's at one time every hour x 8 hr day x 365 days / yr = 20440 ATV's per yr	20440
Tour 2 - Narrated 2 hour Tour		
Tour 3 - Instructional 3 hr Tour		
Tour 4		
Tour 7		
Tour 8		
Tour 9		

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail.
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC

Grand Canyon ATV Adventures, Inc. dba Sedona ATV Adventures & FAT CAT ATV Tours
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Tour 1 - Beginner 1 hr Tour	ATV	NA	NA	NA	**7**	0	**7**	20440	0%
Tour 2 - Narrated 2 hr Tour		NA	NA	NA	**205**	0	**205**		1%
Tour 3 - Instructional 3 hr Tour		NA	NA	NA	**2**	0	**2**		0%
Tour 4		NA	NA	NA	**10**	0	**10**		0%
Tour 7		NA	NA	NA	**644**	**1,976**	**1,310**		6%
Tour 8		NA	NA	NA	**3**	**27**	**15**		0%
Tour 9		NA	NA	NA	**34**	**1,157**	**596**		3%
	TOTALS:				**905**	**3,160**	**2,145**	20,440	

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
ATV	2,145	20,440	10%

Grand Canyon ATV Adventures, Inc. dba
Sedona ATV Adventures & FAT CAT ATV Tours
Actual Use & Annual Allocation Summary -- Tour Roads

	ATV									
Road Number	Tour 1 - Beginner 1 hr Tour	Tour 2 - Narrated 2 hr Tour	Tour 3 - Instructional 3 hr Tour	Tour 4	Tour 7	Tour 8	Tour 9	**Actual Use Summary for each Road**	**Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
00131			2	10			596	608	20440	**3%**
00258			2	10			596	608		**3%**
00525	7	205	2	10	1310	15	596	2,145		**10%**
00525A	7	205			1310	15	596	2,133		**10%**
00525C	7	205			1310	15	596	2,133		**10%**
00761	7	205	2	10	1310	15	596	2,145		**10%**
00761B	7	205	2	10	1310	15	596	2,145		**10%**
09513		205	2			15		222		**1%**
09549		205						205		**1%**
09951			2					2		**0%**
09951B			2					2		**0%**
09951C			2					2		**0%**

Grand Canyon ATV Adventures, Inc. dba
Sedona ATV Adventures & FAT CAT ATV Tours

Actual Use & Annual Allocation Summary -- Tour Roads within RUU's

		ATV									
Recreation Use Unit (RUU)	Road Number	Tour 1 - Beginner 1 hr Tour	Tour 2 - Narrated 2 hr Tour	Tour 3 - Instructional 3 hr Tour	Tour 4	Tour 7	Tour 8	Tour 9	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Skeleton Bone	00131			2	10			596	**2,145**	**20440**	**10%**
	00258										
	00761	7	205			1310	15				
	00761B										
	09513										
	09951										
	09951B										
	09951C										
Windmill	00525A	7	205			1310	15	596	**2,145**	**20440**	**10%**
	00525C										
	00525			2	10						
	00761										
	00761B										
	09513										
	09549										

Lutz Adventure Tours, LLC dba Arizona ATV Adventures
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
West Sedona Valley	No Allocation Listed and Use does not occur within restricted RUU's. This Analysis will assume the same allocation as Grand Canyon ATV Adventures Up to 7 ATV's per Guide Assumption: 7 ATV's at one time every hour x 8 hr day x 365 days / yr = 20440 ATV's per yr	20440

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail.
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC

Lutz Adventure Tours, LLC dba Arizona ATV Adventures
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
West Sedona Valley	ATV	NA	NA	NA	**881**	**1,222**	**1,052**	20,440	5%
	TOTALS:				**881**	**1,222**	**1,052**	20,440	

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
ATV	1,052	20,440	5%

Lutz Adventure Tours, LLC dba Arizona ATV Adventures
Actual Use & Annual Allocation Summary -- Tour Roads

Road Number	ATV West Sedona Valley Actual Use Summary for each Road	**West Sedona Valley Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
00131	1052		**5%**
00258	1052		**5%**
00258A	1052		**5%**
00525	1052		**5%**
00525A	1052		**5%**
00525C	1052		**5%**
00525D	1052		**5%**
00761	1052		**5%**
00761A	1052		**5%**
00761B	1052		**5%**
00761D	1052		**5%**
09513	1052		**5%**
09513A	1052		**5%**
09513B	1052		**5%**
09517A	1052		**5%**
09518	1052		**5%**
09518A	1052		**5%**
09518B	1052		**5%**
09518C	1052		**5%**
09518D	1052		**5%**
09518E	1052		**5%**
09518F	1052		**5%**
09519	1052		**5%**
09520	1052		**5%**
09524	1052		**5%**
09524B	1052		**5%**
09524C	1052		**5%**
09524E	1052		**5%**
09524F	1052		**5%**
09524N	1052		**5%**
09524P	1052		**5%**
09525	1052		**5%**
09532	1052		**5%**
09536	1052		**5%**
09536C	1052		**5%**
09536D	1052		**5%**
09536E	1052		**5%**
09536G	1052		**5%**
09538	1052		**5%**
09538A	1052	**20440**	**5%**
09538B	1052		**5%**
09538C	1052		**5%**
09538D	1052		**5%**
09539	1052		**5%**
09540	1052		**5%**
09541	1052		**5%**
09541A	1052		**5%**
09541B	1052		**5%**
09542C	1052		**5%**
09543	1052		**5%**
09544A	1052		**5%**
09546	1052		**5%**
09546A	1052		**5%**
09547	1052		**5%**
09548	1052		**5%**
09548A	1052		**5%**
09548B	1052		**5%**
09548C	1052		**5%**
09548D	1052		**5%**
09548E	1052		**5%**
09548F	1052		**5%**
09549	1052		**5%**
09549A	1052		**5%**
09549B	1052		**5%**
09549E	1052		**5%**
09549F	1052		**5%**
09549G	1052		**5%**
09549H	1052		**5%**
09549M	1052		**5%**
09549N	1052		**5%**
09551	1052		**5%**
09552	1052		**5%**
09553	1052		**5%**
09554	1052		**5%**
09558	1052		**5%**
09559	1052		**5%**
09559A	1052		**5%**
09571	1052		**5%**
09571B	1052		**5%**
09574	1052		**5%**

Lutz Adventure Tours LLC, dba Arizona ATV Adventures
Actual Use & Annual Allocation Summary -- Tour Roads within RUU's

Recreation Use Unit (RUU)	Road Number	Actual Use Summary for each RUU	Annual Allocation Summary for each RUU	% Annual Allocation Used for each RUU
Red Cliffs	00525	1052	20440	5%
	00525D			
	09551			
Skeleton Bone	00131	1052	20440	5%
	00258			
	00258A			
	00761			
	00761B			
	00761D			
	09513			
	09513A			
	09513B			
	09517A			
	09518			
	09518A			
	09518B			
	09518C			
	09518D			
	09518E			
	09518F			
	09519			
	09520			
	09524			
	09524B			
	09524C			
	09524E			
	09524N			
	09524P			
	09525			
	09536			
	09536C			
	09536D			
	09536E			
	09536G			
	09538			
	09538A			
	09538B			
	09538C			
	09538D			
	09539			
	09540			
	09541			
	09541A			
	09541B			
	09544A			
	09571			

Lutz Adventure Tours, LLC dba Arizona ATV Adventures
Actual Use & Annual Allocation Summary -- Tour Roads within RUU's (cont.)

Recreation Use Unit (RUU)	Road Number	Actual Use Summary for each RUU	Annual Allocation Summary for each RUU	% Annual Allocation Used for each RUU
Windmill	00525	1052	20440	5%
	00525A			
	00525C			
	00525D			
	00761			
	00761A			
	00761B			
	09513			
	09524			
	09524F			
	09524N			
	09525			
	09532			
	09541A			
	09542C			
	09543			
	09544A			
	09546			
	09546A			
	09547			
	09548			
	09548A			
	09548B			
	09548C			
	09548D			
	09548E			
	09548F			
	09549			
	09549A			
	09549B			
	09549E			
	09549F			
	09549G			
	09549H			
	09549M			
	09549N			
	09551			
	09552			
	09553			
	09554			
	09558			
	09559			
	09559A			
	09571			
	09571B			
	09574			

M Diamond Trailrides, LLC
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Guided Horseback Rides	Use does not occur within restricted RUU's. One Guide per six riders	[6 riders (at one time every hour) x 8 hr per day = 48 riders per day divided by 6 = 8 parties per day] x 365 days / yr = 2920 riders per yr

*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC

The actual use was reported as number of riders, therefore the assumption is one person riding one horse on a trail equates to one vehicle

M Diamond Trailrides, LLC
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Guided Horseback Rides 1 hr	Equestrian (Day-Use)	NA	NA	NA	**298**	**1,375**	**837**	2,920	29%
Guided Horseback Rides 2 hr	Equestrian (Day-Use)	NA	NA	NA	**120**	**462**	**291**		10%
	TOTALS:				**418**	**1,837**	**1,128**	0	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Equestrian (Day-Use)	1,128	2,920	39%

Note: Actual use for number of riders per tour per day was divided by 6 to generate the total number of parties per tour per day. This was then summarized into number of parties per year.

M Diamond Trailrides, LLC
Actual Use & Annual Allocation Summary -- Tour Roads and RUUs

Road Number	Guided Horseback Rides (1 hr & 2 hr) Actual Use Summary for each Road	**Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
00618	1128	2920	39%
09201E	1128		
09201H	1128		

Recreation Use Unit (RUU)	Road Number	Guided Horseback Rides (1 hr & 2 hr) Actual Use Summary for each RUU	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00618	1128	2920	39%
Wickiup	00618	1128	2920	39%
	09201E			
	09201H			

Sedona MTB Adventures, LLC
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
00153 (Schnebly Hill Rd)	Restricted RUU Allocation Listed Below ***	2190
Airport Loop Trail 210		2190
Arizona Cypress Trail 203		2190
Baldwin Trail 191		2190
Bandit Trail 209		2190
Bell Rock Pathway Trail 96		2190
Broken Arrow Trail 125		2190
Carroll Canyon Trail 207		2190
Cockscomb Trail 167 (FR9586, 9586A, 9586B)		2190
Dawa Trail 188 (FR9586, 9586B)		2190
Deadmans Pass Trail 110		2190
Fay Canyon Trail 53		2190
Girdner Trail 162		2190
Herkenham Trail 202		2190
HT Trail 197		2190
Huckaby Trail 161		2190
Jim Thompson Trail 124		2190
Jordan Trail 186		2190
Little Horse Trail 61		2190
Munds Wagon Trail 78		2190
Mystic Trail 157		2190
Old Post Trail 206		2190
Ridge Trail 208		2190
Rupp Trail 204 (1*)		2190
Teacup Trail 183		2190
Templeton Trail 156		2190
Thunder Mountain Trail 165		2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking / biking on a trail

(1*) These Trails are not within Restricted RUU's. For this analysis, the Allocation for these trails will be based on Restricted RUU allocation.

Sedona MTB Adventures, LLC
Actual Annual Use 2002 - 2006

Tour Packages	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Bell Rock Pathway		NA	NA	NA	**11**	**29**	**20**	2190	1%
Bell Rock Pathway, Templeton Trail		NA	NA	NA	**3**	**14**	**9**	2190	0%
Bell Rock Pathway, Templeton Trail, Baldwin, (Upper & Lower)		NA	NA	NA	**11**	**26**	**19**	2190	1%
Baldwin Lower, Verde Valley School Rd		NA	NA	NA	**0**	**2**	**2**	2190	0%
Bell Rock Pathway, Templeton, Baldwin, HT		NA	NA	NA	**0**	**1**	**1**	2190	0%
Bell Rock Pathway, Templeton, HT		NA	NA	NA	**0**	**24**	**24**	2190	1%
Bell Rock Pathway, Templeton, HT, Little Horse		NA	NA	NA	**0**	**5**	**5**	2190	0%
Bell Rock Pthwy, Templeton, HT, Little Horse, Mystic, Broken Arrow		NA	NA	NA	**0**	**7**	**7**	2190	0%
Bell Rock Pathway, Templeton Trail, Baldwin Upper, Little Horse, Mystic, Broken Arrow		NA	NA	NA	**0**	**1**	**1**	2190	0%
Bell Rock Pathway, Templeton Trail, Baldwin Lower, Little Horse, Mystic, Broken Arrow		NA	NA	NA	**0**	**1**	**1**	2190	0%

Sedona MTB Adventures, LLC
Actual Annual Use 2002 - 2006 (cont.)

Tour Packages	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Bell Rock Pathway, Templeton Trail, Baldwin Lower, Upper RR Loop, Herkenham		NA	NA	NA	**0**	**1**	**1**	2190	0%
Bell Rock Pathway, Little Horse		NA	NA	NA	**4**	**1**	**3**	2190	0%
Bell Rock Pathway, Little Horse, Broken Arrow		NA	NA	NA	**1**	**0**	**1**	2190	0%
Bell Rock Pathway, Little Horse, Broken Arrow, Mystic		NA	NA	NA	**2**	**2**	**2**	2190	0%
Munds Wagon, Huckaby		NA	NA	NA	**0**	**4**	**4**	2190	0%
Baldwin Lower, Carroll Canyon, Tea Cup, Airport, Old Post		NA	NA	NA	**1**	**0**	**1**	2190	0%
Jim Thompson, Jordan		NA	NA	NA	**1**	**2**	**2**	2190	0%
Jim Thompson, Jordan, Tea Cup, Thunder, Airport, Bandit, Old Post		NA	NA	NA	**0**	**1**	**1**	2190	0%
Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lower		NA	NA	NA	**0**	**1**	**1**	2190	0%
Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lower, Airport/Bandit		NA	NA	NA	**0**	**1**	**1**	2190	0%
Jim Thmpsn, Jordan, Ridge-Carroll, Baldwin Lwr, Airport/Bandit, Tea Cup		NA	NA	NA	**0**	**1**	**1**	2190	0%

Sedona MTB Adventures, LLC
Actual Annual Use 2002 - 2006 (cont.)

Tour Packages	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Baldwin Lower, Carroll Canyon, Thunder, Girdner, AZ Cypress, Herkenham		NA	NA	NA	**0**	**1**	**1**	2190	0%
Baldwin, Carrol Canyon, Ridge, Old Post, Herkenham		NA	NA	NA	**0**	**2**	**2**	2190	0%
Cockscomb, Girdner, AZ Cypress, Deadmans Pass		NA	NA	NA	**0**	**5**	**5**	2190	0%
Munds Wagon, Schnebly Hill Road		NA	NA	NA	**0**	**4**	**4**	2190	0%
	TOTALS:				34	136	114	54,750	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Mountain Biking	114	54,750	0.2%

Sedona MTB Adventures, LLC

Actual Use & Annual Allocation Summary -- Tour Roads / Trails

	Mountain Biking Tour Packages																											
Road / Trail Number	Bell Rock Pathway	Bell Rock Pthwy, Templeton	Bell Rock Pathway, Templeton Trl, Baldwin, (Upper & Lower)	Baldwin Lower, V V School Rd	Bell Rock Pathway, Templeton, Baldwin, HT	Bell Rock Pathway, Templeton, HT	Bell Rock Pthwy, Templeton, HT, Little Horse	Bell Rock Pthwy, Templeton, HT, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton Trail, Baldwin Upper, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton Trail, Baldwin Lower, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton, Baldwin Lower, Upper RR Loop, Herkenham	Bell Rock Pthwy, Little Horse	Bell Rock Pathway, Little Horse, Broken Arrow	Bell Rock Pathway, Little Horse, Broken Arrow, Mystic	Munds Wagon, Huckaby	Baldwin Lwr, Carroll Cyn, Tea Cup, Airport, Old Post	Jim Thompson, Jordan	Jim Thompson, Jordan, Tea Cup, Thunder, Airport, Bandit, Old Post	Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lwr	Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lower, Airport/Bandit	Jim Thmpsn, Jordan, Ridge-Carroll, Baldwin Lwr, Airport/Bandit, Tea Cup	Baldwin Lower, Carroll Canyon, Thunder, Girdner, AZ Cypress, Herkenham	Baldwin, Carrol Canyon, Ridge, Old Post, Herkenham	Cockscomb, Girdner, AZ Cypress, Deadmans Pass	Munds Wagon, Schnebly Hill	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00153 (Schnebly Hill Rd)															4										4	**8**	**2190**	**0%**
00179F (Broken Arrow)								7	1	1			1	2												**12**	**2190**	**1%**
00633																	2	1	1	1	1					**6**	**2190**	**0%**
09904 to Teacup/Jordan Trail																		1			1					**2**	**2190**	**0%**
09934 (Huckaby / Munds Wagon Trailhead)															4										4	**8**	**2190**	**0%**
Airport Loop Trail 210																1		1		1	1					**4**	**2190**	**0%**
Arizona Cypress Trail 203																						1		5		**6**	**2190**	**0%**
Baldwin Trail 191			19	2	1				1	1	1					1			1	1	1	1	2			**32**	**2190**	**1%**
Bandit Trail 209																		1		1	1					**3**	**2190**	**0%**
Bell Rock Pathway Trail 96	20	9	19		1	24	5	7	1	1	1	3	1	2												**94**	**2190**	**4%**
Broken Arrow Trail 125								7	1	1			1	2												**12**	**2190**	**1%**
Carroll Canyon Trail 207																1			1	1	1	1	2			**7**	**2190**	**0%**
Cockscomb Trail 167 (FR9586, 9586A, 9586B)																								5		**5**	**2190**	**0%**
Dawa Trail 188 (FR9586, 9586B)																										**0**	**2190**	**0%**
Deadmans Pass Trail 110																								5		**5**	**2190**	**0%**
Fay Canyon Trail 53																										**0**	**2190**	**0%**
Girdner Trail 162																						1		5		**6**	**2190**	**0%**
Herkenham Trail 202											1											1	2			**4**	**2190**	**0%**
HT Trail 197					1	24	5	7																		**37**	**2190**	**2%**
Huckaby Trail 161															4											**4**	**2190**	**0%**
Jim Thompson Trail 124																	2	1	1	1	1					**6**	**2190**	**0%**
Jordan Trail 186																	2	1	1	1	1					**6**	**2190**	**0%**
Little Horse Trail 61							5	7	1	1		3	1	2												**20**	**2190**	**1%**
Munds Wagon Trail 78															4										4	**8**	**2190**	**0%**
Mystic Trail 157								7	1	1				2												**11**	**2190**	**1%**
Old Post Trail 206																1		1	1	1			2			**6**	**2190**	**0%**
Ridge Trail 208																			1	1	1		2			**5**	**2190**	**0%**
Rupp Trail 204																										**0**	**2190**	**0%**
Teacup Trail 183																1		1			1					**3**	**2190**	**0%**
Templeton Trail 156		9	19		1	24	5	7	1	1	1															**68**	**2190**	**3%**
Thunder Mountain Trail 165																		1				1				**2**	**2190**	**0%**

Sedona MTB Adventures, LLC

Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

		Mountain Biking Tour Packages																											
Recreation Use Unit (RUU)	Road / Trail Number	Bell Rock Pathway	Bell Rock Pthwy, Templeton	Bell Rock Pathway, Templeton Trl, Baldwin, (Upper & Lower)	Baldwin Lower, V V School Rd	Bell Rock Pathway, Templeton, Baldwin, HT	Bell Rock Pathway, Templeton, HT	Bell Rock Pthwy, Templeton, HT, Little Horse	Bell Rock Pthwy, Templeton, HT, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton Trail, Baldwin Upper, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton Trail, Baldwin Lower, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton, Baldwin Lower, Upper RR Loop, Herkenham	Bell Rock Pthwy, Little Horse	Bell Rock Pathway, Little Horse, Broken Arrow	Bell Rock Pathway, Little Horse, Broken Arrow, Mystic	Munds Wagon, Huckaby	Baldwin Lwr, Carroll Cyn, Tea Cup, Airport, Old Post	Jim Thompson, Jordan	Jim Thompson, Jordan, Tea Cup, Thunder, Airport, Bandit, Old Post	Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lwr	Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lower, Airport/Bandit	Jim Thmpsn, Jordan, Ridge-Carroll, Baldwin Lwr, Airport/Bandit, Tea Cup	Baldwin Lower, Carroll Canyon, Thunder, Girdner, AZ Cypress, Herkenham	Baldwin, Carrol Canyon, Ridge, Old Post, Herkenham	Cockscomb, Girdner, AZ Cypress, Deadmans Pass	Munds Wagon, Schnebly Hill	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Broken Arrow	00179F (Broken Arrow)																												
	Broken Arrow Trail 125								7	1	1			1	2													**20**	**2190**	**1%**
	Little Horse Trail 61							5					3																
Cathedral	Little Horse Trail 61									1	1		3	1	2														
	HT Trail 197							5	7																				
	Bell Rock Pathway Trail 96	20	9	19		1	24						3	1	2													**103**	**2190**	**5%**
	Templeton Trail 156									1	1	1																	
	Baldwin Trail 191				2												1			1	1	1	1	2					
Dry Creek	Deadmans Pass Trail 110																								5		**5**	**2190**	**0%**
Lower Schnebly	00153 (Schnebly Hill Rd)															4										4	**8**	**2190**	**0%**
	Munds Wagon Trail 78																												
Oak Creek Canyon	Huckaby Trail 161															4											**4**	**2190**	**0%**
Red Cliffs	Cockscomb Trail 167 (FR9586, 9586A, 9586B)																								5		**5**	**2190**	**0%**
	Deadmans Pass Trail 110																												
	Fay Canyon Trail 53																												
Schnebly Rim	00153 (Schnebly Hill Rd)																										**0**	**2190**	**0%**
Soldier Pass	09904 to Teacup/Jordan Trail																												
	Jordan Trail 186																	2	1	1	1	1					**7**	**2190**	**0%**
	Teacup Trail 183																1												
VOC	Baldwin Trail 191			19	2					1	1	1					1			1	1	1	1	2			**77**	**2190**	**4%**
	Templeton Trail 156		9			1	24	5	7																				

Sedona MTB Adventures, LLC

Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's (cont.)

		Mountain Biking Tour Packages																											
Recreation Use Unit (RUU)	Road / Trail Number	Bell Rock Pathway	Bell Rock Pthwy, Templeton	Bell Rock Pathway, Templeton Trl, Baldwin, (Upper & Lower)	Baldwin Lower, V V School Rd	Bell Rock Pathway, Templeton, Baldwin, HT	Bell Rock Pathway, Templeton, HT	Bell Rock Pthwy, Templeton, HT, Little Horse	Bell Rock Pthwy, Templeton, HT, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton Trail, Baldwin Upper, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton Trail, Baldwin Lower, Little Horse, Mystic, Broken Arrow	Bell Rock Pathway, Templeton, Baldwin Lower, Upper RR Loop, Herkenham	Bell Rock Pthwy, Little Horse	Bell Rock Pathway, Little Horse, Broken Arrow	Bell Rock Pathway, Little Horse, Broken Arrow, Mystic	Munds Wagon, Huckaby	Baldwin Lwr, Carroll Cyn, Tea Cup, Airport, Old Post	Jim Thompson, Jordan	Jim Thompson, Jordan, Tea Cup, Thunder, Airport, Bandit, Old Post	Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lwr	Jim Thompson, Jordan, Ridge-Carroll, Old Post, Baldwin Lower, Airport/Bandit	Jim Thmpsn, Jordan, Ridge-Carroll, Baldwin Lwr, Airport/Bandit, Tea Cup	Baldwin Lower, Carroll Canyon, Thunder, Girdner, AZ Cypress, Herkenham	Baldwin, Carrol Canyon, Ridge, Old Post, Herkenham	Cockscomb, Girdner, AZ Cypress, Deadmans Pass	Munds Wagon, Schnebly Hill	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Sedona	Huckaby Trail 161															4												**35**	**2190**	**2%**
	00153 (Schnebly Hill Rd)																										4			
	09934 (Huckaby / Munds Wagon Trailhead)																													
	Munds Wagon Trail 78																													
	Teacup Trail 183																1		1			1								
	Airport Loop Trail 210																				1									
	Bandit Trail 209																													
	00633																	2		1										
	Jim Thompson Trail 124																													
	Jordan Trail 186																													
	Ridge Trail 208																								2					
	Herkenham Trail 202											1												1						
	Thunder Mountain Trail 165																		1											
	Arizona Cypress Trail 203																									5				
	Girdner Trail 162																													
	Dawa Trail 188 (FR9586, 9586B)																													
	Mystic Trail 157								7	1	1				2															
Upper Loop	Bandit Trail 209																					1						**9**	**2190**	**0%**
	Airport Loop Trail 210																		1		1									
	Old Post Trail 206																1			1					2					
	Carroll Canyon Trail 207																					1		1						
	Ridge Trail 208																													
	Herkenham Trail 202											1												1						
Windmill	Arizona Cypress Trail 203																							1		5		**6**	**2190**	**0%**
	Girdner Trail 162																													
	Cockscomb Trail 167 (FR9586, 9586A, 9586B)																													
	Dawa Trail 188 (FR9586, 9586B)																													
	Rupp Trail 204																													

Sedona Resort Management, Inc
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
00153 (Schnebly Hill Rd)	Restricted RUU Allocation Listed Below ***	2190
00525		2190
00525C		2190
00525D		2190
00761A		2190
00795		2190
09524		2190
09551		2190
Arizona Cypress Trail 203		2190
Baldwin Trail 191		2190
Carroll Canyon Trail 207		2190
Cockscomb Trail 167		2190
Dawa Trail 188		2190
Dawa Trail 188B (FR9586H) (1*)		2190
Deadmans Pass Trail 110		2190
Girdner Trail 162		2190
Herkenham Trail 202		2190
HT Trail 197		2190
Huckaby Trail 161		2190
Jim Thompson Trail 124		2190
Jordan Trail 186		2190
Munds Wagon Trail 78		2190
Old Post Trail 206		2190
Ridge Trail 208		2190
Rupp Trail 204 (1*)		2190
Teacup Trail 183		2190
Templeton Trail 156		2190
Thunder Mountain Trail 165		2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

(1*) These Trails are not within Restricted RUU's. For this analysis, the Allocation for these trails will be based on Restricted RUU allocation.

Sedona Resort Management, Inc
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
00153 (Schnebly Hill Rd)	Hiking (Day-Use)	NA	NA	NA			**0**	1095	0%
00525		NA	NA	NA			**0**	1095	0%
00525C		NA	NA	NA			**0**	1095	0%
00525D		NA	NA	NA			**0**	1095	0%
00761A		NA	NA	NA			**0**	1095	0%
00795		NA	NA	NA			**0**	1095	0%
09524		NA	NA	NA			**0**	1095	0%
09551		NA	NA	NA			**0**	1095	0%
Arizona Cypress Trail 203		NA	NA	NA			**0**	1095	0%
Baldwin Trail 191		NA	NA	NA			**0**	1095	0%
Carroll Canyon Trail 207		NA	NA	NA			**0**	1095	0%
Cockscomb Trail 167		NA	NA	NA			**0**	1095	0%
Dawa Trail 188		NA	NA	NA			**0**	1095	0%
Dawa Trail 188B (FR9586H)		NA	NA	NA			**0**	1095	0%
Deadmans Pass Trail 110		NA	NA	NA		**269**	**269**	1095	25%
Girdner Trail 162		NA	NA	NA			**0**	1095	0%
Herkenham Trail 202		NA	NA	NA			**0**	1095	0%
HT Trail 197		NA	NA	NA			**0**	1095	0%
Huckaby Trail 161		NA	NA	NA			**0**	1095	0%
Jim Thompson Trail 124		NA	NA	NA			**0**	1095	0%
Jordan Trail 186		NA	NA	NA			**0**	1095	0%
Munds Wagon Trail 78		NA	NA	NA			**0**	1095	0%
Old Post Trail 206		NA	NA	NA			**0**	1095	0%
Ridge Trail 208		NA	NA	NA			**0**	1095	0%
Rupp Trail 204		NA	NA	NA			**0**	1095	0%
Teacup Trail 183		NA	NA	NA			**0**	1095	0%
Templeton Trail 156		NA	NA	NA			**0**	1095	0%
Thunder Mountain Trail 165		NA	NA	NA			**0**	1095	0%
	TOTALS:	**0**	**0**	**0**	**0**	**269**	**269**	30,660	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Hiking (Day-Use)	269	30,660	1%

Sedona Resort Management, Inc
Actual Annual Use 2002 - 2006 (cont.)

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
00153 (Schnebly Hill Rd)	Mountain Biking	NA	NA	NA			**0**	1095	0%
00525		NA	NA	NA			**0**	1095	0%
00525C		NA	NA	NA			**0**	1095	0%
00525D		NA	NA	NA			**0**	1095	0%
00761A		NA	NA	NA			**0**	1095	0%
00795		NA	NA	NA			**0**	1095	0%
09524		NA	NA	NA			**0**	1095	0%
09551		NA	NA	NA			**0**	1095	0%
Arizona Cypress Trail 203		NA	NA	NA			**0**	1095	0%
Baldwin Trail 191		NA	NA	NA			**0**	1095	0%
Carroll Canyon Trail 207		NA	NA	NA			**0**	1095	0%
Cockscomb Trail 167		NA	NA	NA			**0**	1095	0%
Dawa Trail 188		NA	NA	NA	**32**	**133**	**83**	1095	8%
Dawa Trail 188B (FR9586H)		NA	NA	NA			**0**	1095	0%
Deadmans Pass Trail 110		NA	NA	NA	**32**	**5**	**19**	1095	2%
Girdner Trail 162		NA	NA	NA			**0**	1095	0%
Herkenham Trail 202		NA	NA	NA			**0**	1095	0%
HT Trail 197		NA	NA	NA			**0**	1095	0%
Huckaby Trail 161		NA	NA	NA			**0**	1095	0%
Jim Thompson Trail 124		NA	NA	NA			**0**	1095	0%
Jordan Trail 186		NA	NA	NA			**0**	1095	0%
Munds Wagon Trail 78		NA	NA	NA			**0**	1095	0%
Old Post Trail 206		NA	NA	NA			**0**	1095	0%
Ridge Trail 208		NA	NA	NA			**0**	1095	0%
Rupp Trail 204		NA	NA	NA			**0**	1095	0%
Teacup Trail 183		NA	NA	NA			**0**	1095	0%
Templeton Trail 156		NA	NA	NA			**0**	1095	0%
Thunder Mountain Trail 165		NA	NA	NA			**0**	1095	0%
	TOTALS:	**0**	**0**	**0**	**64**	**138**	**101**	30,660	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Mountain Biking	101	30,660	0.3%

Sedona Resort Management, Inc
Actual Use & Annual Allocation Summary -- Tour Roads / Trails

Road / Trail Number	Hiking (Day-Use)	Mountain Bike	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00153 (Schnebly Hill Rd)			**0**	**2190**	**0%**
00525			**0**	**2190**	**0%**
00525C			**0**	**2190**	**0%**
00525D			**0**	**2190**	**0%**
00633 to Jim Thompson & Jordan Trails)			**0**	**2190**	**0%**
00761A			**0**	**2190**	**0%**
00795			**0**	**2190**	**0%**
09524			**0**	**2190**	**0%**
09551			**0**	**2190**	**0%**
09904 to Teacup/Jordan Trail			**0**	**2190**	**0%**
09934 (Huckaby / Munds Wagon Trailhead)			**0**	**2190**	**0%**
Arizona Cypress Trail 203			**0**	**2190**	**0%**
Baldwin Trail 191			**0**	**2190**	**0%**
Carroll Canyon Trail 207			**0**	**2190**	**0%**
Cockscomb Trail 167 (FR9586, 9586A, 9586B)			**0**	**2190**	**0%**
Dawa Trail 188 (FR9586, 9586B)		83	**83**	**2190**	**4%**
Dawa Trail 188B (FR9586H)			**0**	**2190**	**0%**
Deadmans Pass Trail 110	269	19	**288**	**2190**	**13%**
Girdner Trail 162			**0**	**2190**	**0%**
Herkenham Trail 202			**0**	**2190**	**0%**
HT Trail 197			**0**	**2190**	**0%**
Huckaby Trail 161			**0**	**2190**	**0%**
Jim Thompson Trail 124			**0**	**2190**	**0%**
Jordan Trail 186			**0**	**2190**	**0%**
Munds Wagon Trail 78			**0**	**2190**	**0%**
Old Post Trail 206			**0**	**2190**	**0%**
Ridge Trail 208			**0**	**2190**	**0%**
Rupp Trail 204			**0**	**2190**	**0%**
Teacup Trail 183			**0**	**2190**	**0%**
Templeton Trail 156			**0**	**2190**	**0%**
Thunder Mountain Trail 165			**0**	**2190**	**0%**

Sedona Resort Management, Inc
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

Recreation Use Unit (RUU)	Road / Trail Number	Hiking (Day-Use)	Mountain Bike	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Cathedral	Baldwin Trail 191			**0**	**2,190**	**0%**
	HT Trail 197					
	Templeton Trail 156					
Dry Creek	Deadmans Pass Trail 110	269	19	**288**	**2190**	**13%**
Lower Schnebly	00153 (Schnebly Hill Rd)			**0**	**2190**	**0%**
	Munds Wagon Trail 78					
Oak Creek Canyon	Huckaby Trail 161			**0**	**2190**	**0%**
Red Cliffs	00525			**288**	**2190**	**13%**
	00525C					
	00525D					
	00761A					
	00795					
	09524					
	09551					
	Cockscomb Trail 167 (FR9586, 9586A, 9586B)					
	Deadmans Pass Trail 110	269	19			
Schnebly Rim	00153 (Schnebly Hill Rd)			**0**	**2190**	**0%**
Sedona	00153 (Schnebly Hill Rd)			**83**	**2190**	**4%**
	Arizona Cypress Trail 203					
	Dawa Trail 188 (FR9586, 9586B)		83			
	Girdner Trail 162					
	Herkenham Trail 202					
	Huckaby Trail 161					
	09934 (Huckaby / Munds Wagon Trailhead)					
	Munds Wagon Trail 78					
	00633 to Jim Thompson & Jordan Trails)					
	Jim Thompson Trail 124					
	Jordan Trail 186					
	Teacup Trail 183					
	Thunder Mountain Trail 165					
Skeleton Bone	00761A			**0**	**2190**	**0%**
	09524					
Soldier Pass	09904 to Teacup/Jordan Trail			**0**	**2190**	**0%**
	Jordan Trail 186					
	Teacup Trail 183					
Upper Loop	Carroll Canyon Trail 207			**0**	**2190**	**0%**
	Herkenham Trail 202					
	Old Post Trail 206					
	Ridge Trail 208					
VOC	Baldwin Trail 191			**0**	**2190**	**0%**
	Templeton Trail 156					
Windmill	00525			**83**	**2190**	**4%**
	00525C					
	00525D					
	09524					
	09551					
	Arizona Cypress Trail 203					
	Cockscomb Trail 167 (FR9586, 9586A, 9586B)					
	Dawa Trail 188 (FR9586, 9586B)		83			
	Dawa Trail 188B (FR9586H)					
	Girdner Trail 162					
	Rupp Trail 204					

Sedona Spirit Tours and Retreats, LLC dba Sedona Spirit Journeys
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
00119 (to Montezuma's Well) (1*)	Restricted RUU Allocation Listed Below ***	2190
00618 (1*)		2190
09869 (Chapel Rd)		2190
Airport Loop Trail 210		2190
Bell Rock Pathway Trail 96		2190
Deadmans Pass Trail 110		2190
Templeton Trail 156		2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

(1*) These Trails are not within Restricted RUU's. For this analysis, the Allocation for these trails will be based on Restricted RUU allocation.

Sedona Spirit Tours and Retreats, LLC dba Sedona Spirit Journeys
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Vortex 1	Metaphysical	NA	NA	NA	**7**	0	**7**	2190	0%
Vortex 2		NA	NA	NA	**4**	**1**	**3**	2190	0%
Vortex 3		NA	NA	NA	**8**	**2**	**5**	2190	0%
Vortex 4		NA	NA	NA	**3**	0	**3**	2190	0%
	TOTALS:				**22**	**3**	**18**	8,760	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Metaphysical	18	8,760	0.2%

Sedona Spirit Tours and Retreats, LLC dba Sedona Spirit Journeys
Actual Use & Annual Allocation Summary -- Tour Roads / Trails and RUU's

	Metaphysical						
Road / Trail Number	Vortex 1	Vortex 2	Vortex 3	Vortex 4	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00119 (to Montezuma's Well)					**0**	**2190**	**0%**
00618					**0**	**2190**	**0%**
09869 (Chapel Rd)				3	**3**	**2190**	**0%**
Airport Loop Trail 210	7	3			**10**	**2190**	**0%**
Bell Rock Pathway Trail 96	7	3			**10**	**2190**	**0%**
Deadmans Pass Trail 110			5		**5**	**2190**	**0%**
Templeton Trail 156		3			**3**	**2190**	**0%**

		Metaphysical						
Recreation Use Unit (RUU)	Road / Trail Number	Vortex 1	Vortex 2	Vortex 3	Vortex 4	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00618					**0**	**2190**	**0%**
	00119 (to Montezuma's Well)							
Cathedral	Bell Rock Pathway Trail 96	7	3			**10**	**2190**	**0%**
	Templeton Trail 156							
Dry Creek	Deadmans Pass Trail 110			5		**5**	**2190**	**0%**
Red Cliffs	Deadmans Pass Trail 110			5		**5**	**2190**	**0%**
Sedona	09869 (Chapel Rd)				3	**13**	**2190**	**1%**
	Airport Loop Trail 210	7	3					
Upper Loop	Airport Loop Trail 210	7	3			**10**	**2190**	**0%**
VOC	Templeton Trail 156		3			**3**	**2190**	**0%**
Wickiup	00119 (to Montezuma's Well)					**0**	**2190**	**0%**

Spirit Trails Expeditions
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit	
		VEHICLES - ROADS	PARTIES - TRAILS
Mellow Explorations (Cathedral Rock / Bell Rock Hike)	Restricted RUU Allocation Listed Below ***		2190
Sedona Adventure Trek (Deadmans Pass Hike)			2190
Canyon Explorer I (Dry Creek / Girdner Hike I)			2190
Canyon Explorer II (Dry Creek / Girdner Hike II)			2190
Art of Slow Hiking (Thunder Mtn - Teacup Hike)			2190
Tranquil Traveler (Lower / Upper Schnebly Scenic Drive)		4380	
Vultee Arch Road		4380	
Fossil Creek Road	No Allocation -- Not within a Restricted RUU (Allocation for this analysis will be based on Restricted RUU allocation)	4380	
Middle Verde River		4380	
Skeleton Bone / Raptor Hill		4380	
Verde Scenic Drive		4380	
West Clear Creek		4380	
Anderson Butte 4x4		4380	

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC		

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Spirit Trails Expeditions
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Mellow Explorations (Cathedral / Bell Rock Hike)	Hiking (Day-Use)	NA	NA	NA	**1**	**9**	**5**	2190	0%
Sedona Adventure Trek (Deadmans Pass Hike)		NA	NA	NA	0	**1**	**1**	2190	0%
Canyon Explorer I (Dry Creek / Girdner Hike I)		NA	NA	NA	0	**4**	**4**	2190	0%
Canyon Explorer II (Dry Creek / Girdner Hike II)		NA	NA	NA	0	0	**0**	2190	0%
Art of Slow Hiking (Thunder Mtn - Teacup)		NA	NA	NA	0	**6**	**6**	2190	0%
Tranquil Traveler (Lower / Upper Schnebly Scenic Drive)	Jeep Scenic	NA	NA	NA	0	**5**	**5**	4380	0%
Vultee Arch Road		NA	NA	NA	0	0	**0**	4380	0%
Fossil Creek Road		NA	NA	NA	0	0	**0**	4380	0%
Middle Verde River		NA	NA	NA	0	0	**0**	4380	0%
Skeleton Bone / Raptor Hill		NA	NA	NA	0	0	**0**	4380	0%
Verde Scenic Drive		NA	NA	NA	0	0	**0**	4380	0%
West Clear Creek		NA	NA	NA	0	0	**0**	4380	0%
Anderson Butte 4x4	Jeep Scenic 4x4	NA	NA	NA	0	0	**0**	4380	0%
	TOTALS:				**1**	**25**	**21**	45,990	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Hiking (Day-Use)	16	10,950	0.1%
Jeep Scenic	5	30,660	0.02%
Jeep Scenic 4x4	0	4,380	0%

Spirit Trails Expeditions
Actual Use & Annual Allocation Summary -- Tour Roads / Trails

		Hiking (Day-Use)					Jeep Scenic							Jeep Scenic 4x4			
Road / Trail Number	**4x4 Rd**	Mellow Explorations (Cathedral / Bell Rock Hike)	Sedona Adventure Trek (Deadmans Pass Hike)	Canyon Explorer I (Dry Creek / Girdner Hike I)	Canyon Explorer II (Dry Creek / Girdner Hike II)	Art of Slow Hiking (Thunder Mtn - Teacup)	Tranquil Traveler (Lower / Upper Schnebly Scenic Drive)	Vultee Arch Road	Fossil Creek Road	Middle Verde River	Skeleton Bone / Raptor Hill	Verde Scenic Drive	West Clear Creek	Anderson Butte 4x4	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00119A										0					**0**	**4380**	**0%**
00119B										0					**0**	**4380**	**0%**
00119H										0					**0**	**4380**	**0%**
00131											0				**0**	**4380**	**0%**
00152								0							**0**	**4380**	**0%**
00153 (Schnebly Hill Rd)							5								**5**	**4380**	**0%**
00215													0		**0**	**4380**	**0%**
00258											0				**0**	**4380**	**0%**
00258A											0				**0**	**4380**	**0%**
00502									0			0			**0**	**4380**	**0%**
00502C									0			0			**0**	**4380**	**0%**
00525														0	**0**	**4380**	**0%**
00525A	**X**													0	**0**	**4380**	**0%**
00525C														0	**0**	**4380**	**0%**
00618													0		**0**	**4380**	**0%**
00618G													0		**0**	**4380**	**0%**
00708									0			0			**0**	**4380**	**0%**
00708A									0			0			**0**	**4380**	**0%**
00761											0			0	**0**	**4380**	**0%**
09206X												0			**0**	**4380**	**0%**
09235E										0					**0**	**4380**	**0%**
09235X										0					**0**	**4380**	**0%**
09236S										0					**0**	**4380**	**0%**
09236V										0					**0**	**4380**	**0%**
09248C									0			0			**0**	**4380**	**0%**
09518											0				**0**	**4380**	**0%**
09548														0	**0**	**4380**	**0%**
09548A														0	**0**	**4380**	**0%**
09548C														0	**0**	**4380**	**0%**
09548D														0	**0**	**4380**	**0%**
09548E														0	**0**	**4380**	**0%**
09548F														0	**0**	**4380**	**0%**
09904 to Teacup Trail						6									**6**	**2190**	**0%**
Arizona Cypress Trail 203				4	0										**4**	**2190**	**0%**
Baldwin Trail 191		5													**5**	**2190**	**0%**
Bell Rock Pathway Trail 96		5													**5**	**2190**	**0%**
Blodgett Basin Trail 31													0		**0**	**2190**	**0%**
Cockscomb Trail 167				4	0										**4**	**2190**	**0%**
Dawa Trail 188 (FR9586, 9586B)				4	0										**4**	**2190**	**0%**
Dawa Trail 188B (FR9586H)				4	0										**4**	**2190**	**0%**
Deadmans Pass Trail 110			1												**1**	**2190**	**0%**
Girdner Trail 162				4	0										**4**	**2190**	**0%**
Little Horse Trail 61		5													**5**	**2190**	**0%**
Rupp Trail 204				4	0										**4**	**2190**	**0%**
Teacup Trail 183						6									**6**	**2190**	**0%**
Templeton Trail 156		5													**5**	**2190**	**0%**
Thunder Mountain Trail 165						6									**6**	**2190**	**0%**

Spirit Trails Expeditions
Actual Use & Annual Allocation Summary -- Tour Roads / Trails within RUU's

			Hiking (Day-Use)					Jeep Scenic							Jeep Scenic 4x4				
Recreation Use Unit (RUU)	Road / Trail Number	**4x4 Rd**	Mellow Explorations (Cathedral / Bell Rock Hike)	Sedona Adventure Trek (Deadmans Pass Hike)	Canyon Explorer I (Dry Creek / Girdner Hike I)	Canyon Explorer II (Dry Creek / Girdner Hike II)	Art of Slow Hiking (Thunder Mtn - Teacup)	Tranquil Traveler (Lower / Upper Schnebly Scenic Drive)	Vultee Arch Road	Fossil Creek Road	Middle Verde River	Skeleton Bone / Raptor Hill	Verde Scenic Drive	West Clear Creek	Anderson Butte 4x4	Annual Allocation	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00618														0		4380	**0**	**4380**	**0%**
	00618G																		
Cathedral	Baldwin Trail 191		5														2190	**5**	**2190**	**0%**
	Bell Rock Pathway Trail 96																		
	Little Horse Trail 61																		
	Templeton Trail 156																		
Dry Creek	00152								0								4380	**1**	**6570**	**0%**
	Deadmans Pass Trail 110			1													2190		
Fossil Creek Road	00502									0			0				4380	**0**	**4380**	**0%**
	00502C																		
	00708																		
	00708A																		
	09248C																		
	09206X																		
Lower Schnebly	00153 (Schnebly Hill Rd)							5									4380	**5**	**4380**	**0%**
Middle Verde	00119A										0						4380	**0**	**4380**	**0%**
	00119B																		
	00119H																		
	09235E																		
	09235X																		
	09236S																		
	09236V																		
Red Cliffs	Deadmans Pass Trail 110			1													2190	**1**	**2190**	**0%**
Schnebly Rim	00153 (Schnebly Hill Rd)							5									4380	**5**	**4380**	**0%**
Sedona	00153 (Schnebly Hill Rd)							5									4380	**15**	**6570**	**0%**
	Arizona Cypress Trail 203				4	0											2190		
	Dawa Trail 188 (FR9586, 9586B)																		
	Girdner Trail 162																		
	Teacup Trail 183						6												
	Thunder Mountain Trail 165																		
Skeleton Bone	00131											0					4380	**0**	**4380**	**0%**
	00258																		
	00258A																		
	00761															0			
	09518																		
Soldier Pass	09904 to Teacup Trail						6										2190	**6**	**2190**	**0%**
	Teacup Trail 183																		
VOC	Baldwin Trail 191		5														2190	**5**	**2190**	**0%**
	Templeton Trail 156																		
Wickiup	00215														0		4380	**0**	**4380**	**0%**
	00618																		
	Blodgett Basin Trail 31																		
Windmill	00525															0	4380	**4**	**6570**	**0%**
	00525A	**X**																	
	00525C																		
	00761											0							
	09548																		
	09548A																		
	09548C																		
	09548D																		
	09548E																		
	09548F																		
	Arizona Cypress Trail 203				4	0											2190		
	Cockscomb Trail 167 (FR9586, 9586A, 9586B)																		
	Dawa Trail 188 (FR9586, 9586B)																		
	Dawa Trail 188B (FR9586H)																		
	Girdner Trail 162																		
	Rupp Trail 204																		

Sedona Transportation and Tours, LLC dba Sedona Trolley
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (PARTIES)
Huckaby Trailhead	Restricted RUU Allocation Listed Below ***	2190

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 people / day = Maximum of 6 parties of 2 people / day x 365 days / yr = 2190 parties per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Assumption -- One Vehicle driving on a road carries One Party of People hiking on a trail

Sedona Transportation and Tours, LLC dba Sedona Trolley
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use PARTIES 2002	Annual Actual Use PARTIES 2003	Annual Actual Use PARTIES 2004	Annual Actual Use PARTIES 2005	Annual Actual Use PARTIES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Huckaby Trailhead	Scenic	NA	NA	NA	23	34	**29**	2190	1%
	TOTALS:				**23**	**34**	**29**	2,190	

Activity Category	Sum of Two Highest Years (PARTIES)	Authorized Annual Limit (PARTIES)	Percentage of Allocation Used
Scenic	29	2,190	1%

Sedona Transportation and Tours, LLC dba Sedona Trolley
Actual Use & Annual Allocation Summary -- Tour Roads / Trails and

	Scenic			
Road / Trail Number	Huckaby Trailhead	**Actual Use Summary for each Road / Trail**	**Annual Allocation Summary for each Road / Trail**	**% Annual Allocation Used for each Road / Trail**
00153 (Schnebly Hill Rd)	29	**29**	**2190**	**1%**
09934 (Huckaby Trailhead)	29	**29**	**2190**	**1%**

		Scenic			
Recreation Use Unit (RUU)	Road / Trail Number	Huckaby Trailhead	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Sedona	00153 (Schnebly Hill Rd)	29	**29**	**2190**	**1%**
	09934 (Huckaby Trailhead)				

Sun Country Adventures, LLC
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
00152 (Vultee Arch Rd)	Restricted RUU Allocation Listed Below ***	4380
00153 (Schnebly Hill Rd)		4380
00525		4380
00214	No Allocation -- Not within a Restricted RUU (Allocation for this analysis will be based on Restricted RUU allocation)	4380
00214A		4380
00215		4380
00618 (Cowboys & Indians)		4380
00761		4380
00796		4380
09201D		4380
09201E		4380
09201H		4380

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Sun Country Adventures, LLC
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
00152 (Vultee Arch Rd)	Jeep Scenic	NA	NA	NA	0	**2**	**2**	4380	0%
00153 (Schnebly Hill Rd)		NA	NA	NA	**99**	**145**	**122**	4380	3%
00214		NA	NA	NA	0	0	**0**	4380	0%
00214A		NA	NA	NA	0	0	**0**	4380	0%
00215		NA	NA	NA	0	0	**0**	4380	0%
00525		NA	NA	NA	**1**	0	**1**	4380	0%
00618 (Cowboys & Indians)		NA	NA	NA	**2**	0	**2**	4380	0%
00761		NA	NA	NA	0	0	**0**	4380	0%
00796		NA	NA	NA	0	0	**0**	4380	0%
09201D		NA	NA	NA	0	0	**0**	4380	0%
09201E		NA	NA	NA	0	0	**0**	4380	0%
09201H		NA	NA	NA	0	0	**0**	4380	0%
	TOTALS:	NA	NA	NA	**102**	**147**	**127**	52,560	

Activity Category	Sum of Two Highest Years (VEHICLES)	Authorized Annual Limit (VEHICLES)	Percentage of Allocation Used
Jeep Scenic	127	52,560	0%

Sun Country Adventures, LLC
Actual Use & Annual Allocation Summary -- Tour Roads and RUU's

Road Number	Jeep Scenic	**Actual Use Summary for each Road**	**Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
00152 (Vultee Arch Rd)	2	**2**	**4380**	**0%**
00153 (Schnebly Hill Rd)	122	**122**	**4380**	**3%**
00214	0	**0**	**4380**	**0%**
00214A	0	**0**	**4380**	**0%**
00215	0	**0**	**4380**	**0%**
00525	1	**1**	**4380**	**0%**
00618 (Cowboys & Indians)	2	**2**	**4380**	**0%**
00761	0	**0**	**4380**	**0%**
00796	0	**0**	**4380**	**0%**
09201D	0	**0**	**4380**	**0%**
09201E	0	**0**	**4380**	**0%**
09201H	0	**0**	**4380**	**0%**

Recreation Use Unit (RUU)	Road Number	Jeep Scenic	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Beaver Creek	00618 (Cowboys & Indians)	2	2	**4380**	**0%**
Beaverhead	00796	0	0	**4380**	**0%**
Cedar Flat	00214	0	0	**4380**	**0%**
	00214A	0			
Dry Creek	00152 (Vultee Arch Rd)	2	2	**4380**	**0%**
Lower Schnebly	00153 (Schnebly Hill Rd)	122	122	**4380**	**3%**
Red Cliffs	00525	1	1	**4380**	**0%**
Schnebly Rim	00153 (Schnebly Hill Rd)	122	122	**4380**	**3%**
Sedona	00153 (Schnebly Hill Rd)	122	122	**4380**	**3%**
Skeleton Bone	00761	0	0	**4380**	**0%**
Wickiup	00214	0	2	**4380**	**0%**
	00215	0			
	00618 (Cowboys & Indians)	2			
	09201D	0			
	09201E	0			
	09201H	0			
Windmill	00525	1	1	**4380**	**0%**
	00761	0			

Top Hat Expeditions dba Hummer Affair
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
Western Trails Tour	Restricted RUU Allocation Listed Below ***	4380
Western Trails Tour 1.5 hr		4380
Colorado Plateau Ascent 1 hr, 1.5 hr, 2 hr		4380
Sedona Highlights		4380
Ambush		4380
Jeep Eater		4380
Gambler		4380
Secret Mountain Special		4380
Hummer Driving Adventure		4380

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr = 4380 veh per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Top Hat Expeditions dba Hummer Affair
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	% of Allocation Used for 2006
Western Trails Tour	Jeep Scenic	NA	NA	NA	**10**	**58**	**34**	4380	1%
Western Trails Tour 1.5 hr		NA	NA	NA	**13**	**52**	**33**	4380	1%
Colorado Plateau Ascent 1 hr		NA	NA	NA	**47**	**102**	**75**	4380	2%
Colorado Plateau Ascent 1.5 hr		NA	NA	NA	**111**	**489**	**300**		7%
Colorado Plateau Ascent 2 hr		NA	NA	NA	**154**	**517**	**336**		8%
Sedona Highlights		NA	NA	NA	**4**	**1**	**3**	4380	0%
Ambush	Jeep Scenic 4x4	NA	NA	NA	**99**	**294**	**197**	4380	4%
Jeep Eater		NA	NA	NA	**210**	**637**	**424**	4380	10%
Gambler		NA	NA	NA	**107**	**268**	**188**	4380	4%
Secret Mountain Special		NA	NA	NA	**38**	**97**	**68**	4380	2%
Hummer Driving Adventure		NA	NA	NA	**5**	**12**	**9**	4380	0%
	TOTALS:	**0**	**0**	**0**	**798**	**2,527**	**1,663**	39,420	

Activity Category	2006 Actual Annual Use (VEHICLES)	Authorized Annual Limit (VEHICLES)	% of Allocation Used
Jeep Scenic	779	17,520	4%
Jeep Scenic 4x4	884	21,900	4%

Top Hat Expeditions dba Hummer Affair
Actual Use & Annual Allocation Summary -- Tour Roads

		Jeep Scenic						Jeep Scenic 4x4							
Road Number	**4x4 Rd**	Western Trails Tour 1 hr	Western Trails Tour 1.5 hr	Colorado Plateau Ascent 1 hr	Colorado Plateau Ascent 1.5 hr	Colorado Plateau Ascent 2 hr	Sedona Highlights	Ambush	Jeep Eater	Gambler	Secret Mountain Special	Hummer Driving Adventure	**Actual Use Summary for each Road**	**Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
00152		34											34	4380	1%
00153 (Schnebly Hill Rd)				75	300	336	3						714	4380	16%
00525			33					197	424	188	68	9	919	4380	21%
00525A	**X**								424				424	4380	10%
00525C								197	424	188	68	9	886	4380	20%
00525D			33								68		101	4380	2%
00761									424				424	4380	10%
00761A									424				424	4380	10%
09524	**X**								424				424	4380	10%
09549	**X**							197		188	68	9	462	4380	11%
09549B	**X**							197		188	68	9	462	4380	11%
09549M										188			188	4380	4%
09551	**X**									188		9	197	4380	4%
09934 (Huckaby Trailhead)							3						3	4380	0%

Top Hat Expeditions dba Hummer Affair

Actual Use & Annual Allocation Summary -- Tour Roads within RUU's

			Jeep Scenic						Jeep Scenic 4x4							
Recreation Use Unit (RUU)	Road Number	**4x4 Rd**	Western Trails Tour 1 hr	Western Trails Tour 1.5 hr	Colorado Plateau Ascent 1 hr	Colorado Plateau Ascent 1.5 hr	Colorado Plateau Ascent 2 hr	Sedona Highlights	Ambush	Jeep Eater	Gambler	Secret Mountain Special	Hummer Driving Adventure	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Dry Creek	00152		34											34	4380	1%
Lower Schnebly	00153 (Schnebly Hill Rd)				75	300	336	3						714	4380	16%
Red Cliffs	00525D			33								68		919	4380	21%
	00525								197	424	188		9			
	00525C															
	00761A															
	09524	X														
	09551	X									188		9			
Schnebly Rim	00153 (Schnebly Hill Rd)					300	336	3						639	4380	15%
Sedona	00153 (Schnebly Hill Rd)				75	300	336	3						714	4380	16%
	09934 (Huckaby Trailhead)															
Skeleton Bone	00761									424				424	4380	10%
	00761A															
Windmill	00525D			33								68		919	4380	21%
	00525								197	424	188		9			
	00525C															
	09549	X														
	09549B	X														
	09551	X														
	09549M															
	00525A	X								424						
	00761															
	00761A															
	09524	X														

Vaughan's Southwest Custom Tours, Inc.
Tour Allocations

Tour Name	Allocation	Projected Annual Authorized Limit (VEHICLES)
00153 (Schnebly Hill Rd)	Restricted RUU Allocation Listed Below ***	4380

In Restricted RUU's *** Each Permitted Road: Up to 12 vehicles per day and NO MORE THAN 2 VAOT on the road or trail; Each Permitted Single-Track Trail: Up to 12 people per day and NO MORE THAN 6 people at one time on the trail, including guide(s).	12 veh / day x 365 days / yr x = 4380 veh per yr
*** Restricted RUU's include Broken Arrow, Cathedral, Dry Creek, Kachina, Lower Schnebly, Oak Creek Canyon, Red Cliffs, Sedona, Soldier Pass, Upper Loop, and VOC	

Vaughan's Southwest Custom Tours, Inc.
Actual Annual Use 2002 - 2006

Tour Name	Activity Category	Annual Actual Use VEHICLES 2002	Annual Actual Use VEHICLES 2003	Annual Actual Use VEHICLES 2004	Annual Actual Use VEHICLES 2005	Annual Actual Use VEHICLES 2006	Annual Actual Use Average of 2 Highest Years	Authorized Annual Limit (VEHICLES)	% of Allocation Used for 2006
00153 (Schnebly Hill Rd)	Jeep Scenic	NA	NA	NA	**9**	**24**	**17**	4380	0%

Activity Category	2006 Actual Annual Use (VEHICLES)	Authorized Annual Limit (VEHICLES)	% of Allocation Used
Jeep Scenic	17	4,380	0%

Vaughan's Southwest Custom Tours, Inc.
Actual Use & Annual Allocation Summary -- Tour Roads and

Road Number	**Actual Use Summary for each Road**	**Annual Allocation Summary for each Road**	**% Annual Allocation Used for each Road**
00153 (Schnebly Hill Rd)	17	4380	0%

Recreation Use Unit (RUU)	Road Number	**Actual Use Summary for each RUU**	**Annual Allocation Summary for each RUU**	**% Annual Allocation Used for each RUU**
Lower Schnebly	00153 (Schnebly Hill Rd)	17	4380	0%
Schnebly Rim	00153 (Schnebly Hill Rd)	17	4380	0%
Sedona	00153 (Schnebly Hill Rd)	17	4380	0%

Appendix E- Actual Use

Appendix F- Natural Resources Description of each RUU

Recreation Use Units

Apache Maid Recreation Use Unit 3
Beaver Creek Recreation Use Unit 7
Beaverhead Recreation Use Unit 11
Broken Arrow Recreation Use Unit 16
Casner Recreation Use Unit 18
Cathedral Recreation Use Unit 21
Cedar Flat Recreation Use Unit 24
Dry Creek Recreation Use Unit 27
Fossil Creek Road Recreation Use Unit 30
Kachina Recreation Use Unit 34
Lower Schnebly Recreation Use Unit 37
Middle Verde Recreation Use Unit 41
Montezuma Recreation Use Unit 44
Mud Tanks Recreation Use Unit 47
Oak Creek Canyon Recreation Use Unit 51
Red Cliffs Recreation Use Unit 55
Research Natural Areas Recreation Use Unit 58
Savannah/ House Mountain Recreation Use Unit 60
Schnebly Rim Recreation Use Unit 63
Sedona Recreation Use Unit 65
Skeleton Bone Recreation Use Unit 69
Soldier Pass Recreation Use Unit 73
Thirteen Mile Rock Recreation Use Unit 75
Towel Recreation Use Unit 77
Upper Loop Recreation Use Unit 80
Verde Wild and Scenic River Recreation Use Unit 82
Village of Creek (VOC) Recreation Use Unit 85
Wickiup Recreation Use Unit 89
Windmill Recreation Use Unit 92
Wilderness 95
Fossil Spring Wilderness Recreation Use Unit 96
West Clear Creek Wilderness Recreation Use Unit 99
Wet Beaver Wilderness Recreation Use Unit 102
Sycamore Canyon Wilderness Recreation Use Unit 104
Munds Mountain Wilderness Recreation Use Unit 107
Red Rock Secret Mountain Wilderness Recreation Use Unit 109
Mazatzal Wilderness Recreation Use Unit 112

The following information describes each Recreation Use Unit for the Red Rock District written by District and Forest specialists. This includes the following recreation related elements: recreation setting, historical and current recreation uses and patterns, desired experience, and administrative and resource management concerns. Additional information regarding other resource conditions includes special status species (wildlife, fish, and plants), heritage, hydrology and soils, and the transportation system.

Development of Recreation Use Units

The following criteria were used to develop the Recreation Use Units (RUU):

- Forest Land Management Plan Amendment 12 Management Area Boundaries; topographical landform i.e. the top of the Rim, the foothills to the Rim, the Chalk Hills, Towel & Hackberry Mountains, Wickiup Mesa etc.. For the portion of the District managed under Amendment 12 (163,000 acres of the District) we used the management area boundaries almost exclusively. For instance, the Sedona and the Upper Loop RUU nearly matches the Neighborwoods MA; Savannah, Kachina, part of the Dry Creek and Windmill RUUs are the Savannah MA; and the Oak Creek MA is the Oak Creek RUU etc.

- Wilderness Area Boundaries;

- Road Systems, i.e. Fossil Creek Road, Interstate 17, the Cornville Rd., Highway 89a, FR 761 etc.;

- Sub-watershed boundaries where we felt a break was needed were occasionally used

The interdisciplinary team that developed the RUUs includes Jim Beard, Jack Norman, Debbie Terrion and Bill Stafford. The team used roads, topography, and management areas to delineate the boundaries of the Recreation Use Units.

Special status wildlife, fish, & plant species are described for each RUU. This includes species that are either sensitive, Federally listed, or Forest Service management indicator species. Non-Special status wildlife, fish and plants are not discussed in this document.

Apache Maid Recreation Use Unit

Recreation Setting

The Apache Maid Recreation Use Unit at 55,295 acres is the second largest unit on the Red Rock Ranger District. It contains the landform with the highest elevation on the District, Apache Maid Mountain and Lookout at 7,301 feet The Unit includes the second largest natural lake in Arizona, Stoneman Lake, and is 90% forested including Pinyon-Juniper Woodlands, and ponderosa pine Forests. Elevations range from 4,000 feet near the junction of Interstate 17 and State Route 179 to Apache Maid Mountain affording a change in elevation of 3,300 feet The Unit offers a wide variety of recreation experiences, benefits, and opportunities characterized by lightly used forest roads, traversing basalt rock formations, crossing intermittent gullies, and ending at deep canyons. Refer to Map 6- Apache Maid Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

The Unit includes areas with slightly different recreation use and activity patterns including the largely un-roaded area west of Interstate-17, extending the edge of Dry Beaver Creek and Woods Canyons. This area gets light use from hunting, fuelwood gathering, and the Chavez Trail, with the heaviest use concentrated around the gauging station road (FR 647) and trespass roads off of Interestate-17. The area east of Interstate-17 extending to the ponderosa pine type is similar in vegetation type to the area west of Interstate-17 but includes a substantial number of roads and substantially more use from off highway vehicles (OHVs), hunting, fuelwood gathering, wildlife viewing, stock tank fishing and driving for pleasure. The area east of the N-S line formed by Apache Maid Mountain includes the ponderosa pine vegetation type. This portion of the unit has much more use than the P-J portions of the unit, including camping and more volume of use for activities including hunting, OHVs, fishing, and driving for pleasure, wildflower viewing and equestrian use. There is also regular and consistent interest in visiting the Apache Maid Lookout Tower. Stoneman Lake, when it has water in it, offers a dramatically beautiful landscape. It can also offer boating opportunities. The existing outfitter-guide use is focused on archaeological sites in Red Tank Draw. Fall brings various hunting seasons and hunting outfitter-guide opportunities. Occasionally, there are user conflicts between hunting camp activities and the general public dispersed camper. The more popular dispersed recreation sites are impacted by the volume of use. Winter activities will continue to be a challenge because of the broken snow cover. During some winters snow play, cross country skiing, and snow mobile activities may be a possibility. Private property around Stoneman Lake may provide an off-forest staging area for these activities.

ROS Class

There are 5,874 acres of semi-primitive non-motorized (SPNM); 19,694acres of semi-primitive motorized (SPM); 29,403 acres of roaded natural (RN) ROS classes in this unit. The unit also has 324 acres of non-Forest Service lands.

Desired Experience

The "biggest draws" to this recreation unit include Stoneman Lake, Apache Maid Mountain, vast fuel wood cutting opportunities, easily accessible ponderosa pine forests and of course I-17 and the Stoneman Lake Road (FR 213). The greatest attraction is the vast expanse, including 179 miles of backcountry roads where recreationists can travel a long way without seeing other visitors while experiencing wildlife, broad blue sky, dark green vegetation and a general feeling of freedom.

Recreation Activity Niche

The niche for the unit is semi-primitive experiences which offer guided and un-guided opportunities for off highway vehicles (OHV), equestrian, hiking, hummer, scenic, mountain biking, 4X4 driving, geo-caching, hunting winter sports, livestock packing, weddings and heritage site tours.

Administrative and Resource Management Concerns

Recreation problems and concerns include damage from "ever expanding" campsites, roads developed by OHVs in the ponderosa pine area--particularly in and around Forest Roads 229, 213 and 665. Other recreation related problems include garbage deposited in fire rings and around campsites; lack of patrol by Forest Service employees and volunteers (the District averages one patrol per week in the late spring, summer, and early fall, and none the rest of the year), and widening of roads caused by wet weather use and avoidance of mud puddles.

In addition, regular and repeated cutting of green alligator juniper, green oak and green juniper for firewood is a concern. Time has caused substantial changes in impacts to the Apache Maid Unit largely from the increased use of OHVs and high clearance 4X4s used to scout and hunt wildlife and to drive for pleasure. These impacts were not evident 25 years ago west of Interstate-17, near FR 229, the Stoneman Lake Road and Mullican Canyon.

Opportunities/ Recommendations

The higher elevation of the Apache Maid Recreation Use Unit warrants seasonal use allocations. Late spring through late fall provides opportunity for activities such as scenic "jeep," ATV, hummer, mountain bike, and equestrian tours. The increased popularity of OHV use will likely be reflected in this area as more people discover its availability.

Increased managerial presence is needed in the unit. Significant illegal cutting of Alligator Juniper and Gambel Oak occurs, particularly in the rattlesnake quiet area but also throughout the entire unit. Additional eyes and ears are needed to stop the devastation of these trees, many of which are several hundred years old.

Desired Condition for Recreation

The desired recreation condition is to provide semi-primitive motorized and non-motorized opportunities. Scenic conditions would improve with the reduction of road density and fewer scars on the land from un-needed non-system roads and poorly maintained roads. Roads would be properly drained (to reduce resource damage) and trail maintenance would improve. Garbage and trash would be collected to reduce the amount of garbage currently in the area. Public information would improve and preventative law enforcement

would increase. Violations would be reported and the appropriate action would be taken.

Special Status Wildlife, Fish, & Plant Species

The special status species at most risk in this RUU is likely the northern leopard frog. The northern leopard frog occurs in the northeastern quarter of Arizona, usually in montane streams and wetlands that have aquatic vegetation but also in wet meadows at higher elevations. This leopard frog is generally restricted to permanent waters. The northern leopard frog is only known to persist in the Apache Maid RUU, despite historic widespread distribution across northern Arizona. Threats include predation from nonnative aquatic organisms, chytrid fungus outbreaks, habitat destruction from livestock grazing and off-highway vehicles, and desiccation during drought.

The Apache Maid RUU supports the highest concentration of wintering bald eagles on the District. Wintering bald eagles occur throughout this RUU from approximately mid-October through mid-April where they forage on waterfowl, fish, small mammals, and carrion. Wintering bald eagles roost in communal roost trees that are primarily ponderosa pine trees on steep slopes and are protected from prevailing winds by surrounding vegetation. Roost areas in this RUU occur around Apache Maid Mountain, Stoneman Lake, Rattlesnake Canyon, Brady Canyon, and Jack's Canyon.

Two known Mexican spotted owl nesting areas, called protected activity centers (PACs), occur in this RUU. Suitable nesting habitat occurs on slopes greater than 40% where ponderosa pine and mixed conifer tree species provide for multi-layered canopies, numerous snags, and downed woody material.

In this RUU, suitable nesting and roosting habitat is located in canyons with rocky cliffs where dense vegetation or crevices or caves provide cool moist microsites for nests and roosts.

This unit supports the most habitats for turkey on the District. Key habitat attributes include: Availability of roost trees in summer and winter range which consist of groups of large yellow pines; uneven aged overstory structure; nesting areas; mast from ponderosa pine, pinyon pine, juniper and oak; riparian areas around springs and seeps, and small openings for seedhead and invertebrate production.

Pronghorn mainly occur in the eastern portion of this RUU, around Apache Maid Mountain, in the Waldroup/Mullican areas south of Apache Maid Mountain, and in the old watershed treatment areas north and west of Apache Maid Mountain. Pronghorn prefer areas with very low canopy cover (i.e. Grasslands and open meadows) but do occur in open ponderosa pine forests and pinyon/juniper woodlands. Encroachment of juniper, inadequate hiding cover for fawns, and high predator populations have all contributed to the

decline of pronghorn in northern Arizona.

Elk are primarily found in mixed conifer and ponderosa pine woodlands during the spring, summer and fall months but move into pinyon-juniper woodlands during the winter; especially when deep snows preclude access to forage in the higher country. Year-round habitat for elk occurs in this RUU.

The Rattlesnake Canyon Quiet Area is closed to motorized travel from 8/15 to 12/31. The closure objective is to provide opportunities for such recreational activities as hunting, hiking, horseback riding, and bicycling in areas undisturbed by vehicles. Game retrieval is not permitted by motor vehicles during this closure. Activities that require the use of any motorized equipment (chain saws) are prohibited in this area during the closure period.

One sensitive plant species is known to occur in this RUU. Flagstaff penstemon occurs on dry slopes with ponderosa pine in mountainous or hilly regions south of the Grand Canyon. It may be expected to occur on light, dry neutral soils in eroded or mountainous areas.

Hydrology & Soils

This unit occupies an elevated plain setting located above the rim with an average elevation of approximately 6000 feet. The slopes are typically described as level to gently sloping. The predominant soil map units are 462, 466, and 492. These soils have developed in basaltic parent material and have very fine soil textures throughout. They are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There are about 80 miles of level 2 unsurfaced roads within this unit potentially available for use in outfitter/guide activities; however, 91% of these roads intersect with soils rated with severe limitation for unsurfaced roads. The only mitigation to prevent soil damage when wet is non-use. These roads would be available for outfitter/guide use seasonally during the dry conditions from June 1 to November 1 annually. There are no level 2 roads within or near riparian areas. Some roads may require drainage improvement or other treatments before outfitter/guide activities are approved.

There are no Forest trails within this unit available for outfitter/guide activities. Permitted trail activities would use the level 2 road network. The same seasonal use limitations as described above would apply.

Heritage

Approximately 7.97% or 4,408 acres out of the unit total 55,295 acres have been surveyed. The surveys revealed 151 sites, which leads to a prediction of 21.92 sites/square mile.

Transportation System

There are some surfaced roads. The RUU has 179 miles of un-surfaced roads with severe maintenance drainage and resource damage problems. FR 213 (Stoneman Lake Road) is the only maintained road during winter conditions. Main roads: 213, 229, 644, 620

Beaver Creek Recreation Use Unit

Recreation Setting

The Beaver Creek Recreation Use Unit at 16,125 acres is eighty percent forested with pinyon-juniper woodland, riparian vegetation and southwestern desert shrub. It is one of the steeper units with 17 percent of the acres over 40 percent slopes. It is characterized by permanent flowing streams including Wet Beaver Creek and Walker Creek and the major intermittent stream—Red Tank Draw. It includes a number of major trails (9 miles) including the Bell Trail, White Mesa, Long Canyon, Walker Basin and the Weir Trail. It is an area rich in archaeology and has several developed sites including Beaver Creek Campground and Picnic Area, V Bar V Rock Art Site, Bell Trailhead, Bruce Brockett Trailhead and other lesser trailheads including Long Canyon and Walker Basin. It is the gateway to the Wet Beaver Creek Wilderness, and the Sinagua Circle Archaeological Interpretation Project and it includes Refer to Map 7- Beaver Creek Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

The Beaver Creek Area over the past 25 years has changed from a place that barely reached capacity during holidays to a place overrun with visitors and residents during most spring and summer weekend days and holidays. The main attractions are water, swimming, and fishing opportunities. Other recreation activities include camping, hiking, picnicking, viewing scenery and staging for backpack trips into the Wet Beaver Creek Wilderness.

The unit includes several areas that are similar in many ways but vary somewhat including Blue Grade Road and Red Tank Draw country typified by rugged stark canyons and mesas; Beaver Creek Developed Site and Ranger Station area including the creek and its heavy use; lower Beaver Creek dispersed area downstream from FR 618--including the dispersed areas from Rimrock to Beaver Creek Bridge along FR 121 and Lawrence Crossing; and the relatively lightly used area along Walker Creek and Walker Basin Trail.

There are also several major secondary roads in the unit with substantial use along FR 618 and Montezuma Well Road (FR 119). The Blue Grade Road (FR 689) is an interesting back country road which climbs along the historic road that pre-dated Interstate 17 and rises over 700 feet in elevation in only three miles through some spectacular country. This rough road offers jeep tour opportunities. FR 9201J offers a 4X4 experience as it parallels Walker Creek to the top of the rimrocks following one of the original historical routes into the area.

The Beaver Creek Unit also offers great "birding" and wildlife viewing opportunities with Great Blue Herons, ducks, deer and javelina sighting common place. Archaeological site visiting is a popular recreation opportunity in the unit with regular visits by the public to Sacred Mountain, Red Tank Draw Petroglyphs and several cliff top ruins. The Sinagua Circle plans to feature some sites in this RUU.

ROS Class

There are 2,307 acres of SPNM; 5,202 acres of SPM; 7,959 acres of RN, and 178 acres of rural (R) ROS classes in this unit. The unit also has 479 acres of non-Forest Service lands.

Desired Experience

The Beaver Creek Recreation Use Unit has something for almost every recreationist. It offers the benefits of peace and tranquility with sounds of running water and the challenge of a cool dip in one of the most beautiful streams in the State. With its close proximity to Interstate-17 it is only one and a half hours from the Phoenix Valley, and one of the most sought after areas for Flagstaff residents who come down, particularly in the spring and winter, to escape the cold. The recently expanded Bell Trailhead with over thirty parking spaces is now regularly overflowing with cars during weekends.

Recreation Activity Niche

The Beaver Creek Unit offers guided opportunities for ATV, equestrian, hummer, scenic, mountain biking, 4X4 driving, backpacking, hunting, livestock packing and heritage site visit tours. These tours may improve preventative law enforcement, resource protection and with "fee retention" provide much needed maintenance of roads and trails within the unit.

Administrative and Resource Management Concerns

Dispersed camping areas along Walker Creek between FR 618 and Beaver Creek have expanded and regularly require removal of garbage. Dispersed use in Lawrence Crossing Area has expanded to the boundary of the V Bar V Rock Art Site requiring the installation of fences and gates, which regularly get cut. Illegal roads in Lawrence Crossing Area are a major problem and the danger of escaped campfires causing wildfires is a big concern especially along Beaver Creek downwind from the V Bar V Rock Art Site. Intrusion from visitors onto Southwestern Academy Property has been a problem recently.

There are also some major swim areas including the swimming area at Beaver Creek Campground, the "Platform" Swim area, and the swim site near the entrance to the SW Academy Entrance. The area receives two patrols per week by Forest Service personnel. Dispersed campers overstaying their stay limits, dump sites, illegal pot hunting, shooting too close to roads and developed sites, and trash are substantial problems.

There is a substantial need for the development of a comprehensive recreation plan for Beaver Creek. Use has increased and the role of the various developed and dispersed sites needs to be better defined. Increased patrols and "eyes and ears" are needed in the area to help the Forest Service

stay on top of problems in the Unit.

Lawrence Crossing and Walker Basin continue to be very popular dispersed camp areas. The Platform, Beaver Creek Bridge, and other popular swim areas sustain heavy use especially during the summer. Each of these areas bring typical concerns such as abandoned campfires, trash accumulation, human waste, and law enforcement issues, as well as ever expanding site deterioration in need of revegetation. Lawrence Crossing also provides an unwanted back way into the V-V Heritage site and its associated panels that are not open to the public. In the past, these panels have been vandalized.

Beaver Creek RUU contains the front end of Bell Trail (#13). The Forest Service recently installed a 40 slot parking lot. During summer months, swimmers overwhelm the area's swim holes. Numerous social trails and fire rings attest to the amount of use and popular access routes between the creek and Bell Trail. Vehicles typically line the road adjacent to The Platform (off FR 618H) and Beaver Creek Bridge swim holes. Trash, human waste, and abandoned campfires typify problems associated with these users.

Desired Condition for Recreation

The desired condition for recreation in this RUU is to have well maintained roads, trails, trailheads, signs and other recreation infrastructure, and a well informed public who is interested in protecting and sustaining natural resources. Conflict between recreationists would be very limited, and some crowd management techniques would be implemented at major dispersed locations such as Beaver Creek Swimming Hole by the Campground, the "Platform" and at the heavily used Beaver Creek Trailhead. The "Sinagua Circle" concept would be implemented to interpret and protect heritage sites. The desired condition in the RUU would also include providing visitors with a clean but rugged area where riparian environment and exceptional views can be enjoyed without excessive crowds.

Special Status Wildlife, Fish, & Plant Species

Yellow-billed cuckoos prefer to nest in well-developed riparian zones where adjacent stands of mesquite provide suitable foraging. Cuckoos are known to nest in this RUU along Wet Beaver Creek and Red Tank Draw and likely Walker Creek although surveys have not been conducted.

Common black-hawks prefer to nest along perennial riparian areas with groves of tall trees. Black-hawk prey includes crayfish, amphibians, reptiles, and fish. Streams of low to moderate gradient and less than one foot deep with scattered boulders are ideal for foraging. In this RUU, common black-hawks are known to nest along Wet Beaver Creek, Red Tank Draw, and Walker Creek.

Southwestern willow flycatchers prefer dense riparian thickets along perennial streams that have wide and shallow channels in broad valley floodplains. Although no nesting birds have been detected within this RUU, suitable habitat for this bird occurs along Wet Beaver Creek.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, narrow-headed garter snake, Mexican garter snake, springsnails, and obsolete viceroy butterfly. The obsolete viceroy butterfly is a riparian dependent butterfly. The larvae and adult form of the obsolete viceroy feed on leaves, twigs and other plant parts of host species including willow and cottonwood. Limited surveys have occurred; the only occurrence data is from a few collections, one of which was from this RUU.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones where they forage on waterfowl and fish. A winter bald eagle count route along Wet Beaver Creek occurs in this RUU and has been monitored annually since 1992. At least one eagle is detected in almost every year with some years reporting two to three eagles.

Refer to the Apache Maid special status species description for additional habitat information for bald eagles and elk. Elk can be found during the winter in this RUU.

This RUU contains three main riparian areas; Wet Beaver Creek, Walker Creek, and Red Tank Draw. Wet Beaver Creek currently supports roundtail chub, desert sucker, sonoran sucker, speckled dace and possibly longfin dace. Spikedace and possibly loachminnow historically occurred in Wet Beaver Creek. Walker Creek supports Gila chub, desert sucker and speckled dace. This is one of only three streams on the Coconino National Forest that has a population of Gila chub. Red Tank Draw also supports a population of Gila chub.

The Tonto Basin agave is found in association with archeological features that are located atop benches, at edges of slopes, or on gentle slopes that have well drained soils and overlook major drainages and perennial streams. Several populations occur within this RUU.

Hydrology & Soils

This unit includes lands adjacent and within the Wet Beaver Creek corridor, including the significant tributaries Red Tank Draw and Walker Creek, from Montezuma Castle to Wilderness boundary. The average elevation is approximately 4200 feet with slopes from level to steeply sloping. The predominant soil map units are 403, 414, 420, and 430. Soil units 403 and 414 have developed in mixed alluvium with gentle slopes and soil units 420 and 430 have developed in basaltic parent material with steep slopes. These soils typically have fine soil textures throughout and are subject to traffic use problems and soil damage when wet, like Apache Maid above but to a lesser degree.

There are around 19 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. Some roads may require drainage improvement or other treatments before outfitter/guide activities are approved. Forty five percent of these roads intersect with soils rated with severe limitation for unsurfaced roads; mitigation would include seasonal use only during the dry conditions from June 1 to November 1 annually. Twenty nine percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use, however; these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 0.8 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 7.85 percent or 1,267 acres out of 16,148 acres for the unit have been surveyed for heritage sites. The surveys revealed 145 heritage sites, which leads to a prediction of 73.24 sites/square mile. There is a need to develop site protection measures for recreation use and identify interpretive opportunities.

Transportation System

The main roads 618 and 119 may take the most traffic and need to be reviewed. FR 689 (Blue Grade) is also important. FR 119 provides dirt road access into Montezuma Well National Monument, which as 51 miles of level 2 road with substantial drainage, resource protection, and maintenance problems. The nine miles of trails in the unit are in need of substantial maintenance.

Beaverhead Recreation Use Unit

Recreation Setting

The Beaverhead Recreation Use Unit is the third largest unit at 32,416 acres. It includes a wide area bounded by interstate-17 on the east, Highway 89A on the west, Cornville Road on the south and Highway 179 and House Mountain on the north. It has numerous sub-units including Dry Beaver Creek Drainage, Beaver Head Flat Road area, foothills south and west of House Mountain east of Page Springs Road, and intermingled private-NF ownership between Highway 89A and Page Springs Road. The majority of the area is interspersed forest (53 percent) and forested (41 percent). It has approximately 88 miles of system roads and almost no trails. Recreation use is mostly ATVs, OHVs with some water based use at Spring

Creek and Mormon Crossing on Lower Oak Creek. The Historic Chavez Wagon Road crosses the flats between Beaver Head Flat Road and Beaver Head Spring offering historical interpretation opportunities as does Stagestop Monument near the spring. Refer to Map 8- Beaverhead Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

A substantial amount of ATV use occurs east of Cornville along Melon Well Road, where locals have developed a play area and established a major network of non-system ATV trails and roads. The area around Beaverhead Spring for one half mile downstream from Stagestop has become a popular place for swimmers and day users due to the permanent water source along Dry Beaver Creek.

ROS Class

There are 974 acres of SPNM; 9,908 acres of SPM; 7,512 acres of RN, and 4,643 acres of rural ROS classes in this unit. The unit also has 9,379 acres of non-Forest Service lands.

Desired Experience

Conflicts between recreation users and private landowners would be kept to a minimum in and adjacent to Cornville and McGuireville.

Recreation Activity Niche

The Beaverhead niche is to offer guided recreation opportunities for ATV, equestrian, hot air balloons, hummers, scenic, mountain biking, 4X4 driving, backpacking, hunting, livestock packing and heritage site visit tours in an area where open vistas and light use is offered. The unit will offer semi-primitive opportunities in the Dry Beaver Creek area and on the south foothills of House Mountain while avoiding neighborhood issues in the Lower Oak Creek and Page Springs area.

Administrative and Resource Management Concerns

The area was closed to camping in 2002 due to extreme use by transients and groups.

Melon Tank Road (FR 9205K) just outside of Cornville shows signs of excessive OHV use. The Forest Service recently completed work eliminating the unauthorized extension of this road all the way to the top of House Mountain and FR 120A.

Management of Stage Stop area presents a site deterioration challenge to the District. This popular dispersed camp area was fenced off to allow riparian vegetation to recover from associated over use. At times it is still popular with the Rainbow Family. Stage Stop Historic Monument commemorates the stage coach route that passed through here.

A Forest Order prohibits camping and campfires in the vicinity of Mormon Crossing and Spring Creek. Another Forest Order prohibits camping and campfires at Stage Stop and Beaver Creek Area.

Opportunities/

The Chavez Trail needs to be located, marked and included within the FS

Recommendations

trail system. Illegal trails and roads need to be closed and obliterated. The Cornville "Quad" play area needs to be closed and rehabilitated. Roads into Winter Cabin Spring and Baker Homestead need to be obliterated to protect cultural resources. Creek access above and below Mormon Crossing needs to be kept intact. Access to the Spring Creek Riparian Closure needs to be kept closed as does the closure at Spring Creek. Commercial riparian interpretive walks with limited driving access could be accommodated along Dry Beaver Creek as would interpretive trips to the location of the old Prescott to Santa Fe Stage Station at "Stage Stop".

Desired Condition for Recreation

Quad and motorcycle "sacrifice" areas such as the ones around Cornville would be closed and rehabilitated. A "reasonable" system of roads and trails would be established and the proliferation of an ever increasing system would be stopped. Road maintenance would improve and roads would be maintained particularly for resource protection. Overall scenic quality would improve with fewer motorized scars on the land and less soil erosion from road damage.

Special Status Wildlife, Fish, & Plant Species

Most of the concern in this RUU is with rare species associated with the riparian areas of Oak Creek, Dry Beaver Creek, Sheepshead Canyon, and Spring Creek.

While no nesting bald eagles are known to occur in this RUU, nesting eagles from lower down on Oak Creek may occur in this RUU while foraging. Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones where they forage on waterfowl and fish. Refer to the Apache Maid special status species description for additional habitat information.

Yellow-billed cuckoos are known to nest in this RUU along Dry Beaver Creek and on state land along Oak Creek. Spring Creek provides suitable nesting habitat as well, although limited surveys have not detected nesting cuckoos. Refer to the Beaver Creek special status species description for additional habitat information for this bird and the black-hawk.

In this RUU, common black-hawks are known to nest along Oak Creek and Dry Beaver Creek. Suitable habitat is present along Spring Creek.

Within this RUU, suitable habitat for Southwestern willow flycatchers occurs along Oak Creek, Dry Beaver Creek, and Sheepshead Canyon. Although no nesting birds are known to occur, migrants have been detected at Dry Beaver Creek and Sheepshead Canyon. Refer to the Beaver Creek special status species description for addition habitat information.

Lowland leopard frogs prefer permanent stream pools, springs, stock tanks, and side channels of major rivers from sea level to 4,800 feet in elevation but more commonly under 3,300 feet. Leopard frogs are seldom found in

association with bullfrogs or crayfish. Despite historic, widespread distribution, lowland leopard frogs currently persist in few locations, including this RUU. Potential causes for the decline of this species are the presence of predacious non-native fish, bullfrogs, and crayfish.

The Mexican garter snake is usually found in or near streams and ponds in canyons up to 6,200 feet in elevation. This garter snake is most closely linked to shallow slow-moving or impounded waters, though it also occurs in other aquatic environments. The Mexican garter snake's diet consists of leopard frogs, toads, tadpoles, and various native fishes. Lizards and small rodents are taken during occasional terrestrial forays. The Mexican garter snake is known to be associated with leopard frogs which are a major prey species. Mexican garter snakes have been sighted along the Verde River and several of its tributaries, most notably Oak Creek near the Page Springs Fish Hatchery (within this RUU).

The Page spring snail is restricted to six extant populations in central Arizona; all located outside of-National Forests system lands within this RUU. It is found attached to firm substrates (e.g., rock, wood) in spring fed areas.

One riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist is the obsolete viceroy butterfly.

A resident population of elk occurs in Dry Beaver Creek within this RUU. Refer to the Apache Maid sensitive species description for addition habitat information.

Streams in this RUU that support native fish include Oak Creek, Spring Creek and Dry Beaver Creek. The lower portion of Oak Creek currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, speckled dace. Spring Creek supports five species of native fish including Gila chub, desert sucker, Sonora sucker, longfin dace, and speckled dace. The population of Gila chub in this creek is one of only three known to occur on the Coconino National Forest. Dry Beaver Creek supports roundtail chub.

Suitable habitat for various limestone-dependent sensitive plant species occurs in this RUU. Arizona cliffrose grows on low arid hillsides, associated with a unique white outcrop which appears to be a shallow gravelly loam that develops over White Tertiary Limestone lakebed deposits high in lithium and magnesium. It occurs in shallow to moderately deep, extremely cobbly loam soil. Ripley's wild buckwheat occurs on sandy-clay, to gravelly, stony, medium-textured soil on limestone and sandstone bedrock; and on white calcarious soil of Tertiary lakebed deposits with red chery rocks, volcanic tuffs and ashes and redeposited limestone. The heathleaf wild buckwheat is known primarily from the Verde Formation, an old lake basin laced mainly with limestone outcrops, but also with clay, sand, and gypsum deposits. The plant prefers the limestone substrate which has been described

as chalky gray or white, and floury. Verde Valley sage is a low much-branched shrub. This plant is restricted to areas of whitish, powdery, gypseous limestone of the Tertiary lakebed deposits. The Hualapai milkwort occurs in similar soil types as the other limestone dependent plants.

Several populations of the Tonto Basin agave occur within this RUU.

Hydrology & Soils

This Unit includes lands adjacent to the Oak Creek reach in the vicinity of Page Springs as well as the lower reach of Dry Beaver Creek. The average elevation is approximately 4000 feet with slopes from level to the steeper foot slopes of House Mountain. The predominant soil map units are 280, 350, 381, 385, and 420. Soil units 280 and 381 have developed in mixed alluvium with gentle slopes. Soil units 350 and 385 have developed in limestone parent material with gently sloping to steep slopes, and 420 in basaltic parent material with steep slopes. These soils typically have coarse soil textures with high levels of rock fragments and are minimally subject to traffic use problems and soil damage when wet.

There are 39.31 miles of level 2 unsurfaced roads potentially available for use in outfitter/guide activities. Some roads may require drainage improvement or other treatments before outfitter/guide activities are approved. Thirty one percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 1.21 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 10.28% or 3,331acres out of 32.405 for the unit have been surveyed for Heritage sites. The surveys revealed 66 sites, which leads to a prediction of 12.66 sites/square mile.

Transportation System

The main roads with the most of traffic are 796, 120, Page Springs (FR 134), Cornville (FR 119) roads. There is a lot of ATV traffic. This RUU has approximately 88 miles of unsurfaced roads with drainage, resource damage and maintenance problems. Melon Tank Road (FR 9205K) just outside of Cornville shows signs of excessive OHV use. This road has been extended all the way to the top of House Mountain, eventually connecting into FR 120A. The turntable off Cornville road is a popular staging area for equestrian users, as well as others.

Broken Arrow Recreation Use Unit

Recreation Setting

The Broken Arrow Recreation Use Unit is one of the smallest at 391 acres but is the most controversial. The unit offers stark contrasts and breathtaking beauty to visitors and residents who take the opportunity to enjoy the challenge of a 4X4 or a Mountain Bike or the simple opportunity for a walk. Forest users gain access to the Broken Arrow RUU through Morgan Road residential area. An increasing number of homeowners have voiced their displeasure with tour traffic and noise. Note that more than one-third of all Coconino National Forest guided users take the Broken Arrow 4X4 Tour.

Broken Arrow is mostly forested (70 percent) with interspersed forest (open PJ woodland) occupying 30 percent of the area. The unit has 2 miles of system roads and 2 miles of system trails. Major recreation uses include 4X4 touring, Mountain Biking and hiking. Some walking for pleasure occurs along the Broken Arrow Jeep Road. The Broken Arrow Trailhead is the southern access for the Marg's Trail, a wilderness trail in the Munds Mountain Wilderness. The popular Broken Arrow Trail is used by Mountain Bikers and Hikers and ties into the Little Horse Trail thru the Chicken Point Area. Refer to Map 9- Broken Arrow Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Use in the Broken Arrow Unit has steadily increased over the years in commercial and non-commercial recreation activity. Commercial use limits were set during the 1989 Jeep Study at 5,400 commercial jeeps annually with a maximum of 12 jeeps at one time. They were changed in 1997 to 10 vehicles every two hours and 5 maximum per hour. Total use both commercial and non-commercial increased from an average of 23 vehicles per day in 1988 and 1989 to 89 per day in 2004.

Areas of concentrated public use include Submarine Rock, Chicken Point, and Mushroom Rock; the sinkhole, the Broken Arrow Trailhead, and the Broken Arrow road. Expansion of these areas should be stopped.

ROS Class

There are 111 acres of SPNM; 260 acres of SPM; and 20 acres of RN, ROS classes in this unit.

Desired Experience

The desired experience should that of a roaded area which has a very natural appearance. Opportunities should be available for 4X4 driving, mountain biking and hiking in this unit.

Recreation Activity Niche

The "niche" is to provide commercial opportunities without deteriorating peoples experience and this beautiful place. There needs to be an appropriate balance of non-commercial and commercial use at Broken Arrow to prevent non-commercial users and adjacent neighbors from seeing strings of commercial jeeps in one place or in too short of a time period.

Administrative and Resource Management

Recreation issues within the unit include the widening and deepening of roads and trails, the construction of illegal hiking and Mountain Bike Trails, and the ever increasing number of user created trails. There are concerns

Concerns

from hikers and Mountain Bikers about too many vehicles using the area.

As knowledge of the extraordinary 4X4 opportunity increases, general public use of this area by 4X4 clubs and rental jeep drivers will increase as well. This may fuel user conflicts between the guided and unguided users. Inexperienced drivers may present a safety hazard to other users as well as themselves on this technical 4WD route.

An ATV outfitter-guide poses safety problems in this unit. A high level of expertise is needed to drive this route without rolling the ATV. The inherent difference in speed between jeep and ATV travel on the road contributes to traffic flow problems that could force a driver to stop or back up in a dangerous position.

Opportunities/ Recommendations

Do not compromise protection of the sinkhole through exposure to outfitter-guide activity. Prohibit rappelling and spelunking.

The unit needs rehabilitation in Broken Arrow Trail corridor, behind the Broken Arrow Subdivision, and around the Chimney Rock Area. Construction and maintenance of illegal mountain bike trails needs to be stopped.

Desired Condition for Recreation

A semi-primitive recreation experience should be available in the Broken Arrow Unit. That means contact frequency should be light to moderate, managerial presence should be limited and man and his improvements should not dominate the landscape in the semi-primitive ROS class.

Broken Arrow should not look like “It is being loved to death”. It needs to be a place where the natural beauty and the majestic landscape are not dominated by excessive use. All users must stay on “System” roads and trails to prevent further damage to the unit.

The desired situation in Broken Arrow in the roaded natural ROS class is a not very remote area with moderate to high contact frequency on roads and moderate to low contact frequency on trails. It is an area where on-site regimentation and controls are noticeable but harmonize with the natural environment. It is an area where native materials are used on roads and the natural landscape is partially retained.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion. Refer to the Apache Maid RUU special status species description for additional habitat information.

While 23 species of bats potentially occur throughout the Red Rock Ranger District, bat surveys have documented 17 bat species roosting in sinkholes, cracks in cliffs, cliff dwellings (Indian ruins), caves, mines, under bridges, and in abandoned buildings. Other roosts likely occur in natural structures such as underneath loose bark on snags, in tree and snag cavities, and under rocks. All of the bat species occurring or potentially occurring in the area are insectivorous. Water sources such as earthen stock tanks, springs, seeps, and streams are important for bat foraging due to the abundance of insects found flying above the water. In this RUU, bat roosts with the cave myotis and Townsend's big-eared bat have been discovered.

Hydrology & Soils

This is a very small but highly used unit adjacent to the Broken Arrow subdivision of Sedona. The average elevation is approximately 4400 feet with slopes from moderately sloping to steep. The predominant soil map units are 471 and 474. These soils are typically coarse textured throughout and have developed in sandstone parent material. Maintenance of vegetative ground cover is essential to prevent soil erosion.

Heritage

Approximately 14.32 percent or 56 acres out of 391 acres for the unit have been surveyed for heritage sites. The surveys revealed 7 sites, which leads to a prediction of 80 sites/square mile.

Transportation System

There is about 0.5 miles of level 2 unsurfaced roads potentially available for use in outfitter/guide activities. Some roads may require drainage improvement or other treatments before outfitter/guide activities are approved. These roads have historically received high levels of 4x4 use and have received periodic maintenance. There are no level 2 roads within or near riparian areas. Because of heavy use and damage from motorized vehicles the Broken Arrow Trail needs maintenance.

Casner Recreation Use Unit

Recreation Setting

The Casner Recreation Use Unit is small at 1,107 Acres and is mostly forested (62 percent). It follows the 245 kv powerline and Forest Trail Number 8, the Casner Mountain Trail. Currently, APS has a nonexclusive special use permit to accommodate maintenance and repair of the powerline.

The unit rises 2,000 vertical feet from the bottom along FR 525C to the top located on the Mogollon Rim.

Casner Mountain 4X4 Trail #8 is currently available by permit to non-commercial full-size vehicles (>50 inch width) from May 16 through October 14 to

accommodate migrating wildlife. There is a maximum of 10 vehicles per group. Smaller vehicles do not have this seasonal use restriction. Locked gates at the top and bottom prevent access for the restricted vehicles while allowing access for the narrower ones. Refer to Map 10- Casner Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

The unit provides outstanding views of the Verde Valley and wonderful views into Sycamore Canyon and Mooney Canyon. Most of the use is ATV riders, and hiking and equestrian use from individuals who are completing loop hikes or rides from the Taylor Cabin area, Loy Canyon or Mooney Canyon. The unit is used mostly by ATV riders to scout for game and for general ATV riding. Approximately six special use permits are granted per year to non-commercial groups. The trail is gated at the top and bottom. ATVs can get past the gate without a key. The unit includes all non-wilderness land along the corridor between the Sycamore Canyon Wilderness and the Red Rock/Secret Mountain Wilderness.

ROS Class

There are 1,050 acres of SPM; and 57 acres of RN ROS classes in this unit.

Desired Experience

Semi-Primitive Motorized experience along Trail #8 and a Semi-Primitive Non-Motorized Experience elsewhere. Commercial tours on the Casner Powerline Road will not be permitted.

Recreation Activity Niche

Opportunities abound in this unit for riding ATVs, clubs can get a limited number of permits for 4X4 trips from May to October. Some long distance equestrians also use it for long loop rides up Sycamore Canyon Trails such as the Doggie Trail and the Taylor Cabin Canyon Trail and down the Casner Trail (it is a FS system trail) or up the Casner Trail and down the Mooney Trail. It also offers opportunities for filming wildlife (particularly elk) and an unconfined and very isolated recreation experience.

Administrative and Resource Management Concerns

Problems include lack of patrol by Forest Service Personnel, and motorized intrusions into wilderness along the flat areas on top of the mesa. Muddy conditions are a problem on the route especially during the winter and during the summer thunderstorm season. During the winter of 2005-2006, there was substantial development of parallel roads to avoid mud and/or water holes in the existing road.

Most of the RUU is a narrow corridor between Sycamore Canyon and Red Rock-Secret Mountain Wildernesses. Wilderness intrusions from motorized or mechanized vehicles pose one of the major concerns for this area.

Opportunities/ Recommendations

Consider whether to extend seasonal restrictions to motorized vehicles less than 50 inches wide. Also decide which, if any, commercial uses would be appropriate.

Desired Condition for Recreation

Wilderness boundaries would be well signed to prevent motorized intrusions. Grade Dips would be in good working order on Trail #8 and non-commercial

group 4X4 permits would be issued per the direction in Amendment 12. Trail use and the evidence of human use would be light and limited to the trail corridor.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in this RUU.

Elk can be found during the winter in this RUU.

Pronghorn now only persist below the rim in this and a few other RUUs. A movement study showed that pronghorn occur in this RUU, particularly when traveling along the Casner power line to mingle with the Fry Park herd up on the Peaks Ranger District. Refer to the Apache Maid RUU special status species description for additional habitat information for these three species.

Hydrology & Soils

This is a small unit located on top of Casner Mountain. The average elevation is approximately 6600 feet with slopes from gently sloping to steep. The predominant soil maps units are 462, 471, and 495. Soil map units 462 and 495 have developed in basaltic parent material with gentle slopes and soil map unit 471 has developed in limestone/sandstone parent materials with steep slopes. These soils have fine soil textures throughout and are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There around 3 miles of level 2 unsurfaced roads within this unit. However 100 percent of these roads intersect with soils rated with severe limitation for unsurfaced roads. The only mitigation to prevent soil damage when wet is non use. These roads would be available for use only during dry conditions from June 1 to November 1 annually. There are no level 2 roads within or near riparian areas.

The Casner trail follows the level 2 road alignment and would be subject to the same restrictions as listed above for the road.

Heritage

Approximately 8.58 percent or 97 acres out of 1,131 acres for the unit have been surveyed for heritage sites. The surveys revealed 1 site, which leads to a prediction of 6.6 sites/square mile.

Transportation System

There is only one road (powerline trail #8).

Cathedral Recreation Use Unit

Recreation Setting

The Cathedral Unit is 5,081 acres largely influenced by Cathedral Rock and Highway 179. Remarkable contrasts of red rock, dark green vegetation, good weather and blue sky combine in magical ways in this Unit. It is 56 percent forest, 38 percent interspersed forest setting, and 6 percent meadows or bare rock. This mix of forested and unforested area means that visitors have a greater chance of seeing each other while in this unit, and they have a greater effect on each other than in totally forested units. It is one of the steepest units with 16 percent of the land area over 40 percent slopes. It is bounded by the VOC on the south, the Back-O-Beyond Road on the north, the Verde Valley School Road on the west, and includes the non-wilderness portion of the Big Park Area on the east. The area includes the world famous view of Cathedral Rock from the flowing Oak Creek above Crescent Moon Ranch. This is one of the top two most photographed locations in the State of Arizona besides the Grand Canyon.

Inventories show the unit contains almost 17 miles of roads and over 20 miles of trail. Some of the trails are famous, including: the Bell Rock Pathway, Little Horse, Cathedral Saddle, Templeton, H.T., Big Park Loop and Baldwin trails. Another significant trail, the Llama Trail, is currently being constructed and added to the system. The unit includes major trailheads including the Bell Rock Pathway, Little Horse, Back-O-Beyond and Baldwin Trailheads. Refer to Map 11- Cathedral Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Recreation activity includes hiking, walking for pleasure, Mountain Biking, Rock Climbing, jogging and some equestrian activity (particularly from the Verde Valley School). There is substantial interest in meditation and spiritual activity, especially in the vicinity of Cathedral Rock. Driving for pleasure, photography and scenery viewing are major activities along Highway 179, the Verde Valley School Road and the Back-O-Beyond Road. Commercial guiding activity is very limited in the unit with only two parties per day.

Cathedral RUU features Bell Rock Pathway, one of the most heavily used trails on the District. Tour buses frequent the Pathway parking, providing a photo stop and short walk opportunity for their passengers.

ROS Class

There are 3,336 acres of SPNM; 936 acres of RN, and 463 acres of rural ROS classes in this unit. The unit also has 346 acres of non-Forest Service lands.

Desired Experience

Few units except wilderness have so much of the land base dedicated to SPNM. In these areas light contact frequency is emphasized. Also managerial presence should be limited (not too many signs, overbearing regulations) and man and his improvements should not dominate the characteristic landscape.

Recreation

The unit's niche is to continue the relatively remote feeling and breathtaking

Activity Niche

views, unencumbered by masses of people, while providing limited commercial opportunities for mountain biking, and public transit. Other activities that occur in the unit are weddings (at Red Rock Crossing), meta-physical tours and heritage site visits.

Administrative and Resource Management Concerns

Recreation concerns include the lack of trail patrols, the cost of maintaining the 20 plus miles of trail, the illegal construction of trails by hikers and Mountain Bikers, the proliferation of social trails created by users walking or riding cross country, and degradation to the scenic quality and visual beauty of Cathedral Saddle from damage caused to vegetation and soil by overuse.

Major areas of concern are: the area between Bell Rock and the VOC (Big Park Loop) where severe vegetation and soil damage has occurred; the east side of Cathedral Rock; and the Cathedral Rock Art Site. The Cathedral Unit includes “World Quality” landscape, which is a “signature” site for the Sedona Area. The proliferation of social trails and general cross country travel, mostly non-motorized has damaged this unit over the years. The introduction of a system of trails and trailheads including good signing and maps has helped the area to heal but damage to cryptobiotic soil communities and the increase in bare soil and the reduction of organic litter continue to be a problem in the unit.

There are a lot of rescues on Bell Rock, Courthouse Butte and Cathedral Rock; and there is a need for safe beginner climbing guides on Bell Rock. Free climbers continue to fall to their death or serious injury on all of these monoliths. Beginner climber training needs to be offered for free and for a fee. There are conflicts with sensitive or critical wildlife habitat in some rock climbing areas.

Currently, tour buses do not contribute any fees for their use of the area. A short stop fee would be appropriate for this type of use; short stop fees are established by the Regional Office.

Although the Forest Service has spent considerable time and resources to decrease the number of social trails from Highway179 into the Forest, much work and revegetation remains to be done. The unit also contains some “most damaged” areas listed in the Forest Plan Amendment 12 for re-habilitation: Cathedral Rock and areas surrounding Bell Rock. Although some progress has been made, additional efforts are needed in the Big Park Area (south of Bell Rock) and Cathedral Rock, especially the east side of Cathedral Saddle. This area has continued to show substantial loss of vegetation and many social trails.

An ongoing problem of wilderness intrusion by mountain bikes via Cathedral Loop Trail exists.

On the west side of Hwy 179, Cathedral Rock petroglyphs are occasionally subject to vandalism. A watchful outfitter-guide may benefit the heritage

site in a site steward role.

There is quite a challenge to manage the unit for SPNM when it has one of the busiest highways in the State averaging over 8,000 vehicles per day. Once visitors get away from the influence of the highway things get pretty quiet and there is a relatively remote feeling in the unit if it is managed properly.

Opportunities/ Recommendations

Cathedral Rock provides opportunity for rock climbing where it does not conflict with sensitive or critical wildlife habitat. Review use levels and determine an appropriate outfitter-guide use allocation. From personal observations and reports from patrolmen the trailheads feel like they are near capacity. Use on trails still appears to be under capacity within the unit at about 300 people per day on the average using the trails. There appears to be a need to accommodate mountain bike guides in the unit.

Evaluate locations and appropriate use levels for wedding, inspirational, and metaphysical activities within this unit.

The area has a lot of trails which need a lot of care. Preventative law enforcement (guides that spot illegal activities) would help reduce the proliferation of illegal, environmentally damaging, social trail building which occurs in the area.

Desired Condition for Recreation

The substantial trail system including trailheads in the unit would be well signed and maintained. Non-FS System “Social Trails” would be eliminated with particular emphasis on the Cathedral Rock, Bell Rock and the area north of Big Park. The illegal trail construction that has been a problem in the area would be stopped.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion. Refer to the Apache Maid RUU special status species description for additional habitat information.

In this RUU, common black-hawks are known to nest along Oak Creek. Refer to the Beaver Creek RUU special status species description for addition habitat information.

The essential nesting habitat for peregrine falcon includes rock cliffs that have a mean height of 200 to 300 feet. Peregrines prey mainly on birds found in wetlands and riparian areas within a 10 to 20 mile radius from the nest site. The Verde Valley population of peregrine falcons is the second largest population in Arizona. There is one known peregrine eyrie in this RUU.

Other riparian dependent species that could potentially occur in this RUU

but for which no occurrence records exist include lowland leopard frog, narrow-headed garter snake, Mexican garter snake, springsnails, and obsolete viceroy.

In this RUU, one known bat roost is present in a vertical crack on a cliff face but the species using the roost has not been identified. Refer to the Broken Arrow RUU special status species description for addition habitat information.

Only a small portion of Oak Creek falls within this RUU. This portion currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, and speckled dace.

Hydrology & Soils This unit includes lands around Cathedral Rock, on both sides of Highway 179, and to the south side of Courthouse Butte. The average elevation is approximately 4200 feet with slopes from gently sloping to steep. The predominant soil maps units are 457, 458, and 471. These soils are typically coarse textured throughout and have developed in sandstone parent material. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There is around 2 miles of level 2 unsurfaced roads. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There are no level 2 roads within or near riparian areas.

Heritage Approximately 11.67 percent or 593 acres out of 5,080 acres for the unit have been surveyed for heritage sites. The surveys revealed 32 sites, which leads to a prediction of 34.54 sites/square mile.

Transportation System Primary access is from Highway 179 and FR 216A (Verde Valley School Road. The Forest Service has closed many roads along Highway 179 that access the Forest system lands; this effort was continued in Amendment 12. Substantial amount of urban interface since this RUU buffers Sedona, Village of Oak Creek, and other private properties. Twenty miles of system trails need maintenance due to heavy use and erosion.

Cedar Flat Recreation Use Unit

Recreation Setting The Cedar Flat Unit at 34,384 acres is very isolated and lightly used. It is mostly forested, includes 11 miles of trails and over 80 miles of forest system roads. Access to Cedar Flat RUU is via FR 214. This road presents an ideal opportunity for 4X4, hummer, ATV, equestrian, and mountain bike tours. The rugged nature of the road discourages motorized use from general public. Hunters frequent the area possibly because few, other than them, venture into this remote area.

The Cedar Flat Unit includes the large expanse of Pinyon-Juniper Woodland

that sits at the mile high elevation level and includes many rough and potentially muddy roads on the basalt rock formations. The trails include the Walker Basin and Bell Trails which consist of a combination of user created roads and trail segments which loosely make up the trail system. Recreation use is almost exclusively hunting, cultural resource site visiting and fuel wood gathering with some very limited ATV and wildlife photography. Refer to Map 12- Cedar Flat Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

The potential for wildlife viewing and photography unencumbered by high numbers of visitors is substantial in this area. Also, due to the density of cultural resource sites, some quite large, the potential for archaeological site visiting is high in this unit, subject to proper clearance and the approval by archaeologists.

ROS Class

There are 28,671 acres of SPM; and 5,713 acres of RN ROS classes in this unit.

Desired Experience

Contact frequency will be limited to 6 parties/vehicles per day. Semi-primitive motorized experiences will include limited managerial presence, and road density will be low. Natural appearing landscapes will dominate the area as will a sense of solitude. Wildlife viewing experiences will abound.

Recreation Activity Niche

The Cedar Flat Unit's niche is to provide motorized, equestrian, mountain biking and hunting through guided and un-guided opportunities, all of which offer platforms for photography in a wide open western setting.

Administrative and Resource Management Concerns

The unit includes a major wilderness portal access point and trail at Bald Hill for Trail 17, the West Clear Creek Trail. The access point is along a severely damaged road. The trail is damaged as it descends into West Clear Creek and, the trailhead is hard to locate and not signed or delineated. It needs work.

Recreation issues include the lack of patrol and enforcement of the Code of Federal Regulations due to lack of personnel and funding, significant pot hunting, and cultural resource site damage. Additional concerns are illegal fuel wood cutting, particularly to the limited stands of green alligator juniper trees, and continual widening and deepening of roads and trails due to wet weather use. Also, the lack of road maintenance is a problem which makes patrolling the area difficult and costly. Persistent illegal wood cutter problems also occur.

Opportunities/ Recommendations

Commercial use could provide increased managerial presence in the area with increased reporting of violators and preventative enforcement.

FR214 may provide a challenging 4X4, ATV, or mountain bike route connecting into the Apache Maid RUU. Horseback rides may present another outfitter-guide opportunity.

Desired Condition for Recreation

Wildlife viewing and hunting opportunities will be abundant and heritage resources will receive few impacts. Because vehicles and people can be seen from a great distance in this unit, light use is preferable.

Special Status Wildlife, Fish, & Plant Species

One riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist is the northern leopard frog. Refer to the Apache Maid RUU special status species description for additional habitat information.

The Cedar Flat RUU supports the second highest concentration of wintering bald eagles on the District, particularly during winters with substantial amounts of snow and when the lakes above the rim freeze. There are no known communal roosts in this RUU.

Elk can be found during the winter in this RUU. Refer to the Apache Maid RUU special status species section for more information.

A small population of pronghorn persists in this RUU. The herd has been augmented in the past by transplants from out-of-state herds. Recent telemetry studies have shown that pronghorn from this RUU move north, eventually to Anderson Mesa on the Mormon Lake Ranger District. Refer to the Apache Maid RUU sensitive species description for additional habitat information for bald eagles, elk and pronghorn.

Hydrology & Soils

This unit occupies an elevated plain setting located above the rim with an average elevation of approximately 5900 feet. The slopes are typically described as level to gently sloping. The predominant soil map units are 462, 466, and 492. These soils have developed in basaltic parent material and have very fine soil textures throughout. These soils are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There are approximately 63 miles of level 2 unsurfaced roads within this unit potentially available for use in outfitter/guide activities. However 94 percent of these roads intersect with soils rated with severe limitation for unsurfaced roads. The only mitigation to prevent soil damage when wet is non use. These roads would be available for outfitter/guide use seasonally during dry conditions from June 1 to November 1 annually. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There are no level 2 roads within or near riparian areas.

There are no Forest system trails within this unit available for outfitter/guide activities. Permitted trail activities would use the level 2 road network. The same seasonal use limitations as described above would apply.

Heritage

Approximately 6.08 percent or 2,090 acres out of 34,384 acres for the unit have been surveyed for heritage sites. The surveys revealed 154 sites, which leads to a prediction of 47.16 sites/square mile.

Transportation System

The main road is 214. The RUU contains 63 miles of level 2 roads with severe resource damage, drainage and maintenance problems. Eleven miles of trails need maintenance due to their remote location and lack of maintenance help.

Dry Creek Recreation Use Unit

Recreation Setting

The Dry Creek Recreation Use Unit includes the Vultee Arch and Long Canyon Roads which are the gateway into some spectacular scenery. They are also the gateway to trails that travel through some of this scenic area.

Dry Creek RUU presents a unique challenge in that one cannot travel far from the road before entering Red Rock-Secret Mountain Wilderness. The area is also heavily laden with archaeological sites. An abundance of social trails exist that access heritage sites as well as wilderness.

The unit is 2,770 acres, is mostly forested with P-J woodland, and has seven miles of system trail and 12 miles of Forest system roads. It is mostly within the semi-primitive motorized Recreation Opportunity Class.

Trails include the Deadman's Pass, Long Canyon (Tr.122), Brins Mesa and Devil's Bridge trails. Trailheads include the Devil's Bridge, Secret Canyon, Vultee Arch/Dry Creek, Brins Mesa and Long Canyon. The Dry Creek Unit is one of the major wilderness portals to the Red Rock/Secret Mountain Wilderness. Refer to Map 15- Dry Creek Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Recreation activities include driving for pleasure, scenery viewing, hiking, jeep touring (in open jeeps), Mountain Biking, visiting the Van Deren Cabin Historic Site, photography, equestrian activity and backpacking. The unit receives substantial commercial use at the present time with 35 vehicles/parties per day on the average.

ROS Class

There are 2,166 acres of SPM; 393 acres of RN, and 9 acres of rural ROS classes in this unit. The unit also has 202 acres of non-Forest Service lands.

Desired Experience

The area provides access to one of the most remarkable hiking areas anywhere. The access to that opportunity and experience should be balanced for commercial or non-commercial scenic viewers.

Recreation Activity Niche

The Dry Creek Recreation Use Unit niche is to provide guided and un-guided access to the Vultee Arch and Long Canyon Roads which are the gateway into some of the scenic landscapes of the District. Its niche is also to be the gateway to trails that travel through some of the scenic area. The unit is mostly within the semi-primitive motorized Recreation Opportunity Class. The unit should also provide road access and trail access to this scenic area without inundating visitors with an overwhelming amount of contacts with other visitors at a frequent interval. The are should provide opportunities for light contact frequencies, a lack of managerial presence and improvements that are not evident to the observer.

Administrative

Recreation issues and concerns include illegal camping, cross country vehicle

and Resource Management Concerns

travel including mountain bikes, which damage soil and vegetation, trail maintenance needs, trail patrol and identification of trail maintenance problems, wilderness intrusions by mountain bikers, and damage to archaeological sites from use, alteration, and pot hunting. Trails in the area are excessively wide including the Devil's Bridge and the Long Canyon Trails. They were jeep trails that got converted to hiking trails and both exceed 12 feet wide. Wide portions need to be ripped, obliterated and re-vegetated. Road maintenance on FR 152, the Vultee Arch Road is a problem. The road gets very muddy when wet which requires closure. During wet winters, closures can last for months. This restricts hiker access to the numerous hiking trails in the area causing numerous complaints. The road needs to have drainage improvements and road base installed to prevent having to close it during all but the wettest periods.

FR 9908 and 9910, commonly referred to as the First and Second Overlooks, respectively, have transformed into popular dispersed use areas that are completely denuded of vegetation. These two roads continue to extend and widen despite Forest Service efforts to arrest the impacts.

FR 9917 accesses Van Deren cabin, a popular heritage site. Water quality issues arise in connection with the crossing of Dry Creek about one-tenth mile before the cabin. Motorized vehicles trek up and down stream from the crossing in the creek bed. In addition to the water crossing problems, the road system has been extended into Red Rock- Secret Mountain Wilderness in the vicinity of Earl Tank.

Recently, Seven Canyons Golf Course developed the area immediately behind Van Deren cabin. The golf course is literally within a stone's throw from the cabin. Runoff from the golf course watering is impacting National Forest system lands by introducing non-native species and fertilizer into Dry Creek.

Proposed guided activities include hiking and mountain biking (we need fees for maintenance help and eyes to monitor and guides to block illegal trails). Scenic tours (we need lots of help blocking illegal roads (resource damage) and lots of help with fees to perform road and trail maintenance. Also, we need help monitoring archaeological sites.

Opportunities/ Recommendations

A small parking area exists on the opposite side of Dry Creek from Van Deren Cabin. Many of these problems could be mitigated by ending vehicular travel before the creek crossing.

Desired Condition for Recreation

The proliferation of "social" roads, pull outs and trails that damage and dominate the area will be rehabilitated. Recreation users will stay on system roads and trails. The wide open, western, majestic characteristic landscape will be available for all to enjoy without being over run with vehicles and people. New trail connections and trailheads will improve access to the Vultee Arch Road (FR 152c) which will be improved with gravel to reduce muddy conditions but will continue to be left somewhat rough.

Special Status Wildlife, Fish, & Plant Species

Despite historic, widespread distribution, lowland leopard frogs currently persist in few locations, including this RUU. Although lowland leopard frogs have not been detected in this RUU, surveys have been limited and potential exists for them to occur. Refer to the Beaverhead RUU special status species description for additional habitat information.

Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion. Refer to the Apache Maid RUU special status species description for additional habitat information.

Hydrology & Soils

This is a small but highly used unit with upper Dry Creek and Forest road 152 running through it. The average elevation is approximately 4600 feet with slopes from gently to moderately sloping. The predominant soil maps units are 45, 457, and 471. These soils are typically coarse textured throughout and have developed in mixed alluvium (45) and sandstone parent material. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are 6.31 miles of level 2 unsurfaced roads available for use in outfitter/guide activities. A high percentage of the soils are rated in the moderate category for both unsurfaced roads and erosion hazard. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There are no level 2 roads within or near riparian areas.

Heritage

Approximately 16.68 percent or 462 acres out of 2,770 acres for the unit have been surveyed. The surveys revealed 53 sites, which leads to a prediction of 73.42 sites/square mile.

Transportation System

This area has the dead-end road 152, and 2-3 paved roads. Forest Road 152 needs gravel surfacing and the 7 miles of trails need maintenance due to heavy use and erosion damage. Many of the closed roads have been converted to trail use (foot traffic); these portions of the trail need to be narrowed to better suit foot traffic as opposed to vehicles.

Dry Creek Road (FR 152 also referred to as Vultee Arch Road) presents some wet weather challenges. Drainage fixes are problematic as these areas seem to over lap other resource concerns (archeology sites and threatened and Endangered species).

Fossil Creek Road Recreation Use Unit

Recreation Setting

The Fossil Creek Road Recreation Use Unit is a long area stretching 16 plus miles from Highway 260 to Fossil Creek along the Fossil Creek Road and then along Forest Road 502 almost to Childs on the south and to Irving to the east. FR 708 (Fossil Creek Road) provides primary access for Verde Valley residents to the ever popular Verde Hot Springs on the Tonto National Forest. Bathers routinely drive vehicles across the Verde River to access the Hot Springs area. Most other uses are concentrated in the riparian area as well.

The 23,426 acre area includes nearly 8 miles of trail and 58 miles of Forest system roads. Trails include the Towel Creek, Sycamore, Flume and the Cimarron Springs Trails. The unit is one of the steepest with 15 percent of the acres over 40 percent slopes. Refer to Map 14- Fossil Creek Road Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

The area receives most of its use from travelers who are accessing Fossil Creek, the Verde Hot Springs and the Verde River. Recreation activities include camping, ATVs, hunting, swimming, driving for pleasure, equestrian and 4X4 driving. The northern portion of the unit receives a lot of use from the Camp Verde (Verde Lakes) Area. The area includes the Southern Bald Eagle Closure Area from December thru June along FR 500. That road also provides access to the Verde Falls and Cottonwood Basin Verde River Access points and the Ladders View point. The Ed's Point Road offers a good 4X4 opportunity with a challenging route and great vistas of Fossil Creek and the Mogollon Rim.

ROS Class

There are 2,634 acres of SPNM; 7,056 acres of SPM; 12,362 acres of RN, and 780 acres of rural ROS classes in this unit. The unit also has 594 acres of non-Forest Service lands.

Desired Experience

Semi-primitive motorized and non-motorized experiences are desired in this unit. An area that is not very remote, with good access, moderate contact frequency on roads, low contact frequency on trails, and an area with a natural appearing landscape.

Recreation Activity Niche

The Fossil Creek Road Unit's niche is to provide support for the interpretation of heritage sites such as the "Irving-Childs Hydroelectric Plant" cultural interpretive sites, and to provide opportunities for other un-guided publics to experience scenic driving in this isolated and rugged landscape.

Administrative and Resource Management Concerns

This area gets a lot of garbage dumps, junk cars and the usual problems associated with an urban interface area. Damage from cross country ATVs and 4X4 use is substantial along Forest Road 503.

The Fossil Creek Area is also part of this unit, and includes numerous Fossil

Creek access roads and trails that are addressed for either closure or restriction in the Fossil Creek Management Area Plan. Parking areas, with vehicle barriers and directional and regulatory signing is needed in this area along with road obliteration and trail construction. Trash, dump sites and campers overstaying their limits are major problems in this area including fire rings full of garbage. A severe lack of funding and personnel to patrol the area has been a continuing problem in the Fossil Creek Road Unit.

Also, with the Irving-Childs Hydroelectric Plant decommissioning there will be no official presence in the area in the near future. After-hours patrol and law enforcement is a particular problem where evening patrols are needed to prevent resource damage and provide for visitor safety. Lack of road maintenance funds and particularly wet weather mud problems on FR 708 from Hackberry Basin to Fossil Creek can cause dangerous driving conditions next to hazardous cliffs. The decommissioning and deconstruction of the Irving-Childs Hydroelectric Plant poses additional concerns of removing gated access from the day-use area, and increased response time from law enforcement. While Arizona Public Service Power Company (APS) remains in the area, there is at least a presence of authority and reliable, fairly accessible help in case of an emergency.

A long abandoned restroom facility at this location continues to be used but not serviced. The site is not suited to extended stays or overnight use because of its floodplain location.

Opportunities/ Recommendations

There is a need to re-establish the Flume Trail #124 where the bridges will be removed by routing the trail up the canyons. The District also needs help to facilitate interpretation of the various elements of the Childs/Irving Project that must remain as part of the Cultural Resource Clearance.

Discussions about decommissioning the power plant favor abandonment of the Flume Trail. Evaluate feasibility of leaving this trail open with due consideration given to the easy access it provides to Fossil Creek Wilderness and Fossil Springs, a sensitive area. Maintenance concerns may be addressed through Adopt-a-Trail program if FS is able to develop a partnership for use/occupancy of the power plant site.

Desired Condition for Recreation

The desired condition includes is a reduction in cross country travel and non-system “social” roads and trails. Dispersed recreation opportunities will abound with an emphasis on the enjoyment of the numerous isolated roads, trails and interesting features in the Unit such as Wingfield Mesa, “Tent” Rocks, Sycamore Basin, Hackberry Basin and the Ed’s Point 4X4 Road. Wide open foreground and background views are desired without people or vehicles obstructing the scene.

Special Status Wildlife, Fish, &

Breeding bald eagles occur in this RUU while foraging. The nearest nest locations are the Coldwater South and East Verde breeding areas, both

Plant Species

located along the Verde River. Individuals from these two nest sites could occur in this RUU while foraging along Fossil Creek. In addition, agency biologist witnessed an immature bald eagle attempting to construct a nest along the middle portion of Fossil Creek during the winter of 2005. That nesting attempt was not successful, but it is anticipated that with beneficial changes to habitat from recent restoration of full flows, nesting is likely to occur along Fossil Creek in the future. Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones where they forage on waterfowl and fish. Refer to the Apache Maid RUU special status species description for additional habitat information.

Fossil Creek provides habitat, however; yellow-billed cuckoos have not been detected during surveys along Fossil Creek in 2005 and 2006. Refer to the Beaver Creek RUU special status species description for additional habitat information.

In this RUU, common black-hawks are known to nest along Fossil Creek. Refer to the Beaver Creek RUU special status species description for additional habitat information.

Although no nesting southwestern willow flycatchers have been detected within this RUU, suitable habitat for this bird may occur along Fossil Creek, especially since restoration of full flows. Refer to the Beaver Creek RUU special status species description for additional habitat information.

Despite historic, widespread distribution, lowland leopard frogs currently persist in few locations, including this RUU. Potential causes for the decline of this species are the presence of predacious non-native fish, bullfrogs, and crayfish. Refer to the Beaverhead RUU special status species description for additional habitat information.

Limited surveys of the obsolete viceroy butterfly have occurred; the only occurrence data is from a few collections, one of which was from this RUU. Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include narrow-headed garter snake, Mexican garter snake, and Fossil springsnail.

In this RUU, one bat roost is known to support at least the pallid bat. Refer to the Broken Arrow RUU special status species description for additional habitat information.

Fossil Creek in this RUU currently supports five species of native fish; roundtail chub, Sonora sucker, desert sucker, speckled dace, and longfin dace. Loachminnow, spikedace, razorback sucker, and Colorado pikeminnow historically occurred in Fossil Creek. Nonnative fish in the Verde and in Fossil Creek are largely responsible for the extirpation of these four species. Recent efforts to eradicate nonnative fish from nine miles of

Fossil Creek have restored suitable habitat; native fish populations thriving without the pressure of non-natives.

Although no populations have been discovered, suitable habitat for the Tonto Basin agave occurs within this RUU. Refer to the Beaver Creek RUU special status species description for additional habitat information.

Hydrology & Soils

This unit is adjacent to the Forest road 502 and 708 corridors into Fossil Creek and also includes Wingfield Mesa to the north. The average elevation is approximately 4000 feet with slopes from gently sloping to very steep. The predominant soil map units are 382, 401, 402, and 420. These soils have developed in basaltic parent material and have fine soil textures throughout. These soils are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There are about 26 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. However 59 percent of these roads intersect with soils rated with severe limitation for unsurfaced roads. Some roads may require drainage or other improvements before outfitter/guide activities are approved. The only mitigation to prevent soil damage when wet is non use. These roads would be available for outfitter/guide use seasonally during the dry conditions from June 1 to November 1 annually. There are no level 2 roads within or near riparian areas. There is 0.17 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 4.17 percent or 978 acres out of 23,425 for the unit have been surveyed for heritage sites. The surveys revealed 87 sites, which leads to a prediction of 56.93 sites/square mile.

There is a need to develop site protection measures for recreation use and identify interpretive opportunities.

Transportation System

The main road is road 708; it links to the Tonto National Forest, road 502 accesses and dead ends at the Verde River. The unit has 58 miles of level 2 roads with resource, drainage and maintenance problems. Due to the isolation of the unit the trails aren’t marked and need maintenance attention.

Kachina Recreation Use Unit

Recreation Setting

The Kachina Recreation Use Unit is 5,909 acres in size and is located southwest of Sedona. It is bordered by Highway 89A on the north and west, Lower Red Rock Loop Road (FR 216) on the east, and it includes Oak Creek on the southeast. The ridges southeast of Oak Creek are the boundary. Therefore Oak Creek is included in the unit. The unit consists of 74 percent pinyon-juniper forests, 14 percent interspersed forest consisting of P-J Forests with a mixture of grass and brush meadows and 12 percent grass meadows. Major roads in the unit besides Highway 89A include the Deer Pass Ranch Road, the Elmerville Road and FR 9845 (the old County Road). Refer to Map 15- Kachina Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

This unit includes around 33 miles of road and approximately 17 miles of mostly equestrian trail that is proposed for addition to the Forest Service trail system as soon as the trails receive further re-construction of grade dips and are brought to an acceptable level of maintenance.

Current recreation activity includes an equestrian guide, who serves over 19,000 customers per year. The recreation opportunities provided include a flavor of the old west with a quiet horseback ride on semi-primitive trails in some of the most beautiful country anywhere. Non-commercial activity includes horse use from the Elmerville Community, 4X4 use and increasing numbers of private ATV use. Some Mountain Bike use also occurs in the area. The Historic Lime Kiln Trail crosses the unit traveling mostly on existing roads and horse trails. Other Cultural Heritage opportunities are provided by the Old County Road with its hand built retaining walls and the Molino Homestead and ruins located in a picturesque location along Oak Creek. The communities of Elmerville, Hidden Valley, Deer Pass and Eagle Mountain Ranch offer some private land inter-face problems but these have been mostly minimal. Commercial Balloon Flights regularly launch from a launch site one- half mile south of 89A on the Lower Red Rock Loop Road during the early morning hours and take advantage of early morning density altitude and prevailing down canyon winds in the Dry Creek Drainage to “mostly silently” sweep along that drainage to provide customers with gorgeous “tree top” views of the Red Rocks to the north, Oak Creek to the east and scenic dry creek.

ROS Class

There are 376 acres of SPNM; 2,873 acres of SPM; 1,638 acres of RN, and 235 acres of rural ROS classes in this unit. The unit also has 787 acres of non-Forest Service lands.

Desired Experience

The Kachina Unit includes some of the most striking landscapes of the Red Rock Country with a near “wildland” setting including rolling hills covered with P-J separated by major riparian areas along Dry Creek and the perennial streamside beauty of Oak Creek. This combined with the relative lack of roads and the moderate but temperate climate provided by the 4,000 foot elevation provides an incomparable setting for dispersed recreation

opportunities and benefits such as peace, solitude, sense of challenge and opportunity for contemplation and family cohesiveness.

Recreation Activity Niche

The Kachina Unit's niche is to provide dispersed recreation activities in a high quality scenic landscapes characteristic of the Red Rock Country.

Administrative and Resource Management Concerns

Recreation problems within the unit include neighborhood conflicts with recreationists, proliferation of non-motorized and motorized trails, expanding campsites, fire rings and trash and a significant need for trail maintenance and re-construction. Social roads and trails need to be closed. Private equestrians continue to create trails in the area as do ATVs and private 4X4s. There are problems with illegal camping in areas closed to camping, and there is a significant demand for commercial touring activity in the unit. Damage to riparian communities is occurring along Oak Creek from 4X4s. Roads that were closed in the past are difficult to keep closed due to the aggressive re-opening of closed roads by users.

Most of the former Kachina Stables trail system exists within this RUU. The horse riding outfitter-guide covers approximately 17 miles of unofficial trails. The roughly 17 mile trail system includes several equestrian stream crossings on Oak Creek and one road crossing on Dry Creek that features a portion of the historic Lime Kiln Trail. All of these water crossings have experienced increased use over the past few years, including motorized vehicular use on many of the equestrian crossings. The various stream crossings are in need of attention to prevent further degradation and the continued introduction of sedimentation into the State designated unique waters of Oak Creek.

As the area becomes better known, efforts are needed to protect the remnants of the Molina homestead and its associated gravesites.

Under the Yavapai County conditional use permit, the outfitter-guide's number of horses will be reduced within five years to 14 horses on the private parcel where the trail rides are staged. The County permit changes occurred in response to issues between the horse stable operations and the adjacent neighborhood.

Continue work with the horse ride Permittee to bring the trail system up to Forest Service standards for inclusion as Forest Service system trails. In the past, the permit holder encountered problems closing social trails as other users are fairly persistent about reopening them. There are numerous social trails leading from the private property onto National Forest.

Opportunities/ Recommendations

Revisit proposed road closures for the Lower Oak Creek Restoration project. The area adjacent to Oak Creek continues to be impacted by heavy use and numerous attempted creek crossing sites.

It may be beneficial to resource management to have equestrian, mountain

biking and heritage site tours to help maintain trails, eliminate illegal trails and protect heritage sites.

The Kachina Unit has many non-system roads and trails. Extra effort needs to be applied to the unit to reduce the proliferation of these non-system road and trails and to reduce the soil erosion and vegetation damage that they cause. One method that needs to be applied is improved directional and interpretive signs.

Desired Condition for Recreation

The Kachina trail system will be improved (grade dips repaired, berm pulled back, signed and low water crossings repaired and constructed) and added to official FS system trails per Amendment 12. Road density will be reduced including "defending" previous road closure work. Historical interpretation opportunities will be pursued for the Lime Kiln Trail. Semi-primitive recreation opportunities and multiple use trail opportunities will be encouraged including hiking, equestrian and mountain biking. FR 9845 will be available for limited commercial 4X4 and scenic driving opportunities and the Kachina trail system will be evaluated first for commercial equestrian guiding opportunities and then if that fails, it will be considered for commercial mountain biking tours.

Special Status Wildlife, Fish, & Plant Species

The portion of Oak Creek within this RUU provides suitable habitat, for yellow-billed cuckoos, however; surveys for nesting cuckoos have not been conducted. Refer to the Beaver Creek RUU special status species description for addition habitat information.

In this RUU, common black-hawks are known to nest along Oak Creek. Refer to the Beaver Creek RUU special status species description for additional habitat information. Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, Mexican garter snake, Page springsnail, and obsolete viceroy.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones, such as Oak Creek, where they forage on waterfowl and fish. Refer to the Apache Maid RUU special status species description for additional habitat information.

The lower portion of Oak Creek currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, and speckled dace.

Although no populations have been discovered, suitable habitat for the Tonto Basin agave occurs within this RUU. Refer to the Beaver Creek RUU special status species description for additional habitat information.

Hydrology & Soils

This unit includes lands adjacent to Oak Creek and lower Dry Creek from their confluence to Highway 89A as well as the residential development of Elmersville. The average elevation is approximately 4000 feet with slopes

from gently sloping to very steep above Dry Creek. The predominant soil map units are 403, 420 and 458. Soil unit 403 developed in mixed alluvium with gentle slopes. Soil unit 420 developed in basaltic parent material and soil unit 458 developed in sandstone parent material, both occur on steep slopes. These soils typically have coarse soil textures with high levels of rock fragments on the surface. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are nearly 16 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. A high percentage of the soils are rated in the moderate category for both unsurfaced roads and erosion hazard. Some roads may require drainage or other improvements before outfitter/guide activities are approved. Seventeen percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 0.85 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 13.97 percent or 825 acres out of 5,909 acres for the unit have been surveyed for heritage sites. The surveys revealed 41 sites, which leads to a prediction of 31.81 sites/square mile.

Transportation System

This RUU contains 33 miles of road with many drainage problems. The eleven miles of equestrian trails need maintenance and have drainage issues that need addressed before these can be added to National Forest system trails.

FR 9845N – FS needs to revisit whether or not to leave this road open or close it at the top of the hill. Numerous attempts have been made from this road to cross Oak Creek along the end of the road. Closing the road at the top would alleviate this problem and protect Oak Creek and its unique water designation.

Lower Schnebly Recreation Use Unit

Recreation Setting

The Lower Schnebly Recreation Use Unit is relatively small at 1,379 acres. It is located along the Lower Schnebly Hill Road from the end of the pavement to Schnebly Hill Vista and includes the area north of the Munds Mountain Wilderness Area, Bear Wallow Canyon and areas north to the Schnebly Hill Research Natural Area. Lower Schnebly RUU features FR 153 (Schnebly Hill Road) and Old Munds Highway trail, plus the Huckaby Trailhead and an unofficial trail into the Cowpies. The RUU provides access to the Mogollon Rim with a heavily used road corridor through this semi-primitive motorized area.

The unit includes five miles of the Schnebly Hill Road and seven miles of National Forest system trails including the Munds Wagon Trail, the Schnebly Trail and portions of the Huckaby Trail. The Unit is 100 percent interspersed forest setting including a mixture of P-J woodlands, chaparral vegetation, bare rock and grassy openings.

Elevations range from 4,500 feet on the west end to over 6,000 feet at Schnebly Hill Vista. This unit includes one of the most scenic roads anywhere with magnificent views of the Supai red sandstone, the white Apache Limestone topped by the black basalt formations. Photographic opportunities abound with views of the Munds Mountain Wilderness, Sedona, Oak Creek Canyon, Mitten Ridge, Wilson Mountain and the Mogollon Rim. Vegetation ranges from the upper Sonoran, including pinyon and juniper interspersed with chaparral yucca and agaves, to views of ponderosa pine and even Douglas-fir on the north aspects of Munds Mountain.

Heritage resources play a major part in the Lower Schnebly Unit. Its name alone brings back memories and stories of Sedona and Carl Schnebly. The road was originally a trail used by pioneers J.J. Thompson, John Loy, the Munds Family and others as an access between upper Oak Creek and the Flagstaff area and to run cattle from winter to summer pastures during the late 1800s. The Munds Wagon Trail was built by J.J. Thompson and John Loy at the turn of the twentieth century using black powder to blast and teams of horses to drag rocks and grade. The Schnebly Hill Road was built during the 1930s in its current location. The rich cultural history of the roads and trails and pioneers is a major tale worth telling. Refer to Map 16- Lower Schnebly Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Recreation activities include driving for pleasure, viewing scenery and wildflowers, hiking, mountain biking, historic and geographic study, photography and particularly driving in open vehicles to enjoy the magnificent scenery. Benefits include economic, physical fitness, sense of challenge, family cohesiveness and mental health. Past commercial recreation activity includes 52 groups of hikers, 28 coach tours, 9 metaphysical tours and approximately 5,330 4X4 tours. Average daily non-commercial use is substantial at 326 vehicles per day.

ROS Class

There are 488 acres of SPNM; 840 acres of SPM; and 51 acres of RN ROS classes in this unit.

Desired Experience

In semi-primitive ROS class areas, use should be light, managerial presence should be limited and man and his improvements should be subordinate to the characteristic landscape. The Schnebly Hill road should retain its rough but passable status.

Recreation Activity Niche

This unit's niche is to provide one of the most scenic corridors with magnificent views of the Supai red sandstone, and the white Apache

Limestone topped by the black basalt formations. Its niche is to provide abounding photographic opportunities with views of the Munds Mountain Wilderness, Sedona, Oak Creek Canyon, Mitten Ridge, Wilson Mountain and the Mogollon Rim. Another niche to provide spiritual settings for weddings and metaphysical opportunities.

Administrative and Resource Management Concerns

Issues include neighborhood conflicts with recreationists (residents complain about jeeps interrupting their peace at the west end of the road), proliferation of non-motorized trails (illegal trail construction and user built trails have been a problem); significant demand for commercial and non-commercial use exists. The Forest Service has received a few complaints from homeowners near the beginning of the road about outfitter-guide use of social roads adjacent to their property.

The road gets a lot of use and abuse so we need increase maintenance of the road. We also need to close illegal trails to provide resource protection along the Huckaby and Munds Wagon Trails.

Commercial opportunities also need to be provided for weddings and metaphysical guides.

Opportunities/ Recommendations

This area was identified in Amendment 12 of the FLMP as one of the sites in need of rehabilitation; the area has significant road maintenance needs.

Schnebly Hill Road provides good opportunity for hummers because its width can accommodate passing of these wide vehicles. Mountain bikers may be interested in the Old Munds Highway trail; efforts should be made to separate bike and vehicle use to minimize user conflicts and increase biker safety.

The “Cow Pies” area should receive some rehabilitation and the old road to them should be placed on the National Forest system and maintained. The old, washed out road that goes from the Schnebly Hill Road to the Munds Wagon Trail needs to be rehabilitated.

The Damifino Trail needs to be evaluated for placing on the trail system.

Desired Condition for Recreation

Visitors along the Schnebly Hill Road should have the opportunity to pull over, take a photo and not be “constantly dusted” by vehicles. Away from the road, in the semi-primitive ROS class the visitors experience should be the rule rather than the exception. Contact frequency should be light once off of the road. Man and his improvements should not be evident once a person is away from the road. The Schnebly Hill Road would retain its rough but passable surface. The Schnebly Hill Road would be maintained as an all weather road to the Merry-Go-Round Gate. This will require some surfacing. Off trail use would be discouraged except on durable surfaces.

Special Status

The Verde Valley population of peregrine falcons is the second largest

Wildlife, Fish, & Plant Species

population in Arizona. There is one known peregrine eyrie in this RUU. Refer to the Cathedral RUU special status species description for additional habitat information.

Other riparian dependent species that could potentially occur along Oak Creek in this RUU but for which no occurrence records exist include common black-hawk, lowland leopard frog, narrow-headed garter snake, Mexican garter snake, Page springsnail, and obsolete viceroy.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones, such as Oak Creek, where they forage on waterfowl and fish. Refer to the Apache Maid RUU special status species description for additional habitat information.

Only a small portion of Oak Creek falls within this RUU. This portion currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, and speckled dace.

Only one sensitive plant species is known to occur in this RUU. Flagstaff penstemon occurs on dry slopes with ponderosa pine in mountainous or hilly regions south of the Grand Canyon. It may be expected to occur on light, dry neutral soils in eroded or mountainous areas.

Hydrology & Soils

The relevant soil units in the Lower Schnebly area based on proximity to road 153 include map units 474 and 475. These soils are derived from sandstone, have moderate to severe erosion hazard, and erode easily.

Forest road 153 is located adjacent to Bear Wallow Canyon and currently produces accelerated runoff and erosion from the road surface and related drainage ditches. Several turnouts or small parking areas between the road and stream channel also contribute to the problem. Resulting sediment delivered to Bear Wallow remains in stream channel storage until periodic storm events flush the sediment into Oak Creek.

Little short of decommissioning and rehabilitation of the road can be done to mitigate effects from the road itself; however; vehicle restrictions to the existing road surface and rehabilitation of turnouts/parking could be effective in reducing some soil erosion. Properly located parking with gravel surface could be accommodated with little adverse effect.

Heritage

Approximately 11.02 percent or 139 acres out of 1,261 acres for the unit have been surveyed for heritage sites. The surveys revealed 1 site, which leads to a prediction of 4.6 sites/square mile.

Transportation System

Road 153 is the only open road, at or near maximum use. There is a need to prevent social roads off the Schnebly Hill Road. Private property owners at the bottom of Schnebly Hill have voiced concerns about tours ending up on

private property.

Middle Verde Recreation Use Unit

Recreation Setting

The Middle Verde Recreation Use Unit is 27,133 acres in size and is bounded by I-17 on the south east, the Cornville Road on the north, Highway 89A on the west and the Verde River on the south. The unit is in an area known by locals as the White Hills, a calcite deposit left by an ancient lake. It is characterized by rolling hills broken by rocky relatively shallow arroyos and canyons. The unit includes 77 miles of National Forest system roads including FR 119A (Middle Verde/Grampa's Wash Road), FR 671 (Tissaw Rd.) and numerous other roads through the White Hills. There are no National Forest system trails in the area. The unit consists of an interspersed forest setting of P-J with Mesquite, Creosote bush, Crucifixion thorn, Cliff rose and a variety of other interesting plants. Refer to Map 17- Middle Verde Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Recreation activities include ATV and 4X4 use, small game hunting, equestrian activities and target shooting. There is no known commercial use in the unit but use is relatively high at around 400 vehicles/parties per day.

ROS Class

There are 9,907 acres of SPM; 6,015 acres of RN, and 4,314 acres of rural ROS classes in this unit. There are also 6,897 acres of non-USFS lands.

Desired Experience

The desired experience should be a natural appearing landscape with human improvements being subordinate to the characteristic landscape. Contact frequency away from surfaced roads should be light to moderate.

Recreation Activity Niche

The unit's niche is to provide substantial opportunities for year long un-confined recreation in a very interesting area with one of the greatest variety of vegetation known anywhere. The area has always been a playground for the local residents of Cornville, Middle Verde, The Yavapai-Apache Nation and Bridgeport (Cottonwood).

The commercial niche is to provide ATV, Hot Air Balloon, Mountain Biking and Heritage tour opportunities without generating the ire of private landowners in the Cornville, Middle Verde and Bridgeport Areas. We need all of these types of tours to provide fees for road maintenance, close the proliferation of illegal roads and ATV routes in the unit and to protect heritage sites.

Administrative and Resource Management Concerns

Conflicts exist between ATVs and 4X4s users and neighborhood residents. Proliferation of motorized trails, expanding campsites, fire rings, abandoned vehicles and trash are also substantial problems in the unit. A serious lack of managerial presence, and a lack of road maintenance are an issues..

Two popular OHV areas create cross country use problems. One is located along FR 119A adjacent to private property at the Verde River. The other is along Tissaw Road. Both areas experience reoccurring trash problems. Lower Oak Creek Estates swim hole also shares this problem. Vehicle crossings of the Verde River in the Tissaw Road area present another concern. An outfitter-guide may provide enough of a presence in these areas to deter these activities and reduce their impacts.

Opportunities/ Recommendations

Experience shows that the primary opportunity for this area is to serve as a location for recreation for local residents including the developing communities of Middle Verde, Cornville, McGuireville and Bridgeport. This urban interface causes substantial damage to the soil and vegetation on the Coconino National Forest System lands. Opportunities for partnerships to stop this degradation and loss of soil and wildlife habitat abound. These partnerships must be pursued whether commercial or community based to work together to reduce the proliferation of motorized and non-motorized roads and trails and to protect vegetation.

Desired Condition for recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Bald eagles are known to nest along Oak Creek in this RUU. While there is no closure associated with this relatively new nesting area, recent efforts to close several social roads that crossed Oak Creek and came within close proximity to the nest site has helped reduce disturbance to nesting bald eagles. It is imperative that these social roads remain blocked (closed) to motorized vehicles. Should they be breached in the future a closure order similar to those for the Towers and Ladders bald eagle breeding areas may be necessary to minimize disturbance to nesting bald eagles. Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones where they forage on waterfowl and fish. No large communal roosts have been identified in this unit. Refer to the Apache Maid RUU special status species description for additional habitat information.

The portions of Oak Creek and the Verde River that occur within this RUU provide suitable nesting habitat, however surveys for nesting yellow-billed cuckoos have not been conducted. Refer to the Beaver Creek RUU special status species description for additional habitat information.

In this RUU, common black-hawks are known to nest along Oak Creek and likely the Verde River.

Although no nesting southwestern willow flycatchers have been detected within this RUU, suitable habitat for this bird occurs along Verde River and possibly Oak Creek. Refer to the Beaver Creek RUU sensitive species

description for additional habitat information for this bird and the common black-hawk.

Mexican garter snakes have been sighted along the Verde River (within this RUU) and several of its tributaries, most notably Oak Creek near the Page Springs Fish Hatchery. Refer to the Beaverhead RUU special status species description for additional habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, Mexican garter snake, Page springsnail, and obsolete viceroy.

A resident population of elk occurs within this RUU. Refer to the Apache Maid RUU special status species description for additional habitat information.

This RUU contains two major riparian streams that support native fish. The Verde River historically supported nine species of native fish including the Colorado pikeminnow, razorback sucker, loach minnow, spikedace, roundtail chub, desert sucker, Sonora sucker, longfin dace, and speckled dace. The roundtail chub, Sonora sucker, desert sucker, longfin dace, and speckled dace occur in portion of the Verde River that flows through the Middle Verde RUU. The lower portion of Oak Creek currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, and speckled dace. Historically loachminnow, Colorado squawfish and possibly razorback sucker occurred in Oak Creek near its confluence with Verde River.

Various limestone-dependent sensitive plant species occurring in this RUU include Verde Valley sage, Ripley's wild buckwheat, heathleaf wild buckwheat, Hualapai milkwort, and Arizona cliffrose. Refer to the Beaverhead RUU special status species description for additional habitat information.

Although no populations have been discovered, suitable habitat for the Tonto Basin agave occurs within this RUU.

Hydrology & Soils

This unit includes lands adjacent to the lower reach of Oak Creek to its confluence with the Verde River and is bordered to the north by the Cornville road. The average elevation is approximately 3500 feet with slopes from gently sloping to steep. The predominant soil map units are 280, 350, 381, and 385. Soil units 280 have developed in mixed alluvium and have gentle slopes. Soil units 350 and 385 have developed in limestone parent material and occur on moderately sloping to steep slopes. These soils typically have coarse soil textures with rock fragments present on the surface and are calcareous throughout.

There are around 31 miles of level 2 unsurfaced roads within this unit

available for use in outfitter/guide activities. Thirty three percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 0.64 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage Approximately 12.14 percent or 3,293 acres out of 27,133 acres for the unit have been surveyed. The surveys revealed 46 sites, which leads to a prediction of 8.94 sites/square mile.

Transportation System FR 119A is part of the natural gas pipeline access south of Oak Creek. Tissaw road is a county road north of Oak Creek. The unit has 77 miles of level 2 road with resource damage and in need of maintenance and drainage work.

Montezuma Recreation Use Unit

Recreation Setting The 10,013 acre Montezuma Unit is bounded on the west by Interstate 17, on the east by the Russell Wash Sub-watershed and Middle Schroeder Butte and on the south by Wickiup Mesa and the Wickiup Mesa Road. The southwest boundary is the Montezuma Castle Highway. Within the heart of this unit are Montezuma Castle National Monument and the Yavapai-Apache Casino Tourist Attractions. The unit is influenced by Rimrock on the north and Camp Verde on the south. It includes almost three miles of the heavily used lower Beaver Creek drainage which receives a lot of use from the Camp Verde Community including transients. Refer to Map 18-Montezuma Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns The Yavapai-Apache Nation had an equestrian tour outfitter/guide permit from the Coconino NF on non-forest system trails in the area for approximately ten years. They have since relinquished their permit. Residents, especially adjacent landowners use the area “at will” and cause some damage. “Overflow” from the Camp Verde High School, Montezuma’s Castle and the Casino spill over into the area. Use is light on the east side of the unit because access is limited. Refer to Map 20-Montezuma Recreation Use Unit in the Map Appendix.

ROS Class There are 2.216 acres of SPM; 412 acres of RN, and 3,230 acres of rural ROS classes in this unit. The area also has 4,155 acres of non-Forest Service System lands.

Desired Experience Input from the users indicates non-motorized and motorized trail opportunity in a natural environment is the primary desired experience.

Recreation The area is a primary target for the Camp Verde Trail System. The

Activity Niche

Community of Camp Verde wants the "Jackson Flat" Trail developed in the Beaver Creek Area and the Verde Valley Greenway (Sponsored by Arizona State Parks) wants the "Verde Valley Greenway Trail" to travel through the Coconino NF around Montezuma Castle National Monument.

Administrative and Resource Management Concerns

The Montezuma RUU contains the non-system trails used by Native Vision Horseback Adventures until January 2005. These trails are popular with OHV users in the Jackson Flat area from adjacent private property or accessed via FR 119C. Cross country use impacts the heritage sites located along the trail system. Beaver Creek crossings are of concern, as are abandoned vehicles, dumpsites, and transient camps in the area.

Opportunities/ Recommendations

Evaluate the non-system trails to determine which, if any, should be included as forest system trails. Mitigate archaeological site impacts. These trails may need construction/ reconstruction work to bring them up to Forest Service standards.

Concern over un-controlled recreation use exists over the whole area but is primarily focused on the west side. For such a centrally located unit, this unit has the reputation of a "no mans land" to the District Staff due to being largely landlocked by private land with very limited access from NF Land.

Convert the old Yavapai-Apache Outfitter/Guide Trails into Forest Service System Trails.

Desired Condition for Recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Bald eagles are known to nest along Beaver Creek in this RUU. While there is no closure associated with this relatively new nesting area, closures may be necessary in the future due to OHV use of social roads that occur within close proximity and line of site to the bald eagle nest. Wintering bald eagles occur in low numbers and are found most consistently along perennial riparian zones. Refer to the Apache Maid RUU special status species description for additional habitat information for bald eagles and elk.

The portion of Wet Beaver Creek within this RUU provides suitable habitat for Yellow-billed cuckoos. However surveys for nesting have not been conducted. Nesting cuckoos have been detected along the Verde River within this RUU.

In this RUU, common black-hawks are known to nest along Wet Beaver Creek.

Although no nesting southwestern willow flycatchers are known to occur on National Forest system lands, nesting birds have been detected on private lands along the Verde River. Refer to the Beaver Creek RUU special status species description for additional habitat information for the flycatcher, common black hawks, and yellow-billed cuckoos.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, Mexican garter snake, Page springsnail, and obsolete viceroy.

A resident population of elk occurs within this RUU.

Wet Beaver Creek currently supports roundtail chub, desert sucker, sonoran sucker, speckled dace and possibly longfin dace. Spikedace and possibly loachminnow historically occurred in Wet Beaver Creek.

Various limestone-dependent sensitive plant species occurring in this RUU include Verde Valley sage, Ripley's wild buckwheat, and heathleaf wild buckwheat. Suitable habitat exists for Arizona cliffrose and Hualapai milkwort. Refer to the Beaverhead RUU special status species description for addition habitat information. Several populations of the Tonto Basin agave occur within this RUU. Refer to the Beaver Creek RUU special status species description for additional habitat information.

Hydrology & Soils

This unit includes lands adjacent to the communities of Rimrock and Lake Montezuma. The average elevation is approximately 3,400 feet with slopes from gently sloping to steep. The predominant soil map units are 350, 385, and 403. Soil units 350 and 385 have developed in limestone parent material and occur on moderately sloping to steep slopes. Soil units 403 have developed in mixed alluvium and have gentle slopes. These soils typically have coarse soil textures with rock fragments present on the surface and are calcareous throughout.

There are about 3 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. Twenty one percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 1.38 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Soils along Beaver Creek are generally sandy, susceptible to wind erosion, and not suited to extensive road and trail use without adequate mitigation such as surface hardening. Any potential permitted uses should be evaluated with this in mind.

Map unit 350 and 385 soils contain significant quantities of calcium

carbonate throughout the profile. There is limited opportunity for improvement of vegetative groundcover, so ground disturbing activities including roads and trails should not be considered without proper mitigation.

Use of non system trails should be eliminated, and trails rehabilitated with drainage and vegetation as soil productivity allows.

Heritage Approximately 14.69 percent or 1,471 acres out of 10,013 acres for the unit have been surveyed for heritage sites. The surveys revealed 41 sites, which leads to a prediction of 17.84 sites/square mile.

Transportation Evaluate the non-system trails to determine which, if any, should be included as forest system trails. Mitigate archaeological site impacts. These trails may need construction/ reconstruction work to bring them up to Forest Service standards.

Mud Tanks Recreation Use Unit

Recreation Setting The Mud Tanks Unit is one of the larger units at 30,935 acres. It includes the plateau located between the Verde Valley and the ponderosa pine Forests of the Mogollon Rim. Located at 6,000 feet elevation it is bounded by West Clear Creek on the north, the edge of the “Rim” on the west, Fossil Creek Canyon on the south and the Red Rock District Boundary Line on the east. The unit is divided in half from east to west by the General Crook Highway (SR 260). The unit is thinly forested with pinyon pine, one seed and alligator juniper, transition ponderosa pines in drainages, and includes gambel oak and many large meadows. Wildlife is abundant, particularly elk and the area in covered with montmerilinite clay soils prone to “no-see-ums”or potholes, and very muddy conditions when wet. The Unit has 58 miles of road and 14 miles of system trail. Trails include two of the most significant historic trails in Arizona—The General Crook Trail and the Mail Trail. Refer to Map 19- Mud Tanks Recreation Use Unit in Appendix A.

Recreation Uses and Patterns

Opportunities for historical and pre-historical interpretation abound as do equestrian and ATV opportunities. The unit has one of the largest concentrations of archaeological sites on the District some of them very large pueblos. Wildlife viewing opportunities are substantial especially elk and the new population of Rock Mountain Bighorn Sheep re-located into West Clear Creek Canyon. Tremendous scenery viewing opportunities exist overlooking the isolated canyons of West Clear Creek, Fossil Creek and Sand Rock Canyon. Long haul equestrian and back packing opportunities exist on the General Crook Trail and the Mail Trail which travels south through the unit, crosses rugged Fossil Creek Canyon and ends up in the Strawberry/Pine/Payson area. Deer, elk, turkey and bear hunting are popular in the unit.

Hunting outfitter-guides frequent the Mud Tank area with their overnight camps beginning late September through December. It is difficult to obtain an accurate count of their use, since many of the special use permits are statewide and issued by other National Forests. Seasonal use is fairly reliable from June 1 through October 1 and a gamble at other times because of wet weather.

ROS Class

There are 1,083 acres of SPNM; 19,066 acres of SPM; and 10,786 acres of RN, ROS classes in this unit. There are not any private lands in this unit.

Desired Experience for recreation

The Mud Tanks Unit is truly one of the best recreation resources available on the District. Recreation benefits include economic benefits, mental and physical health, community and family cohesiveness and a sense of challenge. The area offers tremendous views, light use and a relatively cool climate for recreationists. The magnificent alligator junipers and ponderosa pine stringers provide a special treat for those who venture into the area.

Contact frequency should be light; managerial presence limited (signs) and the sights, sounds and improvements of man should be subordinate to the characteristic view and landscape. Historical opportunities abound on the Mail Trail and the General Crook Trail.

Recreation Activity Niche

The unit's niche is to provide opportunities for historical and pre-historical interpretation abound through equestrian and ATV opportunities. The unit has one of the largest concentrations of archaeological sites on the District. Some of them are very large pueblos.

Administrative and Resource Management Concerns

The proliferation of motorized trails and a serious lack of Forest Service presence are some of the issues that need to be addressed in the Mud Tanks Unit. Archaeological site pot hunting and vandalism, and a need for trail maintenance on the General Crook and the Mail Trail are also issues. With the large mileage of system road and the typically muddy road conditions there is a major need for road maintenance in the unit, particularly grade dip maintenance.

Protection of T&E Species warrants emphasizing activities north of Hwy 260 only. Some activities can occur south of Hwy 260, although these activities would require close monitoring to assure adequate protection of resources. Establishment and maintenance of a presence may benefit the area.

Opportunities/ Recommendations

The historic Mail Trail traverses this unit. Consider appropriateness of horse outfitter-guide activity on this trail outside Wilderness with due consideration given to protection of T&E species.

Desired Condition for Recreation

Roads and trails that are maintained to protect resource values. Reduction of soil erosion and vegetative damage caused by use of Forest Service system and Forest Service non-system roads. The unit should continue to be one where semi-primitive recreation opportunity for hunting, wood gathering and historic trail opportunities abound. Both motorized and non-motorized trail opportunities also need to be available. Use should be discouraged during muddy periods which usually occur between December and March.

Managerial presence needs to be increased. Weeks go by between times when Forest Service Employees visit the area. Substantial illegal cutting of alligator juniper occurs in this area. Alligator Juniper provides valuable food for turkey and thermal cover for deer and elk during the winter.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles occur throughout this RUU, but there are no known communal roosts.

Suitable nesting and roosting habitat for the Mexican spotted owl occurs in this RUU in canyons with rocky cliffs where dense vegetation or crevices or caves provide cool moist microsites for nests and roosts. One known Mexican spotted owl PAC was delineated in this RUU after MSO were detected during surveys in 1990.

Suitable wintering habitat for turkeys occurs in this RUU. Refer to the Apache Maid RUU special status species description for additional habitat information for bald eagles, Mexican spotted owls, turkey, pronghorn and elk.

There are resident populations of elk in this RUU, however the numbers increase during the winter when additional elk move into the area during the winter months.

Grasslands and woodlands above the rim were historically more open (less encroached trees) and supported larger pronghorn populations. A small population of pronghorn persists in this RUU.

The Chiricahua leopard frog occurs locally in central Arizona in rocky streams and wetlands. The extent of the population on the Coconino National Forest wasn't realized until intensive surveys in the late 1990's and early 2000's. All extant populations occur on the Red Rock Ranger District with the majority occurring in the Mud Tanks RUU. In 2001, Chiricahua leopard frogs were the most wide-spread, occurring in nine separate locations. After the drought of 2002, frogs were only documented to occur in two separate locations. Despite efforts to improve habitat and a respite from the 2002 drought, the Chiricahua leopard frog currently occurs in just two locations. Due to such low population numbers, the survival of this meta-population may only be possible if numbers are augmented with hatchery-reared tadpoles.

Hydrology & Soils

This unit occupies an elevated plain setting located above the rim with an average elevation of approximately 5,900 feet. The slopes are typically described as level to gently sloping. The predominant soil map units are 462, 463, and 492. These soils have developed in basaltic parent material and have very fine soil textures throughout. These soils are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There are nearly 46 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. However 94 percent of these roads intersect with soils rated with severe limitation for unsurfaced roads. Some roads may require drainage or other improvements before outfitter/guide activities are approved. The only mitigation to prevent soil damage when wet is non use. These roads would be available for outfitter/guide use seasonally during dry conditions from June 1 to November 1 annually. There are no level 2 roads within or near riparian areas.

Heritage

Approximately 7.33 percent or 2,269 acres out of 30,936 for the unit have been surveyed. The surveys revealed 179 sites, which leads to a prediction of 50.49 sites/square mile.

Transportation System

Highway 260 and many un-surfaced level 2 roads are in this RUU. Most of the 58 miles of level 2 roads have drainage problems with resource damage occurring. The 14 miles of system trail including the Mail Trail and General Crook need marking, signing and maintenance.

Oak Creek Canyon Recreation Use Unit

Recreation Setting

The Oak Creek Canyon Unit is 7,348 acres bounded by the Red Rock/Secret Mountain Wilderness on the west, the rim on the east, Midgely Bridge on the south and FR 535—Mexican Pocket on the north. It includes Munds Canyon on the east. The area includes one of the heaviest used recreation areas in Arizona. West Fork of Oak Creek begins in this RUU and quickly enters Red Rock-Secret Mountain Wilderness. It is extremely popular with tour buses and public school activities. The Mayhew Lodge (heritage site) is a short walk from the parking lot and is located just outside the Wilderness boundary.

The resources in this unit combine to provide an outstanding scenic backdrop including substantial geological formations, a great variety of vegetation types from Upper Sonoran in the lower canyon to the Canadian life zone on north slopes in the upper canyon. There are twelve developed recreation sites including four campgrounds, two swim areas, three picnic areas, and two scenic vista sites and the West Fork Trailhead. Ten National Forest system trails are located in the Canyon for a total of 16 miles of trail. There are also 26 miles of road in the unit. It is also the steepest of the units (except for wilderness) with 56 percent of the acreage at 40 percent or higher slope. Refer to Map 22- Oak Creek Canyon Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Current recreation activity includes driving for pleasure, hiking, fishing, swimming, camping, picnicking and sight seeing. Commercial recreation opportunity exists mainly for public transit and hiking on lightly used forest trails on the east side of the canyon. Use can be as much as 12,000 cars per day along Highway 89A but use is light to moderate once one is away from the highway. The entire unit is influenced by the noise, traffic and congestion of the highway.

ROS Class

There are 1,836 acres of SPNM; acres of 263 SPM; and 4,790 acres of RN, ROS classes in this unit. There is 459 acres of non-Forest Service System lands.

Desired Experience

To experience one of the most beautiful canyons with majestic escarpments of red and white sandstone capped by black basalt with the dark green vegetation framed by the blue sky and all of this accentuated by one of the rarest commodities in all of Arizona—a perennial stream. The experience should be to touch and see the canyon from the highway, from the trails, from the creek and from the many developed sites along the highway. As many as 15,000 visitors use Oak Creek Canyon during holiday weekends during the late spring and summer. Parking availability limits use along the highway and also on trails where trailhead parking is in short supply. Therefore shuttles are needed to prevent over crowding of the highway. The desired experience in the "Canyon" is for a safe and convenient opportunity to enjoy the many developed sites, swimming holes and hiking trails.

Recreation Activity Niche

The recreation niche of the unit is to provide visitors with views of overwhelmingly beautiful scenery, substantial geological formations and views of various vegetation types from Upper Sonoran in the lower canyon to the Canadian life zone on north slopes in the upper canyon. Another type of niche is to provide visitors the opportunity to recreate in this setting using twelve developed recreation sites including four campgrounds, two swim areas, three picnic areas, and two scenic vista sites and the West Fork Trailhead. And to provide access to ten National Forest system trails located in the Canyon for a total of 16 miles of trail.

Administrative and Resource Management Concerns

Issues and concerns include fire prevention, a significant demand for commercial and non-commercial use, the need for resource re-habilitation and the need for trail maintenance exist within the unit. The State designated unique waters of Oak Creek flow through the canyon and are a major attraction for forest visitors. There are parking issues along Highway 89A with many unsafe pullouts occupied by haphazardly parked vehicles. Steep trails lead from virtually every pullout to the water, contributing to soil erosion, vegetation degradation, and sediment problems.

Opportunities/ Recommendations

Oak Creek Canyon contains a high concentration of day use and campgrounds that are popular with the general public. Discourage any outfitter-guide activity that would compete with the general public for use of these areas. Outfitter-guide use may be contingent upon use of a public transit system because of the limited parking in Oak Creek Canyon.

On the west side of the highway, one quickly enters Red Rock-Secret Mountain Wilderness. A number of challenging trails climb the east side, but parking is a limiting factor throughout the Canyon. Consider availability of these east side trails for outfitter-guide opportunities.

Less than 10 percent of the allocated service days are used by the fishing outfitter-guide on an annual basis.

Desired Condition

Desired conditions for recreation include the safe and efficient movement of

for recreation

both visitors and residents in and out of the "Canyon" while allowing them to pursue the many desired recreation activities, experiences and benefits available in this "World Class" natural setting without damaging the fragile ecosystem.

There are certain advantages to commercial trail guides in the "Canyon" because they could provide visitor information and allow the FS to use outfitter guide funds for trail maintenance.

The Forest should improve the dissemination of "Leave-No-Trace" information; improve trail maintenance; prevent man caused fires; improve public safety; and increase public awareness of wilderness values.

Special Status Wildlife, Fish, & Plant Species

In this RUU, common black-hawks are known to nest along Oak Creek. Refer to the Beaver Creek RUU special status species description for additional habitat information.

There is one known peregrine eyrie in this RUU. There is at least one other suspected eyrie in the canyon, but surveys at this site have not been conducted. Refer to the Cathedral RUU special status species description for addition habitat information.

Despite historic, widespread distribution, lowland leopard frogs currently persist in few locations, including the lower portion of this RUU. Refer to the Beaverhead RUU special status species description for additional habitat information.

The Northern leopard frog occurs in the northeastern quarter of Arizona, usually in montane streams and wetlands that have aquatic vegetation but also in wet meadows at higher elevations. This leopard frog is generally restricted to permanent waters. The northern leopard frog is only known to persist in the Apache Maid RUU, despite historic widespread distribution across northern Arizona, including historic records and specimens collected from the upper portion of this RUU. Threats include predation from nonnative aquatic organisms, chytrid fungus outbreaks, habitat destruction from livestock grazing and off-highway vehicles, and desiccation during drought.

The narrow-headed garter snake is the most aquatic of the garter snakes, seldom found far from quiet, rocky pools in large streams and rivers. Food items include fish (non-spiny-rayed species, as are all our native species), frogs, tadpoles, and salamanders. Narrow-headed garter snakes are currently only known from Oak Creek Canyon, although historic records exist as far down as Red Rock State Park. Population numbers there have decreased significantly since the late 1980s. Causes for decline include predation by crayfish, introduction of spiny-rayed fish such as sunfish and small mouth bass, trampling and altering habitat by people recreating, floods, and

intentional killing of snakes by recreationists who fear this aquatic snake is poisonous.

Mexican garter snakes have been sighted along the Verde River and several of its tributaries (such as Oak Creek within this RUU), most notably Oak Creek near the Page Springs Fish Hatchery. Refer to the Beaverhead RUU special status species description for additional habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include Page springsnail and obsolete viceroy.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones, such as Oak Creek, where they forage on waterfowl and fish. Refer to the Apache Maid RUU sensitive species description for habitat information for bald eagles, turkey, elk and Mexican spotted owls.
Suitable nesting habitat for the Mexican spotted owl occurs in this RUU and is located in canyons with rocky cliffs where dense vegetation or crevices or caves provide cool moist microsites for nests and roosts. Although there are five PACs that occur in the canyon, three of these fall entirely within the Red Rock Secret Mountain Wilderness and are not in this RUU. The two known Mexican spotted owl PACs that occur in this RUU straddle the district boundary and are managed by the Peaks Ranger District.

This RUU contains suitable turkey habitat.

Elk can be found during the winter in this RUU. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles, turkey and elk.

The upper portion of Oak Creek supports Sonora sucker, desert sucker, speckled dace and roundtail chub. Historically Gila trout was present but this species became extirpated due to competition, hybridization, and predation by introduced brown and rainbow trout.

Several sensitive plant species are known to occur in this RUU. Flagstaff pennyroyal is associated with rocky, shallow limestone soils in the ponderosa pine vegetation type but prefers more open, sunny habitat. Canopy cover ranges from 0 to 86 percent. Populations occur on the rims overlooking Oak Creek Canyon and the remote, steep limestone canyons and bluffs in the Red Rock Secret Mountain Wilderness. Arizona bugbane is very habitat specific requiring shady, moist environments, and mixed conifer/mixed broadleaf riparian associates. Tall cliffs or narrow canyons and dense overstory canopy with a tendency for north-facing aspect combine to provide the required habitats. Its habitat has rich, high-humus soil, higher humidity than adjacent areas in summer, and the soil remains saturated longer in the spring. Populations of bugbane occur in this RUU. The

eastwood alumroot is found on moist slopes in ponderosa pine forests and canyons at elevations between 5,000 and 6,000 feet in elevation. Cliff fleabane occurs between 4,400 and 7,000 feet in elevation on various aspects and a variety of vegetative communities, including Rocky Mountain Riparian Deciduous Forest. It is found on dacite and Coconino sandstone, on mainly inaccessible shaded cliff-faces and boulders in shady canyons. Flagstaff penstemon occurs on dry slopes with ponderosa pine in mountainous or hilly regions south of the Grand Canyon. It may be expected to occur on light, dry neutral soils in eroded or mountainous areas.

Hydrology & Soils This Unit includes lands within the Oak Creek Canyon corridor along Highway 89A. The average elevation on the canyon floor is approximately 5,000 feet. The slopes in the canyon are gently sloping along the creek and very steep on the canyon side slopes. The soil map units along the unsurfaced roads are 46 and 470. Soil unit 46 is within the riparian corridor. Soil unit 470 developed in basaltic parent material and occurs on steep slopes.

The nearly 4 miles of level 2 unsurfaced roads within this unit are not available for outfitter/guide use. All of these roads have severe limitations for unsurfaced roads and a portion occur in riparian areas. Also these roads are restricted as result of their proximity to residential areas. All outfitter/guide activities within this unit requiring roads would use Highway 89A.

Heritage Approximately 12.08 percent or 902 acres out of 7,467 acres for the unit have been surveyed for heritage sites. The surveys revealed 30 sites, which leads to a prediction of 21.29 sites/square mile. Develop site protection measures for recreation use and identify interpretive opportunities.

Transportation System Pullouts along Highway 89a are expanding and need to be addressed. The 16 miles of trails need maintenance due to steep condition, heavy use and damage from erosion from the Brins Fire.

Red Cliffs Recreation Use Unit

Recreation Setting The Red Cliffs Unit includes 8,841 acres and is an area stretching from the non-wilderness portion of Boynton Canyon on the east including the area up to the wilderness boundary of the Red Rock/Secret Mountain Wilderness wrapping its way along the foot hills of the Red Cliffs all the way to Black Mountain. The unit has incredible views of the characteristic and strikingly beautiful red rocks anchored by dark green vegetation and framed by a brilliant blue sky. No other place on the Coconino National Forest has such views. The magnificence of the scenery feed the eyes, the heart, the mind and the soul. There is no wonder why the Yavapai, Tonto Apache and the Hopi consider the Red Cliffs Sacred. It includes Red Canyon, Hartwell Canyon, Loy Canyon and Robbers Roost. The unit is about half forest and half interspersed forest setting with 45 miles of road and 5 miles of trail.

Roads within the unit include some immensely popular ones including the Red Canyon Ranch Road (FR 525) and the Boynton Pass Road (FR 152C). The unit includes such world class sites as the Palatki Ruin and the Red Cliff Rock Art Site and the Honanki Ruin. Refer to Map 21- Red Cliff Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

The unit has substantial commercial use including hiking tours (1,084 groups per year), 300 hot air balloons, 3,945 4X4 tours, 374 metaphysical and 3,198 archaeological tour groups. Available recreation activities include hiking, mountain biking, driving for pleasure, archaeological site viewing, wildflower viewing, photography, scenery viewing and hunting.

Red Cliffs RUU contains FR 152C (Boynton Pass Road), one of the most popular access roads on the District. This high intensity of use results in user conflicts between guided and unguided users, as well as users pursuing different activities. The inherent difference in speed of travel between the various types of vehicles contributes to some of these user conflicts.

A Forest Order prohibits camping and campfires as well as the use of bicycles or motorized vehicles on developed trails at Honanki and Palatki Ruins. It also closes these sites from after sundown to before sunrise.

ROS Class

There are acres of 629 SPNM; 5,860 acres of SPM; and 1,944 acres of RN ROS classes in this unit. There is also 408 acres of non-Forest Service System land.

Desired Experience

The desired experience is a primitive setting that provides distance from the sights and sound of humans, light to moderate social contact with humans, rustic facilities and the area needs to retain its natural character.

Recreation Activity Niche

The unit's niche is to provide visitors and residents viewing opportunities of the strikingly beautiful red rocks anchored by dark green vegetation and framed by a brilliant blue sky. No other place on the Coconino National Forest has such views. The unit's niche is to feature the magnificence of the scenery to feed the eyes, the heart, the mind and the soul.

Administrative and Resource Management Concerns

Issues and concerns include proliferation of non-motorized and motorized trails, significant demand for commercial and non-commercial touring and archaeological vandalism and pot hunting. There is a need for improved trail and road maintenance.

The area is a Traditional Cultural Property for several Native American Tribes and is an area with substantial spiritual value to many people.

There are complaints from individuals and groups that certain companies have a monopoly on commercial use within the unit at Honanki.

The Yavapai-Apache Nation has voiced concerns about any increase in use of Red Cliffs RUU based on Tribal Cultural Properties.

The Robbers Roost area presents a couple of challenges. First, visitation of Robbers Roost heritage site leads to inappropriate uses on this cultural resource – camping and campfires inside the site and the associated abandoned trash, to name a few.

Wilderness intrusions pose a problem along the access road that travels a narrow corridor surrounded by Red Rock-Secret Mountain Wilderness. Wilderness intrusions also occur along FR 9551 north of Black Tank, especially into the Sebra Tank area.

Opportunities/ Recommendations

Forest Service acquisition of the Woo Ranch provides a unique opportunity. Develop a management plan for the Ranch that addresses the future plans for the rock art panels as well as the other resources.

Opportunity may exist to expand Palatki heritage site to include Woo Ranch panels.

Desired Condition for Recreation

In semi-primitive ROS class areas, use should be light, managerial presence should be limited and man and his improvements should be subordinate to the characteristic landscape.

Use should be moderate on surfaced roads (level 3 roads) and light on un-surfaced roads.

Reduce cultural resource site vandalism; improve public awareness of natural resources; improve road and trail maintenance; reduce sedimentation from Forest roads and trails; prevent man caused fires; reduce the number of search and rescue incidents; and improve public and employee safety.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in the Red Cliffs RUU. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles and pronghorn.

Grasslands and open Sonoran desert scrub in the Verde Valley historically supported pronghorn from north of Cottonwood contiguously south and east through Cornville, Middle Verde, Camp Verde and Wingfield Mesa.
In this RUU, one known bat roost supports one species of an unidentified big-eared bat. Refer to the Broken Arrow RUU special status species description for habitat information.

Hydrology & Soils This unit includes lands bordering the cliffs adjacent to the Red Rock/Secret Mountain and Sycamore Canyon Wilderness from Boynton Pass to Black Mountain. This unit acts as a transition area to the wilderness and is rich in archeological resources. The average elevation is approximately 4,600 feet with slopes from gently sloping to steep. The predominant soil map units are 403, 417, 457, and 458. Soil units 403 and 417 have developed in mixed alluvium with gentle slopes. These soils are deep with fine soil textures throughout. Soil units 457 and 458 have developed in sandstone parent material and occur on slopes from gently sloping to steep. These soils typically have coarse soil textures with high levels of rock fragments on the surface. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are approximately 32 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. A high percentage of the soils are rated in the moderate category for both unsurfaced roads and erosion hazard. Some roads may require drainage or other improvements before outfitter/guide activities are approved. Fourteen percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There are no level 2 roads within or near riparian areas.

Heritage Approximately 6.5 percent or 574 acres out of 8,821 acres for the unit have been surveyed for heritage sites. The surveys revealed 40sites with a prediction of 45 sites/square mile.

Transportation System The best roads are 152C, 525, and 795.

Research Natural Areas Recreation Use Unit

Recreation Setting This RUU is 610 acres. West Fork of Oak Creek and Casner Research Natural Areas. The setting includes the West Fork of Oak Creek RNA which is an area with an incredible variety of life zones and habitats including riparian, ponderosa pine and mixed conifer. Several listed, threatened and endangered species exist in the West Fork portion of this unit. West Fork includes dramatic Coconino Sandstone escarpments with large old growth conifers in the drainages and along the hillsides. Pools along the West Fork of Oak Creek offer climatic relief to desert dwellers during the summer. Colorful autumn leaf displays decorate the unit during the fall.

The Casner RNA is very isolated and is located on the eastern slope of Oak Creek Canyon north of the Schnebly Hill Road and the Bear Wallow Drainage. It consists of sandstone slopes covered with an almost pure stand

of Arizona Cypress.

Recreation Uses and Patterns

The Coconino National Forest Land Management Plan (new page 196-2) prohibits permitted commercial tours except in support of approved research within RNAs. This is reinforced by direction to manage these specially designated areas to protect their special qualities and to provide interpretation and education (replacement page 25).

ROS Class

There are 506 acres of SPNM; acres 86 of SPM; and 18 acres of RN ROS classes in this unit. This unit does not have any non-Forest Service System lands.

Desired Experience

The west fork of Oak Creek is wilderness. The desired experience in wilderness is usually a primitive, unconfined form of recreation in a place of solitude. This should not interfere with the goals of the RNA where potential research is a concern. The Casner RNA is in an isolated area with no trails where there is little interest in recreation.

Recreation Activity Niche

West Fork RNA is a primitive wilderness recreation experience and the Casner RNA is located on the slopes of the east side of Oak Creek Canyon where only occasional visitation occurs.

Administrative and Resource Management Concerns

Heavy day use is a problem in the West Fork of Oak Creek. The area is closed to camping but illegal camping regularly occurs in the area. Amendment 12 of the Forest Plan lists the need to establish designated camping within West Fork in the upper reaches. One of the campsites is located within the RNA. Protection of the narrow headed garter snake is a concern as is re-introduction of native trout in the West Fork RNA.

Lack of public information about wilderness is a problem with visitors in West Fork. Surveys have also shown they lack basic survival items so more information is needed to teach visitors about basic survival in the wilderness. The proliferation of numerous un-wanted trails which parallel the West Fork Trail has been a problem.

Opportunities/ Recommendations

West Fork RNA: Reduce social trails into one trail; rehabilitate unwanted trails, provide more information to visitors; implement the designated reservation campsites; and periodically implement wilderness information specialist camps to prevent illegal camping.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in the Casner RNA while opportunistically hunting and foraging for small mammals and carrion. Refer to the Apache Maid RUU special status species description for habitat information.

In this RUU, known bat roosts support the pallid bat, big brown bat and Townsend’s big-eared bat. Mist netting in the canyon has detected 11

species of bats including Yuma myotis, Arizona myotis, long-eared myotis, fringed myotis, long legged myotis, California myotis, pallid bat, western pipistrelle, big brown bat, hoary bat, and Townsend's big-eared bat. Although these species were not detected during roost inspections, it is likely that they roost in the canyon. Refer to the Broken Arrow RUU special status species description for habitat information.

Hydrology & Soils Soil Map units within the RNA include 474 and 475. These soils are derived from sandstone and have a moderate to severe erosion hazard. Roads and system trails are absent from the area. This area is within the Oak Creek watershed. Any trail development in support of interpretation and education should be designed with adequate drainage and slope to prevent soil damage and accelerated soil erosion.

The Red Rock Secret Mountain RNA is within the West Fork of Oak Creek drainage. Significant work has been accomplished to manage heavy visitor use and repair damage from historic use. Limited use occurs upstream of the defined West Fork trail. Additional use should not be encouraged.

Heritage Approximately .33 percent or 2 acres out of 609 acres for the unit have been surveyed for heritage sites. The surveys revealed 0 sites, which leads to a prediction of 0 sites/square mile.

Savannah/ House Mountain Recreation Use Unit

Recreation Setting The Savannah/House Mountain Unit contains 12,998 acres and is bordered by Highway 179 (VOC Unit) and the Beaverhead Flat Road on the east; Beaver Head Tanks on the south, the summit of House Mountain and the ridge above Oak Creek on the west. The unit includes 22 miles of mostly back country system roads, and 4.3 miles of system trails including some of the Turkey Creek and the House Mountain Trails. This unit is a semi-primitive area or island surrounded by the bustling communities on the north and south. Its primary landmark, House Mountain, is different from the surrounding Red Rock Country. House Mountain is a major landmark in the Verde Valley named by Mrs. Dumas, one of the first settlers in the area. House Mountain and most of the unit is volcanic in origin and the area is covered with basalt rocks and boulders. House Mountain rises almost 1,000 feet above the surrounding landscape. The rough, high clearance roads offer tremendous views of the Verde Valley to the south, Oak Creek and the upper Verde to the southwest and even views looking directly down into the Village of Oak Creek. The area is a haven for deer, javelina, coyotes and other wildlife and offers rough 4X4 opportunities reasonably close to Sedona. Predominant vegetation is Juniper woodland interspersed with grassland and chaparral. The area is remarkably wild and attractive in a rough way. The unit is 81 percent forested with 16 percent interspersed forest setting and 3% grassland. Refer to Map 22- Savannah/ House Mountain Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Historical uses have been hunting, wood gathering, juniper post cutting, grazing, hiking, horseback riding, ATV riding and 4X4 activities. Current public use is approx. 21 vehicles/parties per day who mostly access the area on FR 120A, the road from Beaverhead Tanks and the Turkey Creek Trail as determined by patrolman observations and counts. Prior to July 2005, there was no commercial use in the unit. After that date and the issuance of commercial permits there has been some use in the unit (no actual numbers have been gathered at this time.

ROS Class

There are 3,361 acres of SPNM; 8,640 acres of SPM; 995 acres of RN ROS classes in this unit. There are no non-Forest Service System lands in this RUU.

Desired Experience

The desired experience is semi-primitive which includes recreating in an area where contact frequency is light, the managerial presence is limited and man and his improvements are few and those that are present are subordinate to the characteristic landscape. Motorized and non-motorized trails and challenging roads should provide recreation opportunities for "quads", motorcycles, hikers, mountain bikers and equestrians.

Recreation Activity Niche

The niche for the Savannah-House Mountain Unit is to provide mostly semi-primitive recreation opportunities over high clearance roads and trails in a wide open grassland and pinyon-juniper environment where visitors and residents are encouraged to stay on the existing transportation system. The unit is away from residential areas so ATV, Hummer, Scenic, 4X4 driving activities would not conflict with residents.

Geo caching and hunting guide opportunities may be considered. Commercial tours with less impact such as equestrian, and mountain biking tours will also be considered. It is an area with a lot of illegal motorized, user created roads and ATV paths. Guides may be a tool to discourage the creation of additional routes and help close existing, un-needed routes.

Administrative and Resource Management Concerns

Over the past several years, the Lost Canyon area (FR 9500 road system) exhibits development of social roads and trails. Social roads now climb almost every lookout point that overlooks Highway 179. Social trails with mountain bike use also riddle the area.

House Mountain itself also features a large cultural resource site that may require enhanced protective measures as use of the area increases. Recently, the Forest Service discovered a large area in this RUU that was subjected to illegal woodcutting.

Opportunities/ Recommendations

The unit provides substantial opportunities for 4X4 use in a lightly used area where there are good views of the Red Rocks. There are opportunities for Antelope habitat improvement projects and interpretation of the antelope management indicator species concept. The House Mountain, and

Turkey Creek Trails need to be located, maintained and marked and the Kel Fox trail needs signing and maintenance. Non-system roads and trails need to be closed and FS system roads and trails need to be marked.

Desired Condition for Recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion. A resident population of elk occurs within this RUU. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles and elk.

Suitable habitat for various limestone-dependent sensitive plant species occurs in this RUU. This includes Arizona cliffrose, Ripley's wild buckwheat, heathleaf wild buckwheat, Verde Valley sage, and the Hualapai milkwort. Refer to the Beaverhead RUU special status species description for habitat information. Although no populations of the Tonto Basin agave have been discovered, suitable habitat occurs within this RUU.

Hydrology & Soils

This unit includes House Mountain and the adjacent foot slopes to the south and north with an average elevation of approximately 4,600 feet. The predominant soil map units are 402, 404, and 462. The slopes are typically described as gently to moderately sloping. These soils have developed in basaltic parent material and have very fine soil textures throughout. These soils are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There are nearly 17 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. However 79 percent of these roads intersect with soils rated with severe limitation for unsurfaced roads. Some roads may require drainage or other improvements before outfitter/guide activities are approved. The only mitigation to prevent soil damage when wet is non use. These roads would be available for outfitter/guide use seasonally during dry conditions from June 1 to November 1 annually. There are no level 2 roads within or near riparian areas.

Heritage

Approximately 6.72 percent or 875 acres out of 12,998 acres for the unit have been surveyed for heritage sites. The surveys revealed 43 sites, which leads to a prediction of 31.45 sites/square mile.

Transportation System

This RUU has twenty-two miles of level 2 roads (120A) with severe drainage, resource damage and other maintenance problems. Roads on top of House Mtn develop large mud holes in wet weather that are hard on

tires.

Schnebly Rim Recreation Use Unit

Recreation Setting

The Schnebly Rim Unit is located on the Mormon Lake Ranger District and is within the boundaries of amendment 12 to the Coconino National Forest Land Management Plan and is along Forest Road 153 from Schnebly Vista on the west to Interstate 17 on the east. It is also bordered by Jack's Point and locations accessed by 153A, a high clearance road, on the south and goes one half mile to the north of the Schnebly Hill Road. The unit is 5,167 acres. It includes 30 miles of road and 3 miles of trail (Schnebly Trail). The Schnebly Rim Unit is approximately 40 percent forested and 60 percent interspersed forest setting. The Schnebly Rim Unit is substantially different than other units located in the analysis area. Vegetation is predominantly within the ponderosa pine vegetation type with large areas covered by alligator juniper and pinyon type. Refer to Map 25- Schnebly Rim Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Wildlife viewing opportunities include elk, bear, squirrels and deer. The unit offers climatic relief during the late spring, summer and early fall warm weather periods. The Schnebly Vista is located in this unit and offers magnificent views of Sedona, Munds Mountain and the Verde Valley to the west.

Since most of the area immediately around Sedona is under a camping and campfire closure, this is one of the closest areas available for dispersed camping when visiting Sedona. The higher elevation also provides a welcome escape from the summer heat. Forest Service crews monitor stay limits and routinely clean up the popular dispersed use sites. Current uses include wildlife viewing, 4X4 and ATV driving, hunting, hiking, cross country skiing, wood gathering, hunting and grazing. The unit also has the Munds Mountain quiet area which is closed to motorized vehicle use during the fall season.

Current use is 205 Parties/vehicles per day taken from traffic counters located on the Schnebly Hill Road near Interestat-17. Existing permitted commercial use is 15 parties or vehicles per day.

ROS Class

There are 78 acres of SPNM; 5,006 acres of SPM ROS classes in this unit. There is also 83 acres of non-Forest Service System lands in the unit.

Desired Experience

The desired experience is for semi-primitive motorized and non-motorized activities including 4 wheel driving, Quad and hiking opportunities with an emphasis on the hunting and viewing of wildlife.

Recreation Activity Niche

The Schnebly Rim Unit's niche is to provide breathtaking views of the Red Rock Country, climatic relief from the ponderosa pine type and higher elevations, extreme elevation change (the six mile route from Sedona rises

almost 3,000 feet), wildlife viewing, and photographic opportunities. The commercial niche is for hiking and scenic tours limited to existing actual use numbers.

Administrative and Resource Management Concerns

Most of this unit lies within the Mormon Lake Ranger District, coordination of management efforts will be needed between the two districts. As an alternative, seek administrative privileges for Red Rock Ranger District for outfitter-guide SUPs only, since most outfitter-guide activity on Schnebly Hill requests a continuation onto the Rim. The Woods Canyon seasonal closure affects this area.

Opportunities/ Recommendations

A CCC camp and its associated heritage sites are situated along FR 153A – "The Basalt Loop." These may require additional protection as visitation increases. Foxboro Lake provides a popular wildlife viewing area. Merry-Go-Round Rock, and, to a lesser degree, Schnebly Vista provide popular wedding sites.

Desired Condition for Recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles, turkey and elk.

Nesting turkeys occur in this RUU.

A resident population of elk occurs within this RUU. The Woods Seasonal Closure Area in this RUU is closed to vehicle entry December 15 to April 1. Roads within the area are closed but the road along the perimeter is open to motorized travel. Schnebly Hill Road, FR 153, is not affected by this closure. The closure objective is to minimize disturbance to big game winter habitat.

One riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist is the northern leopard frog; a populations occurs on private lands adjacent to this RUU.

Two sensitive plant species are known to occur in this RUU. Populations of Arizona bugbane and Flagstaff penstemon occur in this RUU. Refer to the Lower Schnebly RUU special status species description for habitat information for Flagstaff penstemon, and Oak Creek Canyon RUU for Arizona bugbane.

Hydrology & Soils

This unit occurs in the transition from pinion/juniper to ponderosa pine above the Mogollon Rim. Major drainages associated with the unit include

Casner Canyon and Bear Wallow Canyon, both tributary to Oak Creek. Level 2 roads within this unit are generally associated with the Schnebly Hill Road. Many of these roads are "user created" and are generally in poor condition in terms of road surface and functional drainage. Many highly disturbed areas exist along the Schnebly Hill Road as a result of dispersed camping and other activities.

Soils are derived from basalt or basaltic cinders and are susceptible to damage when wet. Outfitter /guide permitted activities should be considered in terms of season of use and restricted to relatively dry conditions. Many of the existing roads will be considered for decommissioning in the future, and should not be considered for permitted use. Establishment and maintenance of functional drainage should be a requirement for permitted use.

Heritage

Approximately 5.7 percent or 294 acres out of 5,167 acres for the unit have been surveyed for heritage sites. The surveys revealed 1 site, which leads to a prediction of 2.18 sites/square mile.

Transportation System

There is thirty miles of level 2 roads with drainage, and resource protection problems. Seasonal closure each winter leaves only FR 153 open between Sedona and I-17. However, FR 153 is closed at the gate above Merry-go-round during winter conditions.

Sedona Recreation Use Unit

Recreation Setting

The Sedona Recreation Use Unit is 9,600 acres in size and includes 28 miles of road and 32 miles of trails. It includes the City of Sedona, Highway 89A and Highway 179 and has substantial private land located in the unit. It includes the "Neighborwoods" Management Unit and is characterized mostly by the Red Rock Trail System also known as the Sedona Urban Trails and Pathways System and secondary roads such as the Schnebly Hill Road to the Huckaby Trailhead, Jordan Road, Soldier's Pass Road, Airport Road, the Dry Creek Road, Thunder Mountain Road, Sky View Drive and the Cultural Park Road. National Forest management, use and recreation are characterized by the need to provide visitor access to the National Forest while respecting the rights of residents.
Major trails within the unit include the Mystic, Huckaby, Jim Thompson, Jordan, Cibola Pass, Teacup, Thunder Mountain, Chimney Loop, Two Fence, Brewer and Airport Loop Trails and parts of others not mentioned. The unit is mostly forested. Refer to Map 24- Sedona Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Sedona RUU encompasses the City of Sedona and includes most of the District's urban interface area. This in itself leads to increased user conflicts between forest users and residents. Many residents enjoy immediate access to National Forest lands from their private land.

Elimination of social trails is a persistent challenge.

Most of the recreational road use is on secondary access roads which feed into other units such as Dry Creek, Oak Creek, Lower Schnebly, Broken Arrow, Cathedral and Upper Loop. These roads also access major scenic vista points such as the Huckaby Trailhead, Airport Vista, Airport Saddle, the Chapel of the Holy Cross, the Jim Thompson Trailhead, Red Rock High School and the Cultural Park. Uses include hiking, Mountain Biking, scenic driving and metaphysical tours.

Use was determined by estimates of use on the roads listed above which access the National Forest. Highway use was not included in this unit.

ROS Class

There are 455 acres of SPNM; 1,167 acres of SPM; 411 acres of RN, and 1,165 acres of rural ROS classes in this unit. There are also 5,952 acres of non-Forest Service System lands.

Desired Experience

The Sedona Unit is the place where the vast majority of the public and residents view the world class vistas offered by the Red Rock Country. Most of the trail use in this unit is from residents and tourists walking and mountain biking along trails which they can access from their houses, motels, mountain bike shops and other businesses.

Hiking and mountain biking are some of the most sought after experiences within the Sedona RUU. Surprisingly, people regularly get lost in this unit due to poorly marked trails. One of the most desired experiences in this unit is to be able to find FS system trails without getting “side tracked” on a non-system trail.

Recreation Activity Niche

The Sedona Unit’s niche is to provide the place where the vast majority of the public and residents view the world class vistas offered by the Red Rock Country. It is to provide the place where residents and tourists walk and mountain bike along trails that they can access from their houses, motels, mountain mike shops and other businesses. Its niche is to provide recreational road use on secondary access roads which feed into other units such as Dry Creek, Oak Creek, Lower Schnebly, Broken Arrow, Cathedral and Upper Loop. These roads also access major scenic vista points such as the Huckaby Trailhead, Airport Vista, Airport Saddle, and the Chapel of the Holy Cross, the Jim Thompson Trailhead, Red Rock High School and the Cultural Park. Another niche is to provide visitor access to the National Forest while respecting the rights of residents. The unit is mostly within the rural recreation opportunity class with small amounts of roaded natural, semi-primitive motorized and semi-primitive non-motorized. The unit is mostly forested. Uses include hiking, mountain biking, scenic driving and metaphysical tours.

Administrative

Airport Mesa vortex lies within this RUU. Its easy access draws a

and Resource Management Concerns

considerable number of people. The Forest Service parking near the airport is in need of repair. Alternatively, many people opt to park on airport land and hike along Airport Road to gain access to the trails, posing a safety problem for hikers as well as drivers.

The airport is also the primary source of low flights over Wilderness. Many people voice concern about the noise and question the impacts on cultural resource sites from these low flying aircraft. Quiet Skies Over Sedona, a local group, is particularly interested in resolving this problem.

Opportunities/ Recommendations

The North Urban Trail System (NUTS) includes many of the trails in and around the City of Sedona. Some of the trailheads require access through residential neighborhoods, which generates concern from the residents. Parking presents another issue. Development of the proposed transit/shuttle system should help alleviate some of these concerns. Opportunity may exist for hike, bike, and metaphysical outfitter-guide activities, but equestrian activity is rather limited because of its oversize parking requirements. The future equestrian parking at Jim Thompson Trailhead will be targeted for unguided users. Equestrian outfitter-guides have other trails available that do not require access through a residential neighborhood and will not occupy the limited number of available equestrian parking spaces.

Desired Condition

Good trail and trailhead maintenance, signing and marking. Leave-No-Trace information made available to the public by word of mouth, publications and signing. Good directional and interpretive signing. Closure and re-habilitation of non FS system roads. The Forest needs to end illegal trail construction. Efficient and effective movement of recreation users through communities and onto the National Forest. The prevention of intrusions by mountain bikes into wilderness appendages at Chimney Rock, Cibola Pass and Marg's. The prevention of cross country hiking travel except on durable surfaces. Crypto biotic soil improves over time.

Special Status Wildlife, Fish, & Plant Species

In this RUU, common black-hawks are known to nest along Oak Creek. Refer to the Beaver Creek RUU special status species description for habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, narrow-headed garter snake, Mexican garter snake, Page springsnail, and obsolete viceroy.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones, such as Oak Creek, where they forage on waterfowl and fish. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles.

The lower portions of Oak Creek currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, and speckled dace.

Hydrology & Soils

This Unit includes the City of Sedona and the adjacent urban interface lands around. The average elevation is approximately 4,400 feet. The predominant soil map units are 457, 458, and 474. These soils have developed in sandstone parent material and occur on slopes from gently sloping to steep. These soils typically have coarse soil textures with high levels of rock fragments on the surface. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are about 8 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. A high percentage of the soils are rated in the moderate category for both unsurfaced roads and erosion hazard. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There are no level 2 roads within or near riparian areas.

Heritage

Approximately 18.8 percent or 1,805 acres out of 9,600 acres for the unit have been surveyed for heritage sites. The surveys revealed 58 sites, which leads to a prediction of 20.57 sites/square mile.

Transportation System

Most of the open roads in this unit are State, County, or City roads, or are private. Most of the FS roads are closed. Highways AZ-89A and AZ-179 provide the arterial access, and City streets provide access to the edge of the forest in most cases. The 32 miles of trail need maintenance due to heavy use and erosion.

Skeleton Bone Recreation Use Unit

Recreation Setting

The Skeleton Bone Unit at 28,225 acres is one of the largest units only exceeded by Apache Maid, Beaverhead, Cedar Flat and Wickiup. It is bordered on the east by Highway 89A on the east, the Bill Grey Road (FR761); the Sycamore Canyon Wilderness on the north; and the Verde River and the Cottonwood/Clarkdale area on the south. The unit has 13.6 miles of system trails including the trails near Dead Horse Ranch State Park and the Lime Kiln Historic Trail. It also includes 95 miles of National Forest system (limited maintenance mostly primitive) road.

The unit includes 57 percent interspersed forest setting, 29 percent forest and 14 percent meadow. Major features located within or adjacent to the unit include Dead Horse Ranch State Park, Tuzigoot National Monument, the Verde Canyon Railroad, the upper Verde River and the Bridgeport/Cottonwood/Clarkdale private land “interface” located along a 10 mile Forest Boundary Line on the southwest side of the unit.

The Skeleton Bone Unit is traversed by the Bill Grey (FR 761), Buckboard (FR258) and the Duff Flat Road (FR 131). It also has numerous old natural gas and uranium exploration roads especially in the DK Well area and along the Chalk Hills. The area has some of the most diverse plant life found anywhere in Arizona and includes the Verde Valley Botanical Area. The diverse plants include many endangered species including the Arizona Cliff Rose and Ripley’s Buckwheat. Many other interesting plants grow there including Crucifixion Thorn, Creosote Bush, Tabossa Grass, Needle and Thread Grass, Mesquite and a wide variety of cactus. Refer to Map 25-Skeleton Bone Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

The unit is mostly in the Chalk Hills, the remnants of an ancient fresh water lake that filled the Verde Valley and offers wide open spaces and solitude in a natural setting. Current uses include hunting, ATV and horseback riding, canoeing and kayaking, mountain biking, fuelwood gathering, grazing, hiking, 4X4 driving, scenic driving and wildflower viewing. Another major activity is quick draw shooting at the Spring Creek Pit at the northeast part of the unit ½ mile west of Highway 89A. Almost every weekend in the spring, winter and fall quick draw clubs have competitions at the site. Seven miles of the Historic Lime Kiln Trail traverse the unit from Dead Horse Ranch State Park to Highway 89A. This trail is located on the route used by Pioneers before and during the early 1900’s to trade goods and produce and travel between Upper Oak Creek and Jerome. The trail offers good opportunities for horseback, mountain bikes and hikers.

Skeleton Bone RUU picks up the historic Lime Kiln Trail as it leaves Dead Horse Ranch State Park. This trail features an underpass beneath Highway 89A, allowing users to cross this busy roadway without having to contend with vehicle traffic. As knowledge of its existence spreads, expect use of the underpass to increase.

Skeleton Bone RUU contains some prime 4X4 opportunities as well as some lesser traveled roads well suited for hummer, mountain bike, ATV, or equestrian use. The unit also provides a popular hunting area.

ROS Class

There are 22,723 acres of SPM; 232 acres of RN, and 53 acres of rural ROS classes in this unit. There are also 5, 217 acres of non-Forest Service System lands.

Desired Experience

Desired activities include Quads, equestrian, hiking, hummers, scenic tours, mountain biking, 4X4 driving, hunting and heritage site visits.

Recreation Activity Niche

The Skeleton Bone Unit's niche is to provide light to moderate contact frequencies between visitors in a "wide open" setting of white rocks cut by many rough canyons in an area with stands of dark green junipers and tall pinyon trees with interspersed grasslands. It is an area that is isolated enough to allow a variety commercial opportunities including ATV, equestrian, hiking, hummer, scenic, mountain biking, 4X4 driving, hunting, livestock packing and heritage site tours.

Administrative and Resource Management Concerns

The Verde Valley Botanical Area needs to be protected, as well as the Bridgeport Ruin. Enforcement of non-motorized use on the non-motorized portions of the Lime Kiln Trail needs to occur. Marking and historical interpretation of the Lime Kiln Trail should be done. Trail maintenance and prevention of motorized use on non-motorized trails needs to be planned. Design and construction of a Lime Kiln Trailhead one quarter mile from Sheepshead Tank off the Bill Grey Road needs to be planned.. Acquisition of the Parsons Trailhead (currently on private land) is recommended.

The Verde River forms the northwest boundary of this unit. Numerous social roads extend to the river where the temptation exists to cross the river onto Prescott National Forest. However, there are no system roads that ford the river. In the past, efforts have been make to close and rehabilitate these roads that extend to river. Re-visit, re-evaluate, and renew these efforts, if appropriate.

Opportunities/ Recommendations

Feature development and protection of Lime Kiln trail in this RUU with due consideration given to the appropriateness of motorized traffic on this historic trail.

Desired Condition for Recreation

The desired condition for Skeleton Bone is to have little evidence of remoteness, moderate to high contact frequency and on-site controls are noticeable but harmonize with the natural environment. Some site hardening could be allowed but any facilities should be rustic. The naturalness of the landscape should be partially retained in this unit. Another desired condition for this unit is for well maintained roads and trails. The area will be kept clean, trash picked up and people stay on National Forest system roads and trails. Roads will stay at 12 feet or less in

width. The quantity of non-system roads and trails will not increase. Areas of concentrated public use, including the Bridgeport Ruin, the areas and trails adjacent to Dead Horse Ranch State Park (Thumper, Lime Kiln, Bill Ensign and Bones Trails) and the Verde Valley Botanical Area will receive protection from over use and vegetative and soil damage.

Special Status Wildlife, Fish, & Plant Species

Bald eagles are known to nest along the Verde River in this RUU. The Towers breeding area closure prohibits all entry, except float-through kayaks, from December 1 through June. Wintering bald eagles occur in low numbers and are found foraging on waterfowl and fish along perennial streams and on carrion and small mammals in the uplands. No large communal roosts have been identified in this Unit. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles.

The portion of the Verde River within this RUU provides suitable habitat, for yellow-billed cuckoos however surveys for nesting cuckoos have not been conducted.

Common black-hawks are known to nest along the Verde River and Sycamore Creek. Refer to the Beaver Creek RUU special status species description for habitat information.

Suitable habitat for the southwestern willow flycatcher bird occurs along the Verde River. Although no nesting birds are known to occur on National Forest system lands, nesting birds have been detected on private lands along the Verde River and at Tavasci Marsh. Refer to the Beaver Creek RUU sensitive species description for addition habitat information for the flycatcher and yellow-billed cuckoo.

Mexican garter snakes have been sighted along the Verde River (within this RUU) and several of its tributaries, most notably Oak Creek near the Page Springs Fish Hatchery. Refer to the Beaverhead RUU special status species description for habitat information

The obsolete viceroy butterfly is a riparian dependent butterfly. The larvae and adult form of the obsolete viceroy feed on leaves, twigs and other plant parts of host species including willow and cottonwood. Limited surveys have occurred; the only occurrence data is from a few collections, one of which was from this RUU.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, Mexican garter snake, springsnails.

Habitat improvement projects have and will continue to occur in areas with pronghorn, but due to the barriers created by fenced highways and

communities, there is little possibility of ever re-establishing pronghorn throughout the Verde Valley.

The Verde River historically supported nine species of native fish including the Colorado pikeminnow, razorback sucker, loach minnow, spikedace, roundtail chub, desert sucker, Sonora sucker, longfin dace, and speckled dace. The roundtail chub, Sonora sucker, desert sucker, longfin dace, and speckled dace occur in the portion of the Verde River that that falls within this RUU.

Various limestone-dependent sensitive plant species occurring in this RUU include Arizona cliffrose, Verde Valley sage, Ripley's wild buckwheat, heathleaf wild buckwheat, Arizona cliffrose, and Hualapai milkwort. Refer to the Beaverhead RUU special status species description for habitat information.

Although no populations of the Tonto Basin agaves have been discovered, suitable habitat occurs within this RUU. Refer to the Beaver Creek RUU special status species description for habitat information.

Hydrology & Soils

This unit includes lands from north of Cottonwood to Sycamore Canyon and from below Forest road 761 to the Verde River. The average elevation is approximately 3,800 feet with slopes from gently sloping to steep. The predominant soil map units are 381, 385, 403, and 447. Soil units 381 and 403 have developed in mixed alluvium with gentle slopes. Soil units 385 and 447 have developed in limestone parent material and occur on gentle to moderate slopes. These soils typically have coarse soil textures with rock fragments present on the surface and are calcareous throughout.

There are around 56 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. Thirty seven percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 0.02 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 10.03 percent or 2,830 acres out of 28,225 acres for the unit have been surveyed. The surveys revealed 45 sites, which leads to a prediction of 10.18 sites/square mile.

Transportation

The main roads are 131, 761, and 258. The area Includes 95 miles of level 2 roads with serious drainage and resource damage problems. The 13 miles of trails need regular maintenance due to erosion and the presence of Threatened and Endangered Cliff Rose making marking of routes critical.

Soldier Pass Recreation Use Unit

Recreation Setting

The Soldier Pass Recreation Use Unit is the smallest of the units in the analysis at only 196 acres. Although small, the unit offers some of the most beautiful scenery anywhere with wonderful, up close, views of the Supai Red Sandstone and Coconino Sandstone rock formations of the Mogollon Rim. The stark contrast of red rock, blue sky and dark green vegetation marks this area with breath taking scenery.

The unit contains one mile of National Forest system trail (the Soldier Pass Trail) and approximately 2 miles of road. The majority of the unit is pinyon-juniper forest. The area includes many places named by the pioneers such as Soldier Pass, where Apache and Yavapai Scouts and Soldiers from nearby Fort Verde pursued Tonto Apaches; and Devil's Kitchen sink hole which first appeared in 1888 when the James Family was startled by a large dust cloud coming from the area. It also includes theatrical names given to places in Soldier Pass such as the Seven Sacred Pools. The road easement accessing the area has a gate which is closed between 8 AM and 6 PM and is operated by the local homeowner's association. Refer to Map 26- Soldier Pass Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Current uses include 4X4 driving, hiking, photography and mountain biking. Parties/Vehicle per day capacity estimates for the area range from 28-45 parties or vehicles per day based on the landscape or miles of road/trail methods respectively. Current actual use is 6 commercial tours and 33 private parties or vehicles per day.

Soldier Pass RUU presents several challenges in area management. It is one of the smallest units with one of the more popular destinations on the District. Social roads and trails require constant attention. Resident – forest visitor conflicts led to installation of a gate on private property that controls vehicle access to the trailhead and area. People are attracted to the Devils Kitchen sinkhole; managers struggle to strike a balance between allowing uninhibited access to the sinkhole and providing a safety buffer immediately adjacent to the sinkhole.

ROS Class

There are 184 acres of SPM; and 12 acres of rural ROS classes in this unit. There area does not have any non-Forest System lands.

Desired Experience

The desired experience includes primitive roads, some distance from the sights and sounds of human activity, light to moderate contact frequency, subtle on site regimentation, rustic facilities and retention of the natural characteristic landscape.

Recreation Activity Niche

The niche of this RUU is to provide visitor access to the beautiful scenery while respecting the rights of residents. The stark contrast of red rock, blue sky and dark green vegetation creates a highly scenic landscape.

Administrative and Resource Management Concerns	Need to prevention of off road motorized access. Need to prevention and close illegally constructed mountain bike trails. Need to perform road and trail maintenance. Implementation and monitoring of illegal camping and campfires. There is a need to provide interpretation of the "Devil's Kitchen" sinkhole.
Opportunities/ Recommendations	With the proliferation of illegally created trails in the unit the District may benefit from mountain bike guides assistance of presence and observation of activities in the RUU, and trail maintenance. The current use allocation on the 4X4 road is 2,100 vehicles per year and up to10 jeeps at one time. The outfitter-guide exhausts this use each year. Consider a reduction in "at one time" use with a higher annual capacity.
Desired Condition for Recreation	Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.
Special Status Wildlife, Fish, & Plant Species	Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion. Refer to the Apache Maid RUU special status species description for habitat information. In this RUU, one known bat roost supports at least cave myotis. Refer to the Broken Arrow RUU special status species description for habitat information.
Hydrology & Soils	This is a very small but highly used unit adjacent to a residential subdivision on the north side of Sedona. The average elevation is approximately 4,400 feet with slopes from moderately sloping to steep. The predominant soil map units are 474 and 475. These soils are typically coarse textured throughout and have developed in sandstone parent material. Maintenance of vegetative ground cover is essential to prevent soil erosion. There is less than 1 mile of level 2 unsurfaced roads available for use in outfitter/guide activities. These roads have received high levels of 4x4 use historically and have received periodic maintenance. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There are no level 2 roads within or near riparian areas.
Heritage	Approximately 23.47 percent or 46 acres out of 196 acres for the unit have been surveyed for heritage sites. The surveys revealed 3 sites, which leads to a prediction of 41.74 sites/square mile.

Transportation System Refer to the Hydrology and Soils section for this RUU.

Thirteen Mile Rock Recreation Use Unit

Recreation Setting The Thirteen Mile Rock Unit is one of the larger units at 13,327 acres. It is split east and west by Highway 260 (The General Crook Highway) and is bordered on the north by West Clear Creek, the south by the rim above the Fossil Creek Road and on the west by the rim. Thirteen Mile Rock RUU has limited access from Highway 260 that transects the unit with very few access roads into its interior. The unit has 7 miles of road (mostly Highway 260) and 7 miles of trail (the General Crook Trail). There is another system trail in the unit, the Sycamore Trail which is two miles long and almost never used. The unit is mostly forested. This unit is one of the steepest with over 32 percent of the acreage at a slope of over 40 percent.

The unit offers tremendous views of the Verde Valley as it ascends 1,500 feet in only seven miles. Major features in the unit besides the General Crook Highway are Thirteen Mile Rock, a major Landmark in the Verde Valley, the Thirteen Mile Rock Interpretive Site and Parking Lot and the General Crook Trail. The area is important to the Yavapai-Apache Nation. At one time the sign at Thirteen Mile Rock stated “General Crook Friend of the Apaches”. The portion of the General Crook Trail located on this unit is arguably the most scenic and interesting of the entire General Crook Trail which goes from Prescott to Fort Apache. The reasons for that are that it is completely intact; it is extremely scenic with views of the Verde Valley and Thirteen Mile Rock; and there are two intact parallel portions including a steeper route and a less steep route descending from the Rim. Refer to Map 27- Thirteen Mile Rock Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns Current use includes hunting, some ATV and horseback riding, hiking, wood cutting and grazing. Thirteen Mile rock is a popular rock climbing area. There are permanent anchors and a lot of chalk residue on the rock where there are many popular routes. Non-motorized uses needs to be emphasized in the unit. Current use, other than the General Crook Highway is two parties or vehicles per day.

ROS Class There are 4,404 acres of SPNM; 4,845 acres of SPM; and 4,438 acres of RN classes in this unit. There are no non-Forest Service System lands in this RUU.

Desired Experience Recreationists seek activities on non-motorized trails and primitive roads, distant from the sights and sounds of humans, with little chance of contacting humans. Visitor impacts should be un-noticeable and the area retains its natural characteristic landscape.

Recreation The units’ niche is to provide a step back in history, and provide semi-

Activity Niche

primitive experiences in an area with strikingly beautiful and rugged scenery; and an opportunity for challenging activities in a lightly used setting. Historical places in the unit include the General Crook Highway, Trail and Thirteen Mile Rock. Challenging activities include ATV, Equestrian, Hiking, 4X4 driving, Hunting, Rock Climbing and Heritage Site Visiting.

Administrative and Resource Management Concerns

There is a need to prevent motorized use on the non-motorized parts of the General Crook Trail. There is a need to provide interpretation of the General Crook Trail and Thirteen Mile Rock. There is a need to take steps to prevent illegal fuel wood harvesting, particularly Alligator Juniper. Better monitoring and reporting of illegal activity in this isolated area is needed. Increased prevention of damage to cultural resource sites is needed.

Opportunities/ Recommendations

The General Crook Trail needs some attention including maintenance of cairns and "V" makers. Historical stories abound in this area such as the one Mr. Fuller used to tell about the Indian Kids who would hide behind the rocks and scream "Whooh" to the teamster's mules as they climbed the grade. They finally got them to stop by giving them candy.

Consider Thirteen Mile Rock heritage site as a potential candidate for visitation – possibly in connection with the Sinagua Circle. General Crook trail, a historic route that traverses the area, may provide opportunity for equestrian outfitter-guide activity.

Consider rock climbing at the pit with due consideration given to other quarry obligations – for instance, consider whether this is still a viable material source or material storage area for highway crews.

Desired Condition for Recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones, such as West Clear Creek, where they forage on waterfowl and fish. No large communal roosts have been identified in this unit. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles, pronghorn and elk.

A small population of pronghorn that persists in the Mud Tanks RUU may occasionally visit this RUU. Steep topography and the lack of open grasslands make this RUU largely unsuitable. Elk can be found during the winter in this RUU.

All extant populations of the Chiricahua leopard frog occur on the Red

Rock Ranger District with a small portion of the population occurring in this RUU. Refer to the Mud Tanks RUU special status species description for habitat information.

Hydrology & Soils

This unit includes steep lands located just below the rim along Highway 260 to the east of Camp Verde. The average elevation is approximately 5,000 feet. The slopes are typically described as moderately sloping to very steep. The predominant soil map units are 430 and 463. These soils have developed in basaltic parent material and have very fine soil textures throughout. These soils are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There is less than 1 mile of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. However all of these roads intersect with soils rated with severe limitation for unsurfaced roads. The only mitigation to prevent soil damage when wet is non use. These roads would be available for outfitter/guide use seasonally during dry conditions from June 1 to November 1 annually. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There are no level 2 roads within or near riparian areas.

Heritage

Approximately 2.39 percent or 318 acres out of 13,327 acres for the unit have been surveyed for heritage sites. The surveys revealed 21 sites, which leads to a prediction of 42.26 sites/square mile.

Transportation System

The transportation system in this unit is the seven miles of AZ-260. The General Crook Trail (7 miles) needs marking, signing and maintenance.

Towel Recreation Use Unit

Recreation Setting

The Towel Unit is one of the larger units in the analysis area at 18,044 acres. It includes 10.8 miles of trail including the Towel, Hackberry and Bull Run Trails and only 3.4 miles of road. The Towel Creek RUU offers very limited road access with only a few trails; it merits candidacy for Roadless Area status. The unit is 80 percent forested with 18 percent grassy meadows. The Towel Unit is one of the steepest with 27 percent of the acreage located on slopes greater than 40 percent.

The Towel Unit is characterized by steep topography (elevations range from 3,000 feet elevation near the Verde River to almost 6,000 feet elevation at Hackberry Mountain). Vegetation varies from Upper Sonoran and riparian to pinyon-juniper woodland. The unit has a remarkable number of springs and riparian areas, particularly on the Verde River side and is relatively wild in character. Wildlife abounds and the area is very popular for hunting large and small game. Very lightly used trails such as Towel, Hackberry and Bull Run traverse the area. Numerous rugged canyons traverse the area such as Sycamore, Bull Run, Towel and Sally May. These canyons may

offer canyoneering opportunities. Current use is estimated to be one party or vehicle per day. Refer to Map 28- Towel Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Current use estimates vary from 23-25 parties or vehicles per day respectively from the landscape and the roads/trails method.

ROS Class

There are 10,217 acres of SPNM and 7,827 acres of SPM ROS classes in this Unit. There are no acres of non-Forest System lands in this RUU.

Desired Experience

Recreationist area seeking activities on non-motorized trails and primitive roads, distant from the sights and sounds of humans, with little chance of contacting humans. Visitor impacts should be un-noticeable and the area retains its natural characteristic landscape.

Recreation Activity Niche

Recommended uses include mountain bikes, horses, hikers and hunters but within context of the unit's suggested status as a Roadless Area. The units' niche is to provide a Roadless study area without the encumbrances of pre-existing permits and rights.

Administrative and Resource Management Concerns

Maintenance, brushing and marking of the Towel Creek and Hackberry Trails is needed. Prevention of damage and vandalism of cultural resource sites needs to be planned. Prevention of illegal motorized access is needed.

Opportunities/ Recommendations

Very lightly used trails such as Towel, Hackberry and Bull Run traverse the area. These trails need maintenance including tread work, marking and drainage work.

The area is a proposed roadless area so there should be no motorized use allowed except rancher maintenance of tanks and pipelines. Recommended uses should include mountain bikes, horses, hikers and hunters. An equestrian outfitter-guide opportunity is a possibility but this would be difficult to market, given the limited road access and the long trailering distance from town.

Desired Condition for Recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles forage opportunistically throughout this RUU feeding on small mammals and carrion. No large communal roosts have been identified in this Unit. Refer to the Apache Maid RUU special status species description for habitat information.

In this RUU, several roosts support large numbers of unidentified species of bats. Refer to the Broken Arrow RUU special status species description for habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include yellow-billed cuckoo, lowland leopard frog, Mexican garter snake, and obsolete viceroy.

Although no populations of Tonto Basin agave have been discovered, suitable habitat occurs within this RUU.

Hydrology & Soils

This unit includes lands in the southern portion of the District primarily located between the Verde River to the west and Forest road 708 to the east. The average elevation is approximately 4,500 feet with slopes from gently sloping to very steep. The predominant soil map units are 402, 420 and 430. These soils have developed in basaltic parent material and have very fine soil textures throughout. These soils are subject to traffic use problems and soil damage (compaction, rutting, and displacement) when wet.

There are nearly 1.4 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. However 57 percent of these roads intersect with soils rated with severe limitation for unsurfaced roads. The only mitigation to prevent soil damage when wet is non use. These roads would be available for outfitter/guide use seasonally during dry conditions from June 1 to November 1 annually. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There is 0.04 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 1.58 percent or 285 acres out of 18,045 acres for the unit have been surveyed for heritage sites. The surveys revealed 5 sites, which leads to a prediction of 11.23 sites/square mile.

Transportation System

Very few roads, accessed by trail from the river or the fossil creek road. The trails including the Towel Creek Trail need marking and maintenance.

Upper Loop Recreation Use Unit

Recreation Setting

The Upper Loop Unit is 6,232 acres in size including 22 miles of road and 14 miles of trail. This unit is one of the most scenic and heavily used units in the analysis area. Upper Loop RUU lies within close proximity and easy access from the City of Sedona. Crescent Moon Ranch and Red Rock Crossing Day Use are both situated within this RUU. It is bounded on the north by Sedona private land and airport mesa (Tabletop Mountain); on the east by Lower Oak Creek; the west by the Lower Red Rock Loop Road and Highway 89A and on the northwest by Dry Creek. Major roads in the area include the Upper and Lower Red Rock Loop Roads including access to Red Rock State Park. Trails include the Old Post, Carroll Canyon, Ridge, Herkenham, Scheurman Mountain, Lime Kiln and the Upper Loop Trail. These trails are some of the most scenic and easily accessed and most popular trails anywhere. Refer to Map 29- Upper Loop Recreation Use Unit in the Map Appendix.

Some of the most magnificent views found in the Sedona Area are found along the pullouts of the Upper Red Rock Loop Road. A wonderful mix of red rocks, basalt rock, dark green vegetation and mostly blue sky offers a striking landscape for visitors and residents alike. The unit is mostly forested and includes pinyon and juniper woodlands with Arizona Cypress along the drainages. The unit is very mountainous and rough with elevations ranging from 3,900 feet along Oak Creek to 4,900 feet on Scheurman Mountain. The unit includes three major landforms Schuerman Mountain, the edge of Airport Mesa (Table Mountain) and Lower Oak Creek.

Recreation Uses and Patterns

Current commercial recreation uses include hot air balloons, scenic touring, metaphysical tours and horseback riding. Non-commercial use includes hiking, horseback riding, swimming and fishing and photography. The unit includes the Crescent Moon Ranch Day Use area, one of the most popular developed sites on the District with over 120,000 visitors per year. Red Rock Crossing is also a popular wedding site.

Current use is estimated to be approximately 1,300 parties or vehicles per day.

ROS Class

There are 2,462 acres of SPNM; 459 acres of SPM; 1,315 acres of RN, and 870 acres of rural ROS classes in this unit. There are also 1,126 acres of non-Forest Service System lands.

Desired Experience for Recreation

Visitors desire recreation activities in semi-primitive and roaded natural settings with moderate contact frequency, a natural appearing landscape with non-motorized trails and good access.

Recreation Activity Niche

The units' current niche for commercial recreation uses including hot air balloons, scenic touring, metaphysical tours and horseback riding should

continue at appropriate levels. Non-commercial use includes hiking, horseback riding, swimming and fishing and photography.

Administrative and Resource Management Concerns

Problems found within the area include illegal trail construction, proliferation of user created trails (ATV, 4X4, hiker and mountain bike) which damage soil and vegetation. Other problems include the need for trail maintenance. Hot air balloon use is at or near saturation level.

Opportunities/ Recommendations

Do not increase commercial use except mountain bike to provide more managerial presence and to increase trail maintenance and prevent the continuing proliferation of illegal trails.

Consider whether these sites are available to outfitter-guides and if seasonal, at-one-time or other use restrictions are warranted to reduce competition with unguided public users.

Popular wedding sites within this RUU include Crescent Moon Ranch available through the Room With a View program, Red Rock Crossing whose Ramada may be reserved through the National Reservation System, and Cathedral Overlook along FR 216 (Red Rock Loop Road) not a mile south of Red Rock High School. Evaluate whether and, if so, under what circumstances, these first two sites would be available for commercial vendors. At the other end, on Lower Red Rock Loop Road, FR 9851 accesses a popular dumpsite and target practice area.

The historic Lime Kiln trail passes through this RUU. Also one of the non-system trails under permit with equestrian outfitter-guide traverses Scheurman Mountain in this unit. The trail also provides mountain biking activities. Continue evaluation and trail maintenance and construction to bring appropriate trails up to Forest Service standards for inclusion as system trails. Coordinate use with Dead Horse Ranch and Red Rock State Parks.

Desired Condition

Please refer to the Verde Wild & Scenic River Comprehensive River Management Plan Desired conditions for the Verde Wild and Scenic River.

Special Status Wildlife, Fish, & Plant Species

In this RUU, common black-hawks are known to nest along Oak Creek. Refer to the Beaver Creek RUU special status species description for habitat information.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones, such as Oak Creek, where they forage on waterfowl and fish. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include yellow-billed cuckoo,

lowland leopard frog, narrow-headed garter snake, Mexican garter snake, springsnails, and obsolete viceroy.

The lower portion of Oak Creek currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, speckled dace.

Hydrology & Soils

This unit is located adjacent to Sedona to the southeast. The Red Rock Loop road and Crescent Moon recreation site are located in this unit. The average elevation is approximately 4,400 feet. The predominant soil map units are 403, 457, and 458. These soils have developed in sandstone parent material and occur on slopes from gently sloping to steep. These soils typically have coarse soil textures with high levels of rock fragments on the surface. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are about 7.3 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. A high percentage of the soils are rated in the moderate category for both unsurfaced roads and erosion hazard. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There is 0.37 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 20.07 percent or 1,251 acres out of 6,233 acres for the unit have been surveyed for heritage sites. The surveys revealed 73 sites, which leads to a prediction of 37.35 sites/square mile.

Transportation System

Upper loop has two sections of roads that are paved linked by a gravel section. Much of the land is private. The trails in the unit need maintenance due to heavy use, ATV damage and erosion.

Verde Wild and Scenic River Recreation Use Unit

(Subject to Direction in the Verde Wild and Scenic River Comprehensive River Management Plan)

Recreation Setting

The scenic river portion of the Verde Wild and Scenic River goes from Beasley Flats to Childs; the wild portion flows from Childs to Sheep Bridge (Wild Portion). It is one half mile wide (one quarter mile either side of the centerline of the river). It is 60 miles long and offers a variety of white water experiences. During winter and spring runoff periods it is a popular river for white water canoeists, kayakers, and rafters. It is also popular during low water periods when inflatable kayaks can be used. This RUU covers 3,432 acres.

Recreation Uses and Patterns

Use is relatively light with less than 10,000 visits per year. Use is highest in the spring, with slightly lower use during the winter. Use is low during the fall and summer when fishermen and hunters are the primary users.

ROS Class	There are 536 acres of Primitive; 2,501 acres of SPNM; 290 acres of RN, and 105 acres of rural ROS classes in this unit. No non-Forest Service System lands are present in this RUU.
Desired Experience	The desired experience is limited access to an area that is distant from the sights and sounds of human activity which is away from motorized roads and where human contact frequency is light. It is an area with rustic facilities, which has retained its natural condition.
Recreation Activity Niche	The recreation niche is water based primitive recreation.
Administrative and Resource Management Concerns	Southern bald eagle breeding areas are present in the river corridor. Implementation of road closures particularly in the West Clear Creek, Beasley Flat, Wingfield Mesa, Childs, Red Creek and Sheep Bridge Areas may be necessary for habitat needs of the eagle. Initiation and implementation of fire pan and port-a-potty closure orders is needed. Trash pickup and fire ring removal. Design and construction of a boater access and camp area at Childs. Monitoring and reporting of violations is needed.
Opportunities/ Recommendations	Partnerships need to be developed in order to implement the recommendations listed in management concerns.
Desired Condition for Recreation	The desired condition is to provide an area where human contact frequency is light, with rustic facilities, and has a natural condition.
Special Status Wildlife, Fish, & Plant Species	There are three bald eagle breeding areas within this RUU; Ladders, Coldwater North, and Coldwater South. The Ladders breeding area closure prohibits all entry, except float-through kayaks, from December 1 through June. While there is no closure associated with the Coldwater North and Coldwater South breeding areas, there are certain beaches identified in the Verde Wild and Scenic Management Plan that are closed to camping from December 1 through June 30 to minimize disturbance to nesting bald eagles. Wintering bald eagles also occur in low numbers throughout this RUU and are found most consistently along the Verde River where they forage on waterfowl and fish. No large communal roosts have been identified in this unit. Refer to the Apache Maid RUU special status species description for habitat information for bald eagles. In this RUU, suitable habitat for nesting common black-hawks occurs along the Verde River. Refer to the Beaver Creek RUU special status species description for habitat information for this bird and the yellow-billed cuckoo. Yellow-billed cuckoos prefer to nesting in well-developed riparian zones where adjacent stands of mesquite provide suitable foraging. The Verde River provides suitable habitat, however surveys for nesting cuckoos have

not been conducted

Although surveys have been conducted where patches of suitable habitat is present, no nesting Southwestern willow flycatcher have been detected within this RUU.

Although there are no known peregrine eyries in this RUU, suitable habitat is abundant. Refer to the Cathedral RUU special status species description for habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, Mexican garter snake, and obsolete viceroy.

In this RUU, bat roosts with the following species of bats have been detected: Yuma myotis, cave myotis, California myotis, pallid bat, western pipistrelle, big brown bat, Townsend's big-eared bat, and Mexican free-tailed bat. Refer to the Broken Arrow RUU special status species description for habitat information.

This RUU contains two major rivers that support native fish. The Verde River historically supported nine species of native fish including the Colorado pikeminnow, razorback sucker, loach minnow, spikedace, roundtail chub, desert sucker, Sonora sucker, longfin dace, and speckled dace. Colorado squawfish and razorback sucker occur only in the lower portion of the Verde River which falls within the Verde Wild and Scenic RUU. The roundtail chub, Sonora sucker, desert sucker, longfin dace, and speckled dace occur all along the Verde River. The confluence of Fossil Creek occurs in this RUU. Lower Fossil Creek currently supports five species of native fish; headwater chub, roundtail chub, Sonora sucker, desert sucker, speckled dace, and longfin dace. Loachminnow, spikedace, razorback sucker, and Colorado pikeminnow historically occurred in Fossil Creek. Nonnative fish in the Verde and in Fossil Creek are largely responsible for the extirpation of these four species. Recent efforts to eradicate nonnative fish from nine miles of Fossil Creek have restored suitable habitat; native fish populations thriving without the pressure of non-natives.

Hydrology & Soils

This unit includes the Village of Oak Creek and the adjacent urban interface lands as well as the Highway 179 corridor to Interstate-17. The average elevation is approximately 4,400 feet. The predominant soil map units are 403, 457, and 458. These soils have developed in sandstone parent material and occur on slopes from gently sloping to steep. These soils typically have coarse soil textures with high levels of rock fragments on the surface. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are around 4 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. Twenty three percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 0.21 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 10.87 percent or 373 acres out of 3,432 acres for the unit have been surveyed for heritage sites. The surveys revealed 11 sites, which leads to a prediction of 18.87 sites/square mile.

Develop site protection measures for recreation use and identify interpretive opportunities.

Village of Creek (VOC) Recreation Use Unit

Recreation Setting

The VOC Unit is 10,866 acres in size and includes both the Big Park/Pine Valley Area on the east side of Highway 179 and the Verde Valley School and Verde Valley School Road Area on the west side of Highway 179. It is bounded on the east by the Munds Mountain Wilderness. It includes the Highway 179 corridor all the way to Interstate 17 and goes along the Verde Valley School Road all the way to Oak Creek to the northwest. On the south and west it follows a line along the steep ridges of House Mountain until it reaches Oak Creek. Refer to Map 30- Village of Oak Creek Recreation Use Unit in the Map Appendix.

The unit includes 30 miles of road and 10 miles of trail. Significant trails and trailheads include: Woods Canyon, Jacks Canyon, Hot Loop, Turkey Creek and the Balwin Trailhead. The unit also includes a large part of the Verde Valley School Trail Study Area, The proposed Chavez Trailhead along Highway 179 and the Kel Fox Trail into Arabian Way in the Village of Oak Creek. The unit is mostly forested (69 percent) with 25 percent of the unit in an interspersed forest setting. The VOC unit is the gateway to the Red Rock Country. It is the place where the Forest Service has chosen

to locate the new Red Rock Ranger District Office. It is where visitors get their first view of the Red Rocks.

Recreation Uses and Patterns

Highway 179 use has 8,000 cars per day on the average with use on the Verde Valley School and Jack's Canyon Road much less and trails even smaller. Use on the Verde Valley School Road is 169 vehicles per day near the Turkey Creek Trailhead—near the end of the road on National Forest. Use on the Jack's Canyon Road is probably similar. Trail use on the Jacks Canyon and Woods Canyon Trail combined is estimated to be only 20 people per day or 7,300 people per year.

ROS Class

There are 3,310 acres of SPNM; 1,227 acres of SPM; 1,508 acres of RN, and 1,191 acres of rural ROS classes in this unit. There are also 3,631 acres of non-Forest Service System lands in this RUU.

Desired Experience

The desired experience in this unit is split almost 50/50 between areas with full access where remoteness is of little relevance and moderate to high social contact frequency is acceptable; in contrast to large areas away from houses and major roads where primitive roads and trails, remoteness, and low contact frequencies are desired. This unit is one where desired experience varies widely as does the topography of the unit. In areas around Cathedral Rock, west of Highway 179 and in the Big Park Area, people are seeking a more semi-primitive non-motorized experience. Whereas, in areas to the south (Big Park), north (Back-O-Beyond) and west (Verde Valley School Road) people accept more developed experiences.

Recreation Activity Niche

The VOC unit's niche is as the gateway to the Red Rock Country. It is the place where the Forest Service has chosen to locate the new Red Rock District Office. It is where visitors get their first view of the Red Rocks. Because of the large amount of motorized us in this unit, it's future niche is to provide commercial opportunities that are largely non-motorized and help provide land stewardship including equestrian, hiking, mountain biking, public transit, livestock packing, weddings and metaphysical activities. Many of these activities are for backcountry use in the Munds Mountain Wilderness which must be accessed from this unit.

Administrative and Resource Management Concerns

Problems in the VOC Unit include illegal trail construction; the location of a major school (Verde Valley School) within the unit where they require students to ride horses or mountain bike as part of the curriculum; the creation of motorized trails from ATVs and 4X4s along Dry Beaver Creek and in the Jacks Canyon Area; the presence of garbage and user created roads in south of the Verde Valley School road.

A substantial trail system was constructed by students from the Verde Valley School surrounding the campus within the last 5 years. This is one of the most damaged areas in the Red Rock Country due to these and other user created trails that connect to these trails. During 2003 and 2004 the

District started working with the staff of the School to inventory and begin the environmental analysis process on these trails. Many of the trails are needed for the public but some need to be obliterated. The estimated length of this trail system is 10 miles.

VOC RUU provides an extremely popular creek-side wedding site opposite Red Rock-Crescent Moon Day Use Area. Proximity of these wedding sites to the busy day use area generates user conflicts at times. Unauthorized parking at the end of FR 216A (Verde Valley School Road) presents an enforcement problem. Oftentimes, this is in connection with wedding activities but not always.

Verde Valley School hosts a network of social trails leading from the private property. Continue working with the School to determine which, if any, of these trails should be included as Forest Service system trails.

Stage Stop area provides a different set of challenges because of its popularity as a dispersed camp area. The Forest Service continues its efforts to rehabilitate this heavily impacted riparian area. A Forest Order is in place that prohibits camping and campfires in this area.

Opportunities/ Recommendations

The District needs help inventorying, doing NEPA, and establishing the trail system south of the Verde Valley (VV) School Road. Public/private ventures with outfitter/guides or the VV School would be useful in the area. Major wilderness portal trailheads at Jack's and Woods Canyon are located in the unit. These should be available for equestrian and long haul hiking and backpacking guides who use the long trails into wilderness which are accessed from this unit. Hiking and mountain bike guides should be allowed to use the Jack's Canyon, Woods Canyon and Hot Loop Trails up to the wilderness boundary.

Possible outfitter-guide opportunities along FR 216A include mountain bike activity in the Turkey Creek area with access from Baldwin Trailhead. On the Jacks Canyon side, equestrian, backpack and overnight stock packing opportunities are possible.

Desired Conditions for Recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along perennial riparian zones, such as Oak Creek, where they forage on waterfowl and fish. Wintering bald eagles forage opportunistically throughout the unit feeding on small mammals and carrion. Refer to the Apache Maid RUU special status species description for additional habitat information

In this RUU, common black-hawks are known to nest along Oak Creek. Refer to the Beaver Creek RUU sensitive species description for habitat information.

In this RUU, one known bat roosts supports unidentified bat species. Refer to the Broken Arrow RUU sensitive species description for habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, narrow-headed garter snake, Mexican garter snake, springsnails, and obsolete viceroy.

The lower portion of Oak Creek currently supports Sonora sucker, desert sucker, roundtail chub, longfin dace, speckled dace.

Hydrology & Soils

This unit includes the Village of Oak Creek and the adjacent urban interface lands as well as the Highway 179 corridor to Interstate-17. The average elevation is approximately 4,400 feet. The predominant soil map units are 403, 457, and 458. These soils have developed in sandstone parent material and occur on slopes from gently sloping to steep. These soils typically have coarse soil textures with high levels of rock fragments on the surface. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are around 6 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. Twenty three percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non-use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There is 0.21 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 15.96 percent or 1,732 acres out of 10,866 acres for the unit have been surveyed for heritage sites. The surveys revealed 78 sites, which leads to a prediction of 28.82 sites/square mile.

Transportation System

The transportation system consists of state and county roads. The ten miles of trail need marking, erosion structures and maintenance due to heavy use and high erosion.

Wickiup Recreation Use Unit

Recreation Setting

The Wickiup Recreation Use Unit is the largest next to the Apache Maid Unit at 51,276 acres. It is bounded on the north by the Beaver Creek Unit (the ridge south of Walker Creek); on the east by the cliffs of the Mogollon Rim; on the south by Wingfield Mesa; and on the west by the Verde River, the Montezuma Unit and the Rimrock/Lake Montezuma Community. It includes 108 miles of mostly backcountry roads and only six miles of trail (Blodgett Basin, General Crook and West Clear Creek). It is characterized as an area which the locals call "Government" Land—which means to them----you can have your way with it if you can get away with it. The unit is 48 percent forested with pinyon-juniper woodlands, 40 percent interspersed P-J and oak brush and 12 percent meadows and grasslands. Refer to Map 31- Wickiup Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Current uses in the unit include grazing, fuelwood gathering, mining (gypsum mines near junction of FR618 and Highway 260), horseback and ATV riding, walking for pleasure from residents, hiking, 4X4 driving, hunting, scenic touring. There is very little if any commercial guiding in the unit. Current use level is 120 vehicles per day. Wickiup RUU receives some heavy cross country use adjacent to Wickiup Mesa private property and in the vicinity of the Camp Verde landing strip. The latter is currently under consideration as a Townsite Act land exchange parcel. The Bull Penn dispersed camp area also shows signs of heavy use; it is located within the riparian area of West Clear Creek. Excessive unauthorized visitation at Clear Creek Ruins impacts this heritage site. Each of these areas may benefit from the establishment and maintenance of presence offered by an outfitter-guide visiting the area on a regular basis.

ROS Class

There are 7,913 acres of SPNM; 13,330 acres of SPM; 15,430 acres of RN, and acres of 6,164 rural ROS classes in this unit, and 8,439 acres of non-Forest Service System lands.

Desired Experience for Recreation

Visitors desire an experience on primitive roads that are slightly remote with a moderate number of social encounters on roads and a low number on trails. On site controls should harmonize with the natural environment and it should be a place that retains the naturally appearing landscape.

Recreation Activity Niche

The unit's niche is to provide a variety of motorized and non-motorized uses and access to National Forest while not adversely affecting the rights of residents. Users should access forest roads and trails with the least affect on private landowners.

Administrative and Resource Management Concerns

The area gets very little attention from the Forest Service and therefore has a substantial number of problems including abandoned vehicles, garbage and dumping, illegal campers, illegal woodcutting and a substantial problem with cross country motorized travel and the construction of user created roads and ATV paths from motorized users.

Illegal wood cutting activity abounds in this area. The Montezuma Well dump site demands frequent clean up by Forest Service crews. Again, establishment and maintenance of presence offered by regular visitation from an outfitter-guide may help alleviate these problems.

Opportunities/ Recommendations

Current use level is 120 vehicles per day. Estimated capacity for the Unit is 1,900 parties or vehicles per day. Commercial use could be allowed for horseback, ATV, scenic touring, mountain bike, 4X4, rock climbing and hot air balloon guides provided impacts to residents are minimized.

Desired Condition for Recreation

Recreation visitors should have an opportunity to experience the Coconino National Forest in a setting that has healthy vegetation, reduced soil and wind erosion from roads, improved maintenance of roads for resource protection and improved wildlife habitat.

Special Status Wildlife, Fish, & Plant Species

Nesting yellow-billed cuckoos have been detected along the Verde River and West Clear Creek within this RUU.

Suitable habitat for the Southwestern willow flycatchers occurs along Wet Beaver Creek. Although no nesting birds are known to occur on National Forest system lands, nesting birds have been detected on private lands along the Verde River and West Clear Creek. Refer to the Beaver Creek RUU special status species description for addition habitat information for this bird, yellow-billed cuckoos, and common black-hawks.

Common black-hawks are known to nest the Verde River and West Clear Creek.

Despite historic, widespread distribution, lowland leopard frogs currently persist in few locations, including on private land within RUU. Refer to the Beaverhead RUU special status species description for habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include common black-hawk, Mexican garter snake, springsnails, and obsolete viceroy.

Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion.

A resident population of elk occurs within this RUU. Refer to the Apache Maid RUU special status species description for additional habitat information for elk, and bald eagles.

One known bat roost supports at least the pallid bat. Refer to the Broken Arrow RUU special status species description for habitat information.

There are three main rivers within this RUU that support native fish. The Verde River historically supported nine species of native fish including the Colorado pikeminnow, razorback sucker, loach minnow, spikedace, roundtail chub, desert sucker, Sonora sucker, longfin dace, and speckled dace. All species except for the loachminnow are present in at least portions of the Verde River today. The roundtail chub, Sonora sucker, desert sucker, longfin dace, and speckled dace occur in the portion of the Verde River that falls within this RUU. West Clear Creek historically supported six species of native fish including spikedace, roundtail chub, desert sucker, Sonora sucker, longfin dace, and speckled dace. All species except for the spikedace are present in West Clear Creek today. Wet Beaver Creek currently supports roundtail chub, desert sucker, sonoran sucker, speckled dace and possibly longfin dace. Spikedace and possibly loachminnow historically occurred in Wet Beaver Creek.

Various limestone-dependent sensitive plant species occurring in this RUU include Verde Valley sage, Ripley's wild buckwheat, heathleaf wild buckwheat, and Hualapai milkwort. Suitable habitat exists for Arizona cliffrose. Refer to the Beaverhead RUU special status species description for habitat information.

Several populations of the Tonto Basin agaves occur within this RUU.

Hydrology & Soils

This is a large unit including lands adjacent to Forest road 618 from north to south. The Wickiup Creek watershed is also included in this unit. The average elevation is approximately 4,000 feet. The predominant soil map units are 280, 350, 381, 385, and 403. Soil units 280, 381, and 403 are deep and have developed in mixed alluvium with gentle slopes. Soil units 350 and 385 have developed in limestone parent material and occur on moderate to steep slopes. These soils typically have coarse soil textures with rock fragments present on the surface and are calcareous throughout.

There are 48.9 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. Forty three percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. Some roads may require drainage or other improvements before outfitter/guide activities are approved. There is 0.02 miles of level 2 roads within riparian areas that would not be permitted for outfitter/guide use.

Heritage

Approximately 7.91 percent or 4,058 acres out of 51,276 acres for the unit have been surveyed for heritage sites. The surveys revealed 191 sites, which leads to a prediction of 30.12 sites/square mile.

Transportation System

The area is mostly accessed off the 618 road, but probably accessed by ATV from neighboring communities. This RUU includes 108 miles of level 2 roads with substantial drainage and resource protection issues. The trails in the unit need maintenance due to the remote location and the need for marking as well as ATV damage.

Windmill Recreation Use Unit

Recreation Setting

The Windmill Recreation Use Unit is one of the largest on the Red Rock District at 27,953 acres. It's in the heart of the District with major features such as Coffee Creek, Loy Canyon, Spring Creek, Anderson Butte and Windmill Mountain. It is bounded on the north by the Red Cliff's Unit, the east by the Sedona Unit, the southeast by Highway 89A and the west by the Skeleton Bone Unit. It is characterized as mostly hilly pinyon-juniper woodland with many back country roads which includes large grassland areas interspersed with mesquite, cat-claw with numerous intermittent arroyos punctuated with awesome views of the red rocks. It has the most roads of any unit except Apache Maid. The Unit has 115 miles of road with only 14.5 miles of trail.

Roads include the Red Canyon Ranch Road (FR525), the road to Sycamore Pass (525C), portions of the Bill Grey Road (FR761) and other interesting and scenic roads including 525A, 761B, the Gas Pipeline Road (FR9513), the Greasy Spoon Road and FR125A and the Bradshaw Ranch Road (FR525D). Most of the trails are located in the eastern part of the unit adjacent to Sedona. These include the following trails: Rupp, Az. Cypress, Dawa and Cockscomb. A portion of the historic Lime Kiln Trail goes thru the southeastern part of the unit near the junction of FR525 and Highway. 89A. The unit is mostly forested at 76 percent with 3 percent interspersed forest setting and 19 percent grass meadows of needle and thread and tabossa grass.

The unit offers wonderful views of the red rocks to the north, and the Verde Valley to the south. The unit contains many attractive locations such as the Bradshaw Ranch where with its rustic buildings with its history of movie making and its beautiful setting and entrance road right at the foot of the Red Rocks. The unit also includes the private land headquarters of the largest grazing allotment in the United States, the Windmill Allotment owned by the Morrison Family. The original site of the Coffee Creek Ranger Station was located along Coffee Creek (FR525A) and at the Windmill Ranch Headquarters. Refer to Map 32- Windmill Recreation Use Unit in the Map Appendix.

Recreation Uses and Patterns

Use in the Windmill Unit is mostly on the Red Canyon Ranch Road, the Bill Grey and the Greasy Spoon roads with secondary use on 761B and the Bradshaw Ranch Road 525D. Current uses include hiking, horseback riding, ATV, 4X4, the Central Az. Modelers Permitted landing strip by Dad

Jones Tank, Hot Air Balloons, grazing, hunting for both large and small game, shooting (mostly quick draw contests at the extreme south boundary near Spring Creek) and wildlife viewing. Current estimated use (2004) was 256 parties or vehicles per day (mostly measured along the Red Canyon Ranch Road (FR525)). Commercial permitted use at the time was only 16 parties or vehicles per day per day.

Recreation Activity Niche

The unit's niche is to provide a variety of motorized and non-motorized uses and access to National Forest while not adversely affecting the rights of residents. Users should access forest roads and trails with the least affect on private landowners.

ROS Class

There are 24,782 acres of SPM; 1,744 acres of RN, and 40 acres of rural ROS classes in this unit, and 1, 441 acres of non-Forest Service System lands

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Administrative and Resource Management Concerns

Problems include the need for road maintenance, particularly grade dip installation and grading; the need for archaeological surveys of existing roads to obtain clearances; abandoned trailers and cars; garbage dumps; campers overstaying the camping time limit; the need for more managerial presence and preventative law enforcement; the proliferation of user created motorized and non-motorized roads and trails; private land boundary interface; and the need to improve antelope habitat.

It includes the Fay Canyon South Area identified in the Forest Plan as a highly damaged area in need of rehabilitation to vegetation and soil. It also includes the Greasy Spoon Area which was highly damaged during the wet winter outfitter guide free for all that occurred during the winter of 2004-2005. The unit is located between the communities of Cottonwood and Sedona so it gets a lot of law enforcement problems.

Windmill RUU offers easy access from Sedona and hosts a variety of management challenges. Starting on the east side of the unit, FR 9589 gravel pit demands constant attention to reduce dumping problems. Since this is also a popular target practice site, it also generates resident –forest user conflicts. This gravel pit also serves as a launch site for one of the two permitted hot air balloon companies.

Moving west, social roads and trails continue to pose problems near the gravel pit, in the Greasy Spoon area, and all along FR 9513 as it transects the unit. Social roads and trails also abound in the vicinity of Nolan Tank and the sinkhole, threatening protection of nearby T&E species. Prohibit rappelling and spelunking at the sinkhole.

Opportunities/ Recommendations

Four wheel drive opportunities include the Greasy Spoon Area, the Gas Pipeline Road. Interesting opportunities exist at the Bradshaw Ranch for "Heritage Expeditions" (a public private venture where private companies provide transportation, lodging and food for customers and the Forest Service provides archaeologists to teach and accomplish field recording of archaeological and historical sites). The Ranch could also be a winter campground facility or a cabin rental. Further analysis of these opportunities could be pursued with a public private venture.

Develop a management plan for the recently acquired Bradshaw Ranch, considering outfitter-guide opportunities in the mix of management direction. The Ranch may also provide an ideal location for some recreation event and group use activities.

While considering outfitter-guide opportunities, keep in mind private property owner concerns about through access on FR 761 (Bill Grey Road).

Desired Condition

The Windmill Unit could accommodate the following recreation activities that have a demonstrated need: hot air balloons, and Jeep (4X4) tours.

Special Status Wildlife, Fish, & Plant Species

Wintering bald eagles may incidentally occur in this RUU while opportunistically hunting and foraging for small mammals and carrion.

Pronghorn now only persist below the rim in this and a few other RUUs. Elk can be found during the winter in this RUU. Refer to the Apache Maid RUU special status species description for habitat information on bald eagles, pronghorn and elk.

One known bat roost supports at least Townsend's big-eared bat. Mist netting in the area detected seven species including southwestern myotis, fringed myotis, long legged myotis, pallid bat, western pipistrelle, Mexican free-tailed bat, and big brown bat. Refer to the Broken Arrow RUU special status species description for additional habitat information.

Suitable habitat for various limestone-dependent sensitive plant species occurs in this RUU. Refer to the Beaverhead RUU special status species description for habitat information.

Although no populations have been discovered, suitable habitat for the Tonto Basin agave occurs within this RUU. Refer to the Beaver Creek RUU sensitive species description for habitat information.

Hydrology & Soils This is a large unit located north of Highway 89A between Sedona and Cottonwood. It is typically an open savannah unit with a large amount of level 2 road access. The average elevation is approximately 4,200 feet. The predominant soil map units are 403, 417, 457, and 458. Soil units 403 and 417 have developed in mixed alluvium with gentle slopes. These soils are deep with fine soil textures throughout. Soil units 457 and 458 have developed in sandstone parent material and occur on slopes from gently sloping to steep. These soils typically have coarse soil textures with high levels of rock fragments on the surface. Maintenance of vegetative ground cover is essential to prevent soil erosion.

There are about 73 miles of level 2 unsurfaced roads within this unit available for use in outfitter/guide activities. A high percentage of the soils are rated in the moderate category for both unsurfaced roads and erosion hazard. Restrictions in use should be considered in the permitting process. Thirty one percent of the roads available intersect with soils rated severe for soil erodibility, mitigation for these road segments would be non use. However these road segments could be available for use with either the commitment of a greater level of road maintenance and/or a road surfacing treatment like an aggregate base prior to use. There are no level 2 roads within or near riparian areas.

Heritage Approximately 8.14 percent or 2,275 acres out of 27,949 acres for the unit have been surveyed for heritage sites. The surveys revealed 67 sites, which leads to a prediction of 18.85 sites/square mile.

Transportation System The RUU is accessed by roads 525, the 761, and the 525C. The unit includes 118 miles of level 2 road. Many of these have substantial drainage, maintenance and resource protection problems.

Wilderness

General - Authorize only wilderness-dependent activities that cannot occur outside of Wilderness on outfitter-guide permits. Flesh out definition of “wilderness-dependent.” Shy away from tying this to miles traveled as there is considerable interest in day hikes from various proponents that would be interested in simply going the distance to gain access to Wilderness. In the High Sierra vs. Blackwell 9th Circuit Court decision, a categorical exclusion was deemed inappropriate for outfitter-guide permits, including those that are re-issued on a yearly basis in Wilderness. The Forest Service was also directed to address the extent to which outfitter-guides use was necessary and not just establish a capacity for outfitter-guide use.

Forest Service Manual (FSM) Section 2323.12g Outfitter and Guide Operations direction includes: do not permit caches, and phase out existing ones on a planned basis.

FSM 2323.13h prohibits competitive events, endurance races, survival exercises, or other activities of this nature in Wilderness.

In any of these remote areas, we need to be aware of the possibility of illegal pot farms and their effect on forest visitor safety.

Fossil Spring Wilderness Recreation Use Unit

Recreation Setting

The Fossil Springs Wilderness is approximately 5,036 acres in size and is located in a remote location far from the convenient range of Forest Service patrolmen and trail crews. It includes very isolated canyons including Sand Rock, Calf Pen and Mud Tanks which offer canyoneering opportunities. The wilderness is shared with the Mogollon District. The Mud Tanks and Sandrock portions of the wilderness are on the Red Rock District and the Calf Pen Canyon is on the Mogollon District. Hiking trail access is limited to the Mail Trail, which climbs the north "Rim" of the Fossil Creek Drainage and gets very light use and the Fossil Creek Trail, located mostly on the Tonto NF. Both trails are actually part of the original Mail Trail used by the Yavapai and Tonto Apache, Pony Soldiers and by horseback mail carriers from 1884 to 1914 between the Payson area and Camp Verde. The Wilderness is managed jointly by the Red Rock District and the Mogollon District and is subject to the Fossil Creek Wilderness Implementation Schedule. The Fossil Creek Trail is not in wilderness but accesses the wilderness. Fossil Springs Wilderness does not include the Fossil Springs Spring Bed but is immediately adjacent to it. The main public attractions are the Springs, the trails leading to the Springs and the portions of the creek with water. Most of the wilderness has intermittent creeks with pools of water lasting most of the year. Refer to Map 6 in the Map Appendix.

Recreation Uses and Patterns

Recreation us in the Fossil Springs Wilderness averages 4 parties per day. Use from the Fossil Springs Trail #18 from the Strawberry Trailhead is over 6,000 people per year and on the Flume Trail over 2,000 people per year. The area around Fossil Springs has concentrated public use covering approximately 14 acres on both the Coconino and Tonto National Forests. Use is mostly spring, summer and fall with the high use season being spring.

The Mail Trail provides access to the area from the General Crook Highway 260 and Mud Tanks Mesa. The Arizona Public Service is removing the Childs-Irving Hydroelectric Plants, Flume and the top portion of the dam during the next two years. This will prevent commercial use of the Flume Trail, which provides access from the Irving Trailhead.

ROS Class

The ROS class for this unit is primitive, and there are no non-Forest Service System lands.

Desired Experience

The main public attractions are the Springs, the trails leading to the Springs and the portions of the creek with water.

Recreation Activity Niche

The recreation niche for this unit includes hiking, canyoneering, backpacking and hunting.

Administrative

Problems include illegal marijuana farming, garbage, and lack of Forest

and Resource Management Concerns

Service presence, back country campsite damage, the need for trail maintenance, wilderness boundary posting needs, and the need for preventative law enforcement to protect wilderness values. The area around Fossil Springs gets damage and use that exceeds limits acceptable in wilderness. CNFLMP (page 107) specifies no new trail construction in Fossil Springs Wilderness. Strive to protect the Springs, which are outside of the wilderness boundary but a strong draw to the area itself.

Evaluate feasibility of Sandrock Canyon for outfitted-guided canyoneering activities.

Opportunities/ Recommendations

The unit needs a managerial presence and preventative law enforcement. The Forest Service rarely visits the area due to budget constraints and the remote location. For that reason, outfitter/guides could help pick up trash and monitor the area for violations. Forest Officers could then respond to the violations and deal with them. Cooperative effort between the outfitter/guide and the Forest Service could help rehabilitate some of the damaged campsites in the Fossil Springs Area. Endangered Species could be protected by the outfitter/guides by them helping to install and maintain protection signs and urging people to follow “Leave-no-trace” techniques.

Desired Condition

The desired recreation experience is one that is distant from the sight and sounds of human activity, with light use, no facilities except a few trails and no noticeable visitor impacts. Recreation experiences should be completely primitive.

Special Status Wildlife, Fish, & Plant Species

In this RUU, common black-hawks are known to nest at Fossil Springs. Refer to the Beaver Creek RUU special status species description for additional habitat information.

In this RUU, suitable nesting and roosting habitat is located in canyons with rocky cliffs where dense vegetation or crevices or caves provide cool moist microsites for nests and roosts. One known Mexican spotted owl PAC was delineated in this RUU after MSO were detected during surveys in 1993. Refer to the Apache Maid RUU special status species description for additional habitat information.

Although there are no known peregrine eyries in this RUU, suitable habitat is abundant and peregrines occur just over the district boundary on the Mogollon Rim and Payson Ranger Districts. Refer to the Cathedral RUU special status species description for additional habitat information.

Despite historic, widespread distribution, lowland leopard frogs currently persist in few locations, including this RUU. The population in this RUU is the largest on the entire Forest. Potential causes for the decline of this species are the presence of predacious non-native fish, bullfrogs, and crayfish. Refer to the Beaverhead RUU special status species description

for additional habitat information.

The Fossil Springsnail is typically found only in the headspring and upper sections of the outflows at the numerous Fossil Springs. Because springsnails are minuscule in size, and have only a partial operculum, they cannot withstand any desiccation, and occur only in water that is perennially flowing. In addition, there is evidently some chemical requirement that causes them to occur only in the very headwaters of a spring. The Fossil springsnail has experienced no apparent reduction in range or abundance as a result of activities in the Fossil Creek watershed during the past two decades.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include yellow-billed cuckoo, narrow-headed garter snake, Mexican garter snake, and obsolete viceroy.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along Fossil Creek where they forage on waterfowl and fish. Wintering bald eagles also forage opportunistically throughout the uplands within this Unit feeding on small mammals and carrion. Nesting turkeys occur in this RUU.

Elk are present in this RUU mainly during the winter, although are a small number of resident elk persists. Refer to the Apache Maid RUU special status species description for additional habitat information for bald eagles, Mexican spotted owl, elk and turkey.

Fossil Creek currently supports five species of native fish; headwater chub, Sonora sucker, desert sucker, speckled dace, and longfin dace. Although no populations of Tonto Basin agave have been discovered, suitable habitat occurs within this RUU. Refer to the Beaver Creek RUU special status species description for additional habitat information.

Hydrology & Soils Consider appropriate designated camping sites and elimination of many of the existing sites that adversely impact riparian areas.

Heritage Approximately .18 percent or 9 acres out of 5,036 acres for the unit have been surveyed for heritage sites. The surveys revealed 15 sites.

Transportation System Significant trail maintenance assistance is needed on the Fossil Creek and Mail Trails.

West Clear Creek Wilderness Recreation Use Unit

Recreation Setting

The West Clear Creek Wilderness covers most of the longest creek on the Mogollon Rim. It is jointly managed by the Mogollon and the Red Rock Ranger Districts. It covers approximately 9,813 acres of West Clear Creek and its tributaries. It is an area of extreme topography with several life zones including desert grassland, riparian creek bottoms, and pinyon-juniper, ponderosa pine and Douglas-fir forests. It is an area full of pre-historic archaeological sites. Geological formations abound including the red Supai, white Coconino Sandstone, Apache Limestone and volcanic basalt formations.

Trail access is very limited on the west portion to the West Clear Creek Trail #17, in the middle portion—the Calloway Butte Trail and on the east side the Tramway and Maxwell Trails. The Calloway Butte, Tramway and Maxwell Trails mostly provide access to the creek bottom from the rim. One of the primary recreation activities in this Wilderness is canyoneering or walking down the creek bottom and jumping into pools and swimming along with ones pack. It takes up to six days to traverse the entire length of the Wilderness along West Clear Creek. There are at least twenty-five major pools that one has to swim. It is truly one of the best canyoneering experiences on the National Forest System. It was included as part of the National Geographic Book—“America’s Rivers” in 1982. Refer to Map 6 in the Map Appendix.

Recreation Uses and Patterns

Recreation use is primarily concentrated on the west end of the Creek where the access point is the “Bull Pen” dispersed recreation area and trailhead. This use is primarily along the first mile of the West Clear Creek Trail and along the Creek. Average use is four parties per day for the entire Wilderness. Additional use occurs, mostly during the summer along the Tramway and Maxwell Trails. Very limited use occurs along the Calloway Butte Trail. Total estimated use for the area is 8,800 visits per year.

ROS Class

The ROS class for this unit is primitive, and there are no non-Forest Service System lands.

Desired Experience

The desired recreation experience is one that is distant from the sight and sounds of human activity, with light use, no facilities except a few trails and no noticeable visitor impacts. Recreation experiences should be completely primitive.

Recreation Activity Niche

Equestrian, hiking, canyoneering, backpacking, livestock packing and fishing are representative of the recreation niche.

Administrative and Resource Management Concerns

Areas of concentrated public use need protection and re-habilitation. Garbage needs to be picked up and campsites and fire rings dismantled. These include the campsites along the first couple miles of the West Clear Creek Trail. Cultural resource sites on the east end of the wilderness need recording, monitoring and protection. Signs need to be installed on the east end of the Wilderness (Tramway and Maxwell Trails) to explain how long and difficult the thru canyon trip can be. Trail maintenance is needed, particularly on the upper four miles of the West Clear Creek Trail. Suspicious activity needs to be reported in this Wilderness. Increased presence is needed to report this activity. Fire prevention patrols are needed during high fire danger, particularly on the east end of the Wilderness.

Opportunities/ Recommendations

Possible outfitter-guide activities include backpacking with associated fishing and canyoneering. Livestock packing presents another opportunity, mostly in conjunction with adjacent Cedar Flat RUU and associated hunting activity. These multiple day activities would provide effective night patrol for the area.

Desired Condition for Recreation

Use should not exceed .3 parties per hour in the primitive ROS Class. This comes from the ROS Coefficient used for the “Landscape Method” of .3 parties per 1,000 acres. The goal for wilderness is the Primitive ROS Class. Total desired use should not exceed 1 party every three hours on trails in wilderness. If commercial use is authorized in this unit, it should not exceed one party per day on any given trail.

Search and rescues are a serious problem in this wilderness. Recreation users don’t give themselves enough time to traverse the creek. They often miscalculate the amount of time they need and searches are initiated by their friends and loved ones. This causes the Yavapai County Sheriff Search and Rescue Team a lot of trouble. The individuals are usually found safe but late. One desired condition would be to reduce the frequency of searches in this wilderness by posting warning signs, getting the information out thru “Web Sites” and outfitter guides and wilderness rangers providing the public with information.

A desired condition is well maintained and marked trails. Trail maintenance is a problem in this Wilderness. The four creek crossings on the West Clear Creek Trail often don’t get brushed out so people lose their way and miss where the trail leaves the creek bottom.

Special Status Wildlife, Fish, & Plant Species

Yellow-billed cuckoos prefer to nesting in well-developed riparian zones where adjacent stands of mesquite provide suitable foraging. The portion of West Clear Creek within this RUU provides suitable habitat, however surveys for nesting cuckoos have not been conducted.

In this RUU, common black-hawks are known to nest along West Clear Creek. Refer to the Beaver Creek RUU special status species description for additional habitat information for this bird and yellow-billed cuckoos.

Although there are no known peregrine eyries in this RUU, suitable habitat is abundant and one peregrine eyrie occurs just over the district boundary on the Mogollon Rim Ranger District. Refer to the Cathedral RUU special status species description for addition habitat information.

The Chiricahua leopard frog occurs locally in central Arizona in rocky streams and wetlands and historically occurred within this RUU. Refer to the Mud Tanks RUU sensitive species description for addition habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, northern leopard frog, narrow-headed garter snake, Mexican garter snake, and obsolete viceroy.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along West Clear Creek where they forage on waterfowl and fish.

Suitable nesting habitat for the Mexican spotted owl occurs in this RUU on slopes greater than 40 percent where ponderosa pine and mixed conifer tree species provide for multi-layered canopies, numerous snags, and downed woody material. In this RUU, suitable nesting and roosting habitat is located in canyons with rocky cliffs where dense vegetation or crevices or caves provide cool moist microsites for nests and roosts. One known Mexican spotted owl PAC was delineated in this RUU after MSO were detected during surveys in 1990.

Nesting turkeys occur in this RUU.

Elk are present in this RUU year round up canyon of Buckhorn mountain but only during the winter down canyon from Buckhorn mountain. Refer to the Apache Maid RUU special status species description for additional habitat information for bald eagles, Mexican spotted owl, turkeys and elk.

In this RUU, West Clear Creek historically supported six species of native fish including the Gila trout, roundtail chub, desert sucker, Sonora sucker, longfin dace, and speckled dace. All species except for the spikedace and Gila trout are present in at least portions of West Clear Creek today. Gila trout only occurred in the head waters but were extirpated due to competition, hybridization, and predation by introduced and nonnative brown and rainbow trout.

Although no populations of Tonto Basin agave have been discovered, suitable habitat occurs within this RUU.

Hydrology & Soils Considerations for outfitter-Guide permits should include trail maintenance

including functional drainage, trail width, and limitations on off trail use.

Heritage

Approximately 1 percent or 98 acres out of 9,813 acres for the unit have been surveyed for heritage sites. The surveys revealed 12 sites, which leads to a prediction of 78.37 sites/square mile.

Transportation System

The West Clear Trail needs heavy maintenance and particularly marking and brushing of creek crossings at least twice per year to prevent people getting lost.

Wet Beaver Wilderness Recreation Use Unit

Recreation Setting

The Wet Beaver Creek Wilderness provides one of the most sought after and unique settings in Arizona—it has a perennial stream located in an arid environment. The Wilderness, which covers 5,949 acres of beautiful rock formations, shimmering clear pools, dark green vegetation and mostly clear blue sky provides an outstanding setting for primitive recreation experiences. The Bell Trail (#13) and the Apache Maid Trail (#15) provide limited access to the Wilderness. Two major trailheads, located near Beaver Creek Ranger Station, the Bell Trailhead, for hikers, and the Bruce Brockett Trailhead, for equestrians, provide access to the south end of the Wilderness. Access to the north end is via the Stoneman Lake Road (FR213) and the Apache Maid area thru private land at the Waldroup Place.

The Wilderness provides an off trail canyoneering experience in West Clear Creek and West Fork of Oak Creek, although it is shorter than West Clear Creek. It takes between two and three days to comfortably traverse the entire length of the canyon. Recreationists hike along the creek and when they encounter a pool, float their packs on small inflatable rafts or air mattresses and swim along side of them. There are approximately seventeen large pools which require a swim. Refer to Map 6 in the Map Appendix.

Recreation Uses and Patterns

The Cracks is an extremely popular swimming and camping area within the Wet Beaver Wilderness. Abandoned campsites, fire rings, human waste, and trash continue to threaten the Wilderness integrity. Evaluate feasibility of designating The Cracks for day use only including a camping and campfire closure order.

Use is approximately four parties per day or 9,000 visits per year. Ninety-five percent of the use is concentrated between the west end of the Wilderness and Bell Crossing where the Bell Trail crosses Beaver Creek. It is not un-common to find thirty or more people swimming at the swim hole located above Bell Crossing, known as the “Crack”.

ROS Class

The ROS class for this unit is primitive, and there are no acres of non-Forest Service System lands.

Desired Experience

The desired recreation experience is one that is distant from the sight and sounds of human activity, with light use, no facilities except a few trails and no noticeable visitor impacts. It should be completely primitive.

Recreation Activity Niche

Activities within the recreation niche include swimming, equestrian, hiking, canyoneering, backpacking, hunting and livestock packing.

Administrative and Resource Management Concerns

The "Crack" and the west side of the Wilderness from the boundary to one half mile above Bell Crossing need to be closed to camping and campfires. Leave-No-Trace Information needs to be provided to recreation users at kiosks and in person. There are trash problems in the Bell Crossing area. Trees are being damaged and destroyed for firewood in that area. Interpretive signs need to be installed at the Bruce Brockett Trailhead.

Opportunities/ Recommendations

Outfitter-Guide opportunities include hunting and equestrian use from the Bruce Brockett Trailhead with camping outside Wilderness. These would basically be "pass through" use with no staging areas, campsites, caches, or layovers within the Wilderness.

Desired Condition for Recreation

Use should not exceed .3 parties per hour in the primitive ROS Class. This comes from the ROS Coefficient used for the "Landscape Method" of .3 parties per 1,000 acres. The goal for wilderness is the Primitive ROS Class. Total desired use should not exceed 1 party every 3 hours on trails in wilderness. If commercial use is authorized in this unit, it should not exceed one party per day on any given trail.

Regular patrols of this Wilderness are desired. The trails need regular maintenance especially the maintenance of drainage structures and brushing at Bell Crossing. More eyes and ears are needed in the area to report and take photos of violations. More help is needed to pick up trash.

Special Status Wildlife, Fish, & Plant Species

The portion of Wet Beaver Creek within this RUU provides suitable habitat, however surveys for nesting yellow-billed cuckoos have not been conducted.

In this RUU, common black-hawks are known to nest along Wet Beaver Creek. Refer to the Beaver Creek RUU special status species description for additional habitat information this bird and yellow-billed cuckoos.

One known peregrine falcon eyrie occurs in this RUU. Refer to the Cathedral RUU special status species description for additional habitat information.

Other riparian dependent species that could potentially occur in this RUU but for which no occurrence records exist include lowland leopard frog, northern leopard frog, narrow-headed garter snake, Mexican garter snake,

and obsolete viceroy.

Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along Wet Beaver Creek where they forage on waterfowl and fish. Nesting turkeys occur in this RUU.

Elk are present in this RUU mainly during the winter; however there is a few that remain year-round. Refer to the Apache Maid RUU special status species description for additional habitat information for bald eagles, turkeys and elk.

In this RUU, no bat roosts are known, but mist netting has detected the following species of bats: Yuma myotis, southwestern myotis, western small-footed myotis, pallid bat, Allen's big-eared bat, and big free-tailed bat. Refer to the Broken Arrow RUU special status species description for habitat information.

Wet Beaver Creek currently supports roundtail chub, desert sucker, sonoran sucker, speckled dace and possibly longfin dace. Sikedace and possibly loachminnow historically occurred in Wet Beaver Creek.

Although no populations of Tonto Basin agave have been discovered, suitable habitat occurs within this RUU. Refer to the Beaver Creek RUU special status species description for additional habitat information.

Hydrology & Soils Considerations for outfitter-Guide permits should include trail maintenance including functional drainage, trail width, and limitations on off trail use.

Heritage Approximately 5.53 percent or 329 acres out of 5,949 acres for the unit have been surveyed for heritage sites. The surveys revealed 18 sites, which leads to a prediction of 35.02 sites/square mile.

Transportation System The Bell Trail, White Mesa and Apache Maid Trails need maintenance and do not get much help due to isolation.

Sycamore Canyon Wilderness Recreation Use Unit

Recreation Setting The Sycamore Canyon Wilderness is 14,454 acres, and spans the second largest canyon in Arizona. The Wilderness covers parts of three National Forests and four Ranger Districts. Elevations range from 3,600 feet to 7,000 feet. The area includes five major habitat types including riparian, desert grassland and pinyon-juniper, ponderosa pine and Douglas-fir forests. The wilderness is accessed by many trails including the Parsons, Doggie, Packard, Sycamore Basin, Taylor Cabin Canyon, Winter Cabin, Dorsey, Cedar Creek, Yew Thicket and Dorsey Springs Trails. Incredible views, solitude and primitive recreation opportunities abound in this

Wilderness. Refer to Map 6 in the Map Appendix.

Recreation Uses and Patterns

Recreation use is estimated to be approximately 8,000 visits per year. Use occurs in the south portion (Parson's Trail) year round with the heaviest use during the spring and summer. Use in the north half of the wilderness occurs mostly during the summer and fall seasons. The most heavily used area is along the Parson's Trail, particularly at the swimming hole located above Summers Spring.

ROS Class

The ROS class for this unit is primitive, and the RUU is completely within National Forest Service system lands.

Desired Experience

The desired recreation experience is one that is distant from the sight and sounds of human activity, with light use, no facilities except a few trails and no noticeable visitor impacts. It should be completely primitive.

Recreation Activity Niche

The recreation activity niche includes equestrian use, hiking, canyoneering, backpacking, hunting and livestock packing.

Administrative and Resource Management Concerns

The Coconino and Prescott National Forest coordinated a camping and campfire closure order below the canyon rim from the Parson Springs area south to the Wilderness boundary. Enforcement of this closure is a problem. Trail maintenance is a problem due to the difficult access and shortage of trail maintenance funds and personnel. Trail maintenance is a particular problem on the Parson's Trail with its numerous creek crossings which need trimming several times per year so people can follow the trail. Areas of concentrated public use include Taylor Cabin, the swimming hole two miles up the Parson's Trail and the area around Summers Springs. Help is needed at these sites to cleanup trash, remove fire rings and provide "Leave-No-Trace" information. Also, more eyes and ears are needed in this wilderness to report violations and trail conditions.

Opportunities/ Recommendations

Outfitter/Guides could provide much needed assistance in trail maintenance, monitoring and site cleanup and rehab. Information on trail condition and water availability could be obtained from outfitter/guides. Wilderness information camps are needed along the Parson's Trail to prevent illegal camping. Obliteration of "social" trails is needed.

Desired Condition for Recreation

Use should not exceed .3 parties per hour in the primitive ROS Class. This comes from the ROS Coefficient used for the "Landscape Method" of .3 parties per 1,000 acres. The goal for wilderness is the Primitive ROS Class. Total desired use should not exceed 1 party every 3 hours on trails in wilderness. If commercial use is authorized in this unit, it should not exceed one party per day on any given trail.

Special Status Wildlife, Fish, & Plant Species

Although there are no confirmed peregrine falcon eyries in this RUU, suitable habitat is abundant and peregrine have been observed foraging along Sycamore Canyon. Refer to the Cathedral RUU special status

species description for additional habitat information.

While no bald eagles are known to nest in the Lower Sycamore Canyon Wilderness, nesting bald eagles from the Verde River have been observed foraging along Sycamore Creek within this RUU. Wintering bald eagles occur in low numbers throughout this RUU and are found most consistently along West Clear Creek where they forage on waterfowl and fish. Refer to the Apache Maid RUU special status species description for additional habitat information.

The perennial portion of Sycamore Creek within this RUU provides suitable habitat and surveys have detected nesting yellow-billed cuckoos.

In this RUU, common black-hawks are known to nest along lower Sycamore Creek. Refer to the Beaver Creek RUU special status species description for additional habitat information for this bird and the yellow-billed cuckoo.

Mexican garter snakes have been sighted along the Verde River and several of its tributaries (Sycamore Creek within this RUU), most notably Oak Creek near the Page Springs Fish Hatchery. Refer to the Beaverhead RUU special status species description for additional habitat information.

Other riparian dependent species that could potentially occur in the lower portion of this RUU but for which no occurrence records exist include lowland leopard frog, springsnails, and obsolete viceroy.

Suitable nesting habitat for the Mexican spotted owl occurs in this middle portion of this RUU in canyons with rocky cliffs where dense vegetation or crevices or caves provide cool moist microsites for nests and roosts. One known Mexican spotted owl PAC was delineated in this RUU after MSO were detected during surveys in 1990.

Nesting turkeys occur in this RUU.

Elk are present in this RUU. Refer to the Apache Maid RUU special status species description for additional habitat information for Mexican spotted owl, turkeys, and elk.

Sycamore creek supports five species of native fish including roundtail chub, Sonora sucker, desert sucker, longfin dace, and speckled dace.

Hydrology & Soils

Soil map units in the Sycamore wilderness include 471, 457, and 475. Summers and Sycamore, and Parsons Spring are found within this area. Systems trails include Parsons Spring, Taylor Cabin, and one other. Trail maintenance and confining activities to existing trails is essential in protecting riparian and watershed resources.

Heritage

Approximately .44 percent or 63 acres out of 14,454 acres for the unit have been surveyed for heritage sites. The surveys revealed 10 sites.

Need to develop site protection measures for recreation use and identify interpretive opportunities.

Transportation System

Currently, the Parsons Trailhead is located on private property. The Parsons Springs trail requires brushing an absolute minimum of once a year or the numerous creek crossings are unclear and people get lost.

Munds Mountain Wilderness Recreation Use Unit

Recreation Setting

The Munds Mountain Wilderness roughly 18,093 acres, is a very heavily used wilderness area with an estimated 150,000 visitors per year. It serves as the "back door" to Sedona and offers many of the breathtaking views which are visible from the east side of the Village of Oak Creek and Sedona. It includes many of the most famous landmarks in the area including Bell Rock and Courthouse Butte. The red rock buttes and formations, the dark green vegetation and blue sky make the characteristic landscape of this Wilderness one of the most famous areas in the U.S.

Numerous trails traverse the area including the heavily used Bell Rock Trail which climbs up to the mid point of Bell Rock. The next most heavily used trail is the Marg's Trail which goes along the foothills, followed by the Hot Loop, Woods Canyon and the Jack's Canyon Trails. The least heavily used trail is the Munds Mountain Trail which goes out on the summit of Munds Mountain. Refer to Map 6 in the Map Appendix.

Recreation Uses and Patterns

Recreation use is year long with peak use during the spring and fall months. Urban interface along the west side adjacent to private residences in the area from the Broken Arrow Road to the Schnebly Hill Road is a problem with "social" trails branching out from homes. Transient camping is a problem in the unit. The majority of the use is in and around Bell Rock where at one point Highway 89A with up to 20,000 cars per day traveling within four hundred feed from the wilderness boundary. Surprisingly, some of the Red Rock Districts best "long haul" trails exist in the unit including the Jack's Canyon and Hot Loop Trails.

ROS Class

The ROS class for this unit is primitive. The Wilderness lies entirely within Forest Service System lands.

Desired Experience

The desired recreation experience is one that is distant from the sight and sounds of human activity, with light use, no facilities except a few trails and no noticeable visitor impacts. It should be completely primitive. Of course this is not the case on the west side of the Munds Mountain Wilderness. Primitive conditions can be found on interior portions of the wilderness in Woods Canyon, Jack's Canyon and on Munds Mountain and

	Lee Butte.
Recreation Activity Niche	The recreation activity niche includes equestrian, hiking, back packing, hunting and livestock packing. Certainly photography can bee added to the list also.
Administrative and Resource Management Concerns	Mountain bikes are a problem in this wilderness, particularly on the pass between Bell Rock and Courthouse Butte and on the Marg's Trail. Illegal trail construction of both hiking and mountain bike trails is a problem. The Forest needs help closing "social" or user created trails. Transients regularly camp in this Wilderness because it is so close to town. Implementation of the no camping and no campfires within a mile of the wilderness trailheads is a problem. Trail maintenance is a problem especially on the Jack's Canyon, Munds Mountain and the Hot Loop Trails which are quite long and hard to access.
Opportunities/ Recommendations	More eyes and ears are needed to report violations, to help close "social trails" and to monitor trail conditions. It would be useful to make outfitter/guide funds available to perform trail maintenance. Help is needed to close and obliterate illegally constructed trails. Help is needed to mark trails such as the Hot Loop and the Munds Mountain Trails which are hard to find.
Desired Condition for Recreation	Use should not exceed .3 parties per hour in the primitive ROS Class. This comes from the ROS Coefficient used for the "Landscape Method" of .3 parties per 1,000 acres. The goal for wilderness is the Primitive ROS Class. Total desired use should not exceed 1 party every 3 hours on trails in wilderness. If commercial use is authorized in this unit, it should not exceed one party per day on any given trail.
Special Status Wildlife, Fish, & Plant Species	Wintering bald eagles occur in low numbers throughout this RUU where they opportunistically forage on small mammals and carrion. No large communal roosts have been identified in this unit. Suitable nesting habitat for the Mexican spotted owl occurs in this RUU. One known Mexican spotted owl PAC was delineated in this RUU after MSO were detected during surveys in 1998. Nesting turkeys occur in this RUU. Elk can be found during the winter in this RUU. Refer to the Apache Maid RUU special status species description for additional habitat information on bald eagles, Mexican spotted owl, turkeys and elk.
Hydrology & Soils	This wilderness area occurs in both the Oak Creek and Beaver Creek watersheds. The Oak Creek portion drains into Bear wallow Canyon then into Oak Creek. Access appears to be limited. Jacks Canyon, Woods Canyon and Rattlesnake Canyon are the major drainages in the Beaver Creek portion. System trails occur in Jacks and Woods Canyons. Periodic

trail maintenance including effective drainage is necessary to avoid adverse watershed impacts from trail use.

Heritage Approximately 1.52 percent or 275 acres out of 18.093 acres for the unit have been surveyed for heritage sites. The surveys revealed 30 sites, which leads to a prediction of 69.82 sites/square mile.

Transportation System Trailheads are accessed from AZ-179 and FS 179A and the area can be accessed from FS 153.

Red Rock Secret Mountain Wilderness Recreation Use Unit

Recreation Setting The 48,096 acre Red Rock Secret Mountain Wilderness is the most heavily visited wilderness on the Coconino NF and one most heavily used in the entire Southwest. Like the Munds Mountain Wilderness, it provides the scenic "back drop" for Sedona to the north and when most people think of the Sedona Red Rocks, they are actually thinking of this Wilderness where the red rocks, the dark green vegetation and the blue sky combine to provide breathtaking scenery. The area also includes some of the most heavily used trails and some of the best hiking opportunities on the Forest. The Red Rock Trail System offers hikes where one can travel in a short distance from riparian areas thru pinyon-juniper woodlands into ponderosa pine and even Douglas fir forests. Refer to Map 6 of the Map Appendix.

Recreation Uses and Patterns The east side of this wilderness is Oak Creek Canyon; one of the most heavily used canyons in the Southwest and on the south side is the City of Sedona. Needless to say those areas receive the most use. Several of the trails including the West Fork of Oak Creek, Boynton Canyon, Fay Canyon, Devils Bridge Trails all get over 35,000 hikers each per year. Other trails such as Wilson Mountain and Sterling Pass (both closed due to damage by the Brins Fire), Secret Canyon, Brins Mesa, Soldiers Pass, Dry Creek and the Vultee Arch Trail all get substantial use (10-20,000 hikers per year). Use is yearlong in this Wilderness. Use by residents is significant, particularly along the Marg's, Cibola Pass, Chimney Rock, Brins Mesa and Soldier's Pass Trails.

ROS Class The ROS class for this unit is primitive. The Wilderness lies completely within Forest Service System lands.

Desired Experience The desired recreation experience is one that is distant from the sight and sounds of human activity, with light use, no facilities except a few trails and no noticeable visitor impacts. It should be completely primitive. However, this is not the case on the south side or the extreme east side of the Red Rock Secret Mountain Wilderness near Highway 89a. Much of the Wilderness is fairly primitive including many of the isolated canyons (Bear Sign, Secret Canyon, Mooney Canyon, Loy Canyon and places such

as Bear Mountain, Secret Mountain and Wilson Mountain and the more isolated portions of the West Fork of Oak Creek. Most people seem to be seeking an opportunity to hike in a place with solitude.

Recreation Activity Niche

Equestrian, hiking, canyoneering, back packing, camping, hunting, livestock packing and rock climbing activities are all part of the recreation activity niche for this area.

Administrative and Resource Management Concerns

The District needs to implement a designated camping permit system for the West Fork of Oak Creek as required by the Fish and Wildlife Service and Amendment 12 of the Forest Plan. The Forest needs to reduce incursions by mechanized equipment, particularly mountain bikes. This is a particular problem on trails which cross over wilderness passes between watersheds such as Cibola Pass and Chimney Rock; the Forest needs help to maintain, mark and monitor trails and to close and re-habilitate "social" or user created trails. Eyes and ears are needed out on the trails to report violations. Assistance is needed to re-construct trails damaged by the Brins Fire including the Sterling Pass, Wilson Mountain and North Wilson Mountain Trails. Assistance is needed for monitoring cultural resource sites for vandalism.

Opportunities/ Recommendations

Opportunities include partnerships in trail maintenance, monitoring and marking and the rehabilitation of illegal trails. Also, opportunities exist for the monitoring of cultural resource sites. Opportunities also exist for more eyes and ears to report violations. Studies have shown (*NAU School of Forestry Wilderness Class Survey*—2004 Dr. Martha Lee) that most wilderness visitors do not know they are in wilderness, they do not know what wilderness is and they have no survival pack or survival plan. There is therefore a need to provide this information and "Leave-No-Trace" information to recreation users including guided users.

Desired Condition for Recreation

As stated in previously listed recreation use units, use should not exceed .3 parties per hour in the primitive ROS Class. This comes from the ROS Coefficient used for the "Landscape Method" of .3 parties per 1,000 acres. The goal for wilderness is the Primitive ROS Class. Total desired use should not exceed 1 party every 3 hours on trails in wilderness. If commercial use is authorized in this unit, it should not exceed one party per day on any given trail.

Special Status Wildlife, Fish, & Plant Species

Red Rock Secret Mountain Wilderness. Key habitat attributes include: availability of roost trees in summer and winter range which consist of groups of large yellow pines; uneven aged overstory structure; nesting areas; mast from ponderosa pine, pinyon pine, juniper and oak; riparian areas around springs and seeps, and small openings for seedhead and invertebrate production.

Elk are present in this RUU.

Two Mexican spotted owl PACs and portions of six other PACs, which are managed by the Peaks Ranger District, are known to occur in the Red Cliffs portion of this RUU. There are four MSO PACs that occur in the RNA portion of this RUU; three of which straddle the district boundary and are managed by the Peaks Ranger District. There are three MSO PACs that occur in the West Fork portion of this RUU; all of which straddle the district boundary and are managed by the Peaks Ranger District. Refer to the Apache Maid RUU special status species description for additional habitat information for bald eagles, elk, and Mexican spotted owl.

The West Fork portion of this RUU is too small to support suitable fish and waterfowl foraging for bald eagles. Instead wintering bald eagles may incidentally occur in the West Fork RNA while opportunistically hunting and foraging for small mammals and carrion.

There are five known peregrine falcon eyries in the Red Cliffs portion of this RUU, however, due to the extreme topography others additional eyries may be occupied. There is one known peregrine eyrie in the RNA portion of this RUU. Although there are no confirmed peregrine eyries in the West Fork portion of this RUU, suitable habitat is abundant and thorough surveys have not been conducted. Refer to the Cathedral RUU special status species description for habitat information.

Narrow-headed garter snakes are currently only known from Oak Creek Canyon, including West Fork of Oak Creek and RNA portions of the Red Rock Secret Mountain Wilderness RUU. Refer to the Oak Creek Canyon RUU special status species description for addition habitat information.

Other riparian dependent species that could potentially occur in the Red Cliffs portion of this RUU but for which no occurrence records exist include lowland leopard frog and Mexican garter snake.

The West Fork of Oak Creek supports Sonora sucker, desert sucker, speckled dace and roundtail chub. Historically Gila trout was present but this species became extirpated due to competition, hybridization, and predation by introduced brown and rainbow trout.

This RUU supports populations for several species of sensitive plants. Flagstaff pennyroyal populations occur on the rims overlooking Oak Creek Canyon and along the remote, steep limestone canyons and bluffs in the Red Rock Secret Mountain Wilderness. Arizona bugbane populations occur in this RUU. The eastwood alumroot is found in this RUU on moist slopes in ponderosa pine forests and canyons. Cliff fleabane also occurs in this RUU. Refer to the Oak Creek Canyon RUU special status species description for additional habitat information.

Hydrology & Soils This area lies almost entirely within the Oak Creek watershed and contains

many significant headwater drainage features characteristic of this portion of the watershed. Drainages include Coffee Creek, Mooney Canyon, Spring Creek, Loy Canyon, Hartwell Canyon, Boynton Canyon, Long Canyon, Secret Canyon, Bear Sign Canyon, Dry Creek, Mormon Canyon, Wilson Canyon, Sterling Canyon, and even a portion of the West Fork of Oak Creek.

Moderate to heavily used trails are established within most of these canyons with varying degrees of impact on riparian and watershed resources. Significant work has been accomplished on the West Fork Trail mitigating much of the effect of heavy visitor use and repairing much of the damage from historical use. Similar work should be a pre-requisite of any consideration of additional permitted use within the wilderness.

Heritage Approximately 1.33 percent or 613 acres out of 46,244 for the Unit have been surveyed. The surveys revealed 180 sites.

Mazatzal Wilderness Recreation Use Unit

Please refer to the Tonto National Forest for management direction regarding Mazatzal Wilderness.

Appendix G- Land Status and Forest Plan Direction for each RUU

As mentioned earlier in the assessment, Forest Plan direction is an important component of the analysis. Following is a summary of management areas for each RUU. The summary also includes information on Non-Forest Service System lands.

RUU	Management Area	MA Acres	% MA / RUU
Apache Maid	Administrative Sites	2	0.0%
	Mountain meadows and wet grasslands	388	0.7%
	Pinyon-juniper lands on greater than 40% slope	5,342	9.7%
	Pinyon-juniper lands on less than 40% slope	18,861	34.1%
	Private Land	324	0.6%
	Riparian Areas	189	0.3%
	Timber lands on greater than 40% slope	893	1.6%
	Timber lands on less than 40% slope	6,040	10.9%
	Transition grassland & pinyon-juniper above the Mogollon Rim	21,187	38.3%
	Unsuitable timber lands	2,069	3.7%
	Apache Maid Total Acres:	**55,295**	**100.00%**
Beaver Creek	National Park Service	11	0.1%
	Pinyon-juniper lands on greater than 40% slope	110	0.7%
	Pinyon-juniper lands on less than 40% slope	1,631	10.1%
	Private Land	468	2.9%
	Riparian Areas	658	4.1%
	Transition grassland & pinyon-juniper above the Mogollon Rim	8,113	50.3%
	Verde Valley	5,134	31.8%
	Beaver Creek Total Acres:	**16,125**	**100.0%**
Beaverhead	Private Land	5,987	18.5%
	Riparian Areas	840	2.6%
	State Land	3,392	10.5%
	Transition grassland & pinyon-juniper above the Mogollon Rim	3,941	12.2%
	Verde Valley	18,256	56.3%
	Beaverhead Total Acres:	**32,416**	**100.0%**
Broken Arrow	Redrock Frontcountry	391	100.0%
	Broken Arrow Total Acres:	**391**	**100.0%**
RUU	**Management Area**	**MA Acres**	**% MA / RUU**
Casner	Savannah	296	27.0%
	Timber lands on less than 40% slope	57	5.0%
	Transition	758	68.0%
	Casner Total Acres:	**1,107**	**100.0%**

Cathedral	Neighborwoods	1,033	20.3%
	Private Land	345	6.8%
	Redrock Frontcountry	3,703	72.9%
	Cathedral Total Acres:	**5,081**	**100.0%**

Cedar Flat	Pinyon-juniper lands on greater than 40% slope	3,336	9.7%
	Pinyon-juniper lands on less than 40% slope	12,334	35.9%
	Transition grassland & pinyon-juniper above the Mogollon Rim	17,853	51.9%
	Unsuitable timber lands	284	0.8%
	Verde Valley	577	1.7%
	Cedar Flat Total Acres:	**34,384**	**100.0%**

Dry Creek	Dry Creek Basin	2,482	89.6%
	Neighborwoods	86	3.1%
	Private Land	202	7.3%
	Dry Creek Total Acres:	**2,770**	**100.0%**

Fossil Creek Road	Pinyon-juniper lands on less than 40% slope	63	0.3%
	Private Land	594	2.5%
	Riparian Areas	101	0.4%
	Special Areas	12	0.1%
	Transition grassland & Pinyon-juniper above the Mogollon Rim	232	1.0%
	Verde Valley	22,424	95.7%
	Fossil Creek Road Total Acres:	**23,426**	**100.0%**

Fossil Springs Wilderness	Wilderness	5,036	100.0%
	Fossil Springs Wilderness Total Acres:	**5,036**	**100.0%**

Kachina	Gateway	481	8.1%
	Lower Oak Creek	754	12.8%
	Neighborwoods	1,388	23.5%
	Private Land	395	6.7%
	Savannah	2,499	42.3%
	State Land	392	6.6%
	Kachina Total Acres:	**5,909**	**100.0%**

Lower Schnebly	Oak Creek Canyon	119	8.6%
	Redrock Frontcountry	1,251	90.7%
	Special Areas	9	0.7%
	Lower Schnebly Total Acres:	**1,379**	

RUU	Management Area	MA Acres	% MA / RUU
Mazatzal Wilderness	Wilderness	2,053	100.0%
	Mazatzal Wilderness Total Acres:	**2,053**	**100.0%**
Middle Verde	American Indian Land	445	1.6%
	Pinyon-juniper lands on greater than 40% slope	38	0.1%
	Private Land	5,393	19.9%
	Riparian Areas	387	1.4%
	State Land	1,065	3.9%
	Verde Valley	19,805	73.0%
	Middle Verde Total Acres:	**27,133**	**100.0%**
Montezuma	National Park Service	571	5.7%
	Private Land	3,584	35.8%
	Riparian Areas	201	2.0%
	Verde Valley	5,657	56.5%
	Montezuma Total Acres:	**10,013**	**100.0%**
Mud Tanks	Pinyon-juniper lands on greater than 40% slope	155	0.5%
	Pinyon-juniper lands on less than 40% slope	20,795	67.2%
	Riparian Areas	72	0.2%
	Timber lands on greater than 40% slope	288	0.9%
	Timber lands on less than 40% slope	387	1.3%
	Transition grassland & pinyon-juniper above the Mogollon Rim	7,829	25.3%
	Unsuitable timber lands	360	1.2%
	Verde Valley	1,049	3.4%
	Mud Tanks Total Acres:	**30,935**	**100.0%**
Munds Mountain Wilderness	Wilderness	18,093	100.0%
	Munds Mountain Wilderness Total Acres:	**18,093**	**100.0%**
Oak Creek Canyon	Developed Recreation Sites	28	0.4%
	Oak Creek Canyon	5,242	71.8%
	Pinyon-juniper lands on less than 40% slope	108	1.5%
	Private Land	459	6.1%
	Timber lands on less than 40% slope	322	4.3%
	Unsuitable timber lands	9	0.1%
	West	1,180	15.8%
	Oak Creek Canyon Total Acres:	**7,348**	**100.0%**

RUU	Management Area	MA Acres	% MA / RUU
Red Cliff	Dry Creek Basin	7	0.1%
	Private Land	408	4.6%
	Red Cliff	3,978	45.1%
	Savannah	423	4.6%
	Verde Valley	4,025	45.6%
	Red Cliffs Total Acres:	**8,841**	**100.0%**
Red Rock Secret Mtn Wilderness	Timber lands on less than 40% slope	516	1.1%
	Wilderness	47,580	98.9%
	Red Rock Secret Mtn Wilderness Total Acres:	**48,096**	**100.0%**
RNA	Special Areas	600	100.0%
	RNA Total Acres:	**600**	**100.0%**
Savannah House Mtn	Electronic Sites	1	0.0%
	Savannah	12,997	100.0%
	Savannah House Mtn Total Acres:	**12,998**	**100.0%**
Schnebly Rim	Private Land	83	1.6%
	Schnebly Rim	5,084	98.4%
	Schnebly Rim Total Acres:	**5,167**	**100.0%**
Sedona	Neighborwoods	3,670	38.2%
	Private Land	5,900	61.5%
	State Land	30	0.3%
	Sedona Total Acres:	**9,600**	**100.0%**
Skeleton Bone	Private Land	1,013	3.6%
	Riparian Areas	233	0.8%
	Special Areas	1,209	4.3%
	State Land	4,204	14.9%
	Verde Valley	21,566	76.4%
	Skeleton Bone Total Acres:	**28,225**	**100.0%**
Soldier Pass	Neighborwoods	196	100.0%
	Soldier Pass Total Acres:	**196**	
Sycamore Canyon Wilderness	Wilderness	14,454	100.0%
	Sycamore Cyn Wilderness Total Acres:	**14,454**	**100.0%**

RUU	Management Area	MA Acres	% MA / RUU
Thirteen Mile Rock	Pinyon-juniper lands on less than 40% slope	169	1.3%
	Riparian Areas	61	0.5%
	Transition grassland & pinyon-juniper above the Mogollon Rim	97	0.7%
	Verde Valley	13,000	97.5%
	Thirteen Mile Rock Total Acres:	**13,327**	**100.0%**
Towel	Pinyon-juniper lands on greater than 40% slope	26	0.1%
	Verde Valley	18,018	99.9%
	Towel Total Acres:	**18,044**	**100.0%**
Upper Loop	Neighborwoods	5,111	82.0%
	Private Land	1,121	18.0%
	Upper Loop Total Acres:	**6,232**	**100.0%**
Verde Wild & Scenic River	Verde Scenic River	2,896	84.4%
	Verde Wild River	536	15.6%
	Verde Wild and Scenic River Total Acres:	**3,432**	**100.0%**
VOC	Gateway	1,425	13.1%
	Neighborwoods	3,673	33.8%
	Private Land	3,629	33.4%
	Transition	2,139	19.7%
	VOC Total Acres:	**10,866**	**100.0%**
West Clear Creek Wilderness	Wilderness	9,813	100.0%
	West Clear Creek Wilderness Total Acres:	**9,813**	**100.0%**
Wet Beaver Wilderness	Wilderness	5,949	100.0%
	Wet Beaver Wilderness Total Acres:	**5,949**	**100.0%**
Wickiup	Developed Recreation Sites	15	0.0%
	National Park Service	268	0.5%
	Pinyon-juniper lands on less than 40% slope	832	1.6%
	Private Land	7,913	15.4%
	Riparian Areas	504	1.0%
	State Land	224	0.4%
	Transition grassland and pinyon-juniper above the Mogollon Rim	1,391	2.7%
	Verde Valley	40,129	78.3%
	Wickiup Total Acres:	**51,276**	**100.0%**

RUU	Management Area	MA Acres	% MA / RUU
Windmill	Dry Creek Basin	3,082	11.0%
	Gateway	440	1.6%
	Private Land	1,253	4.5%
	Savannah	22,986	82.2%
	State Land	188	0.7%
	Transition	4	0 %
	Windmill Total Acres:	**27,953**	**100.0%**

Forest Plan Management Area Direction Pertinent to the RUUs

Gateway (MA 22)

Management Emphasis:

Visitors are welcomed and oriented to the area.
A sense of arrival at a special place that encourages stewardship is conveyed.
People entering or leaving the red rock landscape enjoy an outstanding scenic corridor.

Recreation Objectives:

• Manage generally for a Roaded Natural ROS setting. Recognize inconsistencies of future development of State Highway 179 and 89A south of Sedona.
• Facilitate alternative forms of transportation, such as shuttle busses and bicycle paths.

Dry Creek Basin (MA 21)

Management Emphasis:

Opportunities abound for outstanding trail-oriented day use within a Non-motorized, Semi-primitive setting. High-profile visitor orientation and interpretation tells people about the recreation opportunities in Dry Creek Basin, the adjacent Red Rock-Secret Mountain Wilderness and points to the west.

Recreation Objectives:

• Achieve, in general, a Semi-primitive Non-motorized ROS setting away from roads and Semi-primitive motorized along Dry Creek Road. Recognize ROS setting inconsistencies expected along Dry Creek Road at or within half a mile of trailheads.

• Emphasize non-guided, day-use recreational activities, featuring high-quality hiking mountain biking, equestrian use, scenic viewing, contemplation and opportunities to experience nature and solitude.

Commercial Uses Objectives:

• Develop partnerships with commercial tour operators to maintain the Dry Creek Road and to renovate and protect Van Deren Cabin.

Grassland and Sparse Pinyon-Juniper above the Rim (MA10)

Management Emphasis:

Emphasize range management, watershed condition, and wildlife habitat. Other resources are managed to improve outputs and quality.

Neighborwoods (MA 24)

Management Emphasis:

Strong community partnerships for stewardship of "Sedona's backyard" support resident health, safety and quality of life, relatively quiet, easily accessed National Forest Supports wildlife, scenic viewing and experiencing nature.

Recreation Objectives:

• Due to the level of adjacent development and the ease of access, manage generally for Rural or Roaded Natural ROS settings, except where there are remnant pockets of Semi-primitive ROS settings such as in the Soldier Pass area. Soldier Pass should be managed as Semi-Primitive Motorized. This location is less accessible and more primitive than most of the MA. Maintain the rough and primitive condition of the four-wheel road in this area.

Commercial Uses Objectives:

• Modify commercial activities as needed to address resident concerns for safety and to minimize disturbance from commercial activities that access National Forest Lands though neighborhoods.

Oak Creek Canyon (MA14)

Management Emphasis:

Emphasize day-use activities that are pedestrian-oriented with access to Oak Creek and scenery. Provide a range of high quality recreation benefits and interpretation.

Highway 89A offers and outstanding scenic driving experience.

Wildlife habitat, healthy stream conditions and clean air and water are protected.

Cultural history is interpreted.

Recreation Objectives:

• Increase day-use opportunities emphasizing nature-based activities such as hiking, picnicking, bird watching, photography, fishing and interpretation.

• Develop a rock-climbing management strategy for the Oak Creek Vista Area that addresses climbing needs, visitor safety and resource protection.

• Encourage alternative modes of transportation provided by commercial tours to help reduce the impacts of traffic and parking.

Pinyon-Juniper Woodland, Less than 40 Percent Slopes (MA 7)

Management Emphasis:

Emphasize firewood production, watershed condition, wildlife habitat, and livestock grazing. Other resources are managed in harmony with the emphasized resources.

Red Cliff (MA25)

Management Emphasis:

American Indian Tribes and the Forest Service are partners in management of cultural sites. Cultural resources are preserved and interpreted for the enjoyment of all visitors.

Day-use activities emphasize discovery, learning and scenic viewing.

Wilderness access and information are provided.

Recreation Objectives:

• Management should be consistent with Semi-primitive Motorized ROS setting in the part of the MA west of Red Canyon, allowing for specific ROS setting inconsistencies, such as cultural interpretive sites like Palatki, the influence of the main road (FR152c) and access to private lands.

Commercial Uses Objectives:

• Expand partnerships with commercial tours to protect, enhance, restore and monitor Honanki in compliance with Section 106 of the Historic Preservation Act and to provide accurate interpretation of the site etiquette for visitors.

Redrock Frontcountry (MA 26)

Management Emphasis:

There is a strong emphasis on visitor orientation and information.

Nature-based day-use recreation activities occur, including easily accessed trail opportunities and scenic viewing.

The area meets initial needs of visitors for up-close views and orientation while managing crowds to protect the environment.

Recreation Objectives:

• Recreation management is consistent with a variety of ROS settings, including:

o Semi-primitive Non-motorized between Submarine Rock and the Wilderness boundary.

o Semi-Primitive Motorized for the remainder of the Devil’s Dining Room/Broken Arrow Area:

o Semi-primitive Motorized with Roaded Natural inconsistencies (size too small and adjacent to Urban or Rural developments) for Scheurman Mountain, Carrol Canyon and the Cathedral Rock Area

o Roaded Natural for the remainder of this MA

• Manage Broken Arrow Basin away from the parking and staging area, for Semi-primitive Motorized ROS settings while recognizing the inconsistencies in social encounters that can be expected. The level of use on the main four-wheel drive road is higher than generally desired for SPM areas, but the physical setting and maintenance level of the road should be managed as SPM.

Savannah (MA27)

Management Emphasis:

• Ecosystem processes such as fire and flood play a natural role
• High-quality grassland supports a diversity of wildlife
• Low-density human uses occur, including scenic viewing, OHV touring, hunting, wildlife viewing and firewood cutting.
• A wide variety of Semi-primitive Motorized and Non-motorized trail uses are provided.

Recreation Objectives:

• The Savannah MA is relatively remote and should generally be managed for a Semi-primitive Motorized ROS setting.
• Opportunities to experience a natural, uncrowded environment prevail, including opportunities to experience solitude and natural quiet.

Recreation Guideline:

• Recreation goals are subordinate to antelope protection

Commercial Uses Objectives:

• If the demand can be demonstrated, allow commercial tours to provide opportunities for scenic viewing, natural history education, wildlife viewing and other activities that are compatible with antelope protection and Savannah MA goals.

Schnebly Rim (MA)

Management Emphasis:

• Opportunities abound for solitude and contemplation with outstanding vistas.
• Schnebly Hill Road serves as a seasonal gateway for visitors entering the red rock landscape from interstate 17.
• Seasonal, low to moderate levels of Semi-primitive recreation are offered including camping, hunting, scenic viewing and opportunities for discovery and solitude.
• Conserve wildlife habitat, especially winter range for deer, elk and turkey.

Recreation Objectives:

• Manage, in general, for a Semi-primitive Motorized ROS setting, with seasonal closures of the southern portion to motor vehicles, and a Semi-primitive Non-motorized ROS setting above the Rim and west of the road corridor, between the Wilderness and the road. Recognize the relatively high level of use and encounter levels along Schnebly Hill Road, but maintain the road character as appropriate for the Semi-primitive Motorized ROS setting.

Transition (MA29)

Management Emphasis:

• Ecosystem processes such as fire and flood play a natural role.
• Recreation is Semi-primitive and low density with an emphasis on non-motorized trail use.

Recreation Objectives:

• Manage for a Semi-primitive ROS setting. This should generally be non-motorized except along the Casner Powerline Road where motor vehicles are allowed and where trailhead access provides parking and orientation to the area.
• Discourage heavy recreational use. Protect quiet, uncrowded characteristics.
• Except for motor vehicle use along the Casner Powerline Road, management and public use is consistent with goals for Wilderness and provides a transitional experience.
• Emphasize foot, bike and horse trail use. De-emphasize motorized use due to the effect of noise on the opportunities for solitude and natural quiet due to the proximity to Wilderness.

Commercial Uses Objectives:

• Do not permit commercial tours on the Casner Powerline Road
• Continue to support Wilderness-dependant recreation opportunities such as backpacking, horse packing and hunter guiding, where these activities are consistent with resource and ROS objectives.

Verde Valley (MA 11)

Management Emphasis:

Emphasize watershed conditions, range management, wildlife habitats for upland game birds, and dispersed recreation.

Appendix H- Details of Application of the Landscape Method for each RUU

The following sections summarize the interdisciplinary team's capacity adjustments for each RUU. In addition to a narrative for each RUU, a summary of relevant information for each RUU such as size, vegetation cover, natural resources of concern, recreational trends, and management direction for the areas are included. The following table summarizes the capacity adjustments for each RUU. Refer to Appendix F for a detailed description of the natural resources of each RUU.

Table 23 Summary of Recreation Use Unit Capacity Adjustments

RUU	Daily P/V - AOT	Adjustment Factors			Adjusted Capacity	
		Length of Stay (visitor day)	Pattern of Use	Season of Use	Adjusted Daily P/V-AOT	Adjusted Annual P/V-AOT
Apache Maid	423	1.3	0.8	0.8	351.936	128457
Beaver Creek	132	3.5	0.8	0.9	332.64	121414
Beaverhead	685	3.5	0.8	0.9	1726.2	630063
Broken Arrow	3	3.5	0.8	0.9	7.56	2759
Casner	2	3.5	0.8	0.75	4.2	1533
Cathedral	74	3.5	0.8	0.9	186.48	68065
Cedar Flat	114	1.3	0.8	0.75	88.92	25876
Dry Creek	9	3.5	0.8	0.9	22.68	8278
Fossil Creek Road	255	1.5	0.8	0.75	229.5	83768
Kachina	58	3.5	0.8	0.9	146.16	53348
Lower Schnebly	6	3.5	0.8	0.9	15.12	5519
Middle Verde	80	3.5	0.8	0.9	201.6	73584
Montezuma	47	3.5	0.8	0.9	118.44	43231
Mud Tanks	173	1.3	0.8	0.75	134.94	49253
Oak Creek Canyon	34	3.5	0.8	0.9	85.68	31273
Red Cliff	34	3.5	0.8	0.9	85.68	31273
Savannah/House Mountain	27	3.5	0.8	0.75	56.7	20696
Schnebly Rim	7	3.5	0.8	0.75	14.7	3807
Sedona	215	3.5	0.8	0.9	541.8	197757
Skeleton Bone	39	3.5	0.8	0.9	98.28	35872
Soldier Pass	2	3.5	0.8	0.9	5.04	1839
Thirteen Mile	53	3.5	0.8	0.75	111.3	40625
Towel	17	1.3	0.8	0.75	13.26	4840
Upper Loop	135	3.5	0.8	0.9	340.2	124173
Village of Oak Creek	183	3.5	0.8	0.9	461.16	168323
Wickiup	1058	3.5	0.8	0.9	2666.16	973148
Windmill	62	3.5	0.8	0.9	156.24	57028

Apache Maid

The Apache Maid Recreation Use Unit at 55,295 acres is the second largest unit on the Red Rock Ranger District. It contains the landform with the highest elevation on the District-- Apache Maid Mountain and Lookout at 7,301 feet. Stoneman Lake is the second largest natural lake in Arizona. The RUU is 98 percent forested including Pinyon-Juniper Woodlands and Ponderosa Pine Forests. Elevations range from 4,000 feet near the junction of Interstate 17 and State Route 179 to Apache Maid Mountain affording a change in elevation of 3,300 feet. The Unit offers a wide variety of recreation experiences, benefits and opportunities characterized by lightly used forest roads traversing basalt rock formations, crossing intermittent gullies and ending at deep canyons. Refer to Map 6- Apache Maid Recreation Use Unit in the Map Appendix.

The “biggest draws” to this recreation unit include Stoneman Lake, Apache Maid Mountain, vast fuel wood cutting opportunities, easily accessible ponderosa pine forests and of course Interstate-17 and the Stoneman Lake Road (FR213). The greatest attraction is the great expanse of the place including the 179 miles of backcountry roads where recreationists can travel a long way without seeing other visitors and see wildlife and the vast expanse of blue sky, dark green vegetation and general freedom offered by the landscape.

Refer to Appendix F General Resource Information for additional specific resource information related to this RUU.

Management Direction & Land Status

The predominant Management Areas in this RUU are as Follows:

Pinyon-Juniper Woodland, Less than 40 Percent Slopes (MA 7)

18,861 acres or 34% of RUU

Grassland and Sparse Pinyon-Juniper above the Rim (MA10)

21,187 acres or 38% of RUU

Apache Maid RUU Land Status

- Total RUU Acres 55,295
- Non-USFS Acres 324
- Total USFS Lands 54,971
- Total USFS Commonly Used Acres (acres of slope <40%) 52,757

Table 24. Apache Maid Analysis Results

Apache Maid Recreation Use Unit				
ROS Class	**Acres (without Riparian Habitat)**	**Commonly Used Acres (acres with slope under 40% and Acres without Riparian Habitat**	**Calculations: Acres X Coefficient Parties at one time Per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	5,874 -82 acres = 5,792	5,581 -50 acres = 5,531	5,531 x .0013	7
Semi-Primitive Motorized (SPM)	19,694 -319 acres = 19,375	19,029 -171 acres = 18,858	18,858 x .0013	25
Roaded Natural (RN)	29,403 -303 acres = 29,100	28,656 -288 acres = 28,368	28,368 x .0138	391
			P/V-AOT Total for RUU	**423**

Note: Capacity lowered by taking out the acres associated with a 500' riparian buffer equal to 704 acres of USFS Lands for the Northern Leopard Frog

Managerial and Physical Attribute Considerations

1. Rattlesnake Quiet Area (6,968 acres) is closed to motorized use from August 15 to December 31.
2. Sensitive habitat (riparian) 705 acres of Northern Leopard Frog habitat were considered unusable.

Capacity Adjustments

Table 25. Apache Maid Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Apache Maid	423	1.3	0.8	0.8	351.936	128,457

Adjustment notes:

1. The landscape model calculations were rerun using the original usable acres minus acres identified as suitable habitat based on available riparian acres for the northern leopard frog. Removing the riparian acres lowered the PAOT from 428 to 423.

The 6,968 acres associated with the Rattlesnake Canyon Quite area are not available to the majority of the recreational use for 139 days of the year. The Rattlesnake Canyon Quite Area accounts for 13 percent of the usable acres in Apache Maid RUU.
2. This RUU has muddy conditions on the roads a significant portion of the year.
The two conditions above led to increasing the season of use adjustment factor to .8 for this RUU.

LAC Recommendations

1. Monitor total use levels with both traffic counters and one hour personal observations to determine seasonal, daily and hourly use and the percentage of commercial and non-commercial use.
2. Monitor winter road damage.
3. Inventory road maintenance condition yearly using INFRA and complete road analysis work.
4. Monitor new “non-system” road and new campsites

Beaver Creek

The Beaver Creek Recreation Use Unit at 16,125 acres is 69 percent forested with pinyon-juniper woodland, riparian vegetation and southwestern desert shrub. It is one of the steeper units with 17 percent of the acres over 40 percent slopes. It is characterized by permanent flowing streams including Wet Beaver Creek and Walker Creek and the major intermittent stream—Red Tank Draw. It includes approximately nine miles of major trails including the Bell Trail, White Mesa, Long Canyon, Walker Basin and the Weir Trail. It is an area rich in archaeology and has several developed sites including Beaver Creek Campground and Picnic Area, V Bar V Rock Art Site, the Bell Trailhead, Bruce Brockett Trailhead and other lesser trailheads including Long Canyon and Walker Basin. It is the gateway to the Wet Beaver Creek Wilderness, the Sinagua Circle Archaeological Interpretation Project and it includes fifty one miles of inventoried roads. Refer to Map 7- Beaver Creek Recreation Use Unit in the Map Appendix.

The Beaver Creek Area over the past 25 years has changed from a place which barely reached heavy use during holidays to a place overrun with visitors and residents during most spring and summer weekend days and holidays. The main attraction is the water and swimming and fishing opportunities with camping, hiking, picnicking, viewing scenery and staging for backpack trips into the Wet Beaver Creek Wilderness popular activities. The Ranger Station Area including the creek receives heavy use. The lower Beaver Creek Area downstream from FR618 includes dispersed areas from Rimrock to the Beaver Creek Bridge along FR121 and Lawrence Crossing. The area along Walker Creek and the Walker Basin Trail is relatively lightly used.

The Beaver Creek Unit offers guided opportunities for ATV, equestrian, hummer, scenic, mountain biking, 4X4 driving, backpacking, hunting, livestock packing and heritage site visit tours.

Management Direction & Land Status

The predominant Management Areas in this RUU are as Follows:

Grassland and Sparse Pinyon-Juniper above the Rim (MA10)

8,113 Acres- 50% of RUU

Verde Valley (MA 11)

5,134 Acres or 32% or RUU

Landscape Analysis Results

Beaver Creek RUU Land Status

- Total RUU Acres 16,125
- Non-USFS Acres 479
- Total USFS Lands 15,646
- Total USFS Commonly Used Acres (acres of slope <40%) 12,979

Table 26. Beaver Creek Analysis Results

Beaver Creek Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	2,307	1,349	1,349 x .0013	2
Semi-Primitive Motorized (SPM)	5,202	4,100	4,100 x .0013	5
Roaded Natural (RN)	7,959	7,354	7,354 x .0138	101
Rural (R)	178	176	176 x .138	24
			P/V-AOT Total for RUU	**132**

Significant Managerial and Physical Attribute Considerations

The majority of the recreational use in this RUU is half day use.

Capacity Adjustments

Table 2728. Beaver Creek Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Beaver Creek	132	3.5	0.8	0.9	332.64	121,414

LAC Recommendations

1. Monitor for impacts to riparian area from recreation use at campsites on a three year interval.
2. Monitor total use levels with both traffic counters and one hour personal observations to determine seasonal, daily and hourly use and the percentage of commercial and non-commercial use.
3. Monitor winter road damage.
4. Inventory road maintenance condition yearly using INFRA and complete road analysis work.
5. Monitor new "non-system" road and new campsites.

Beaverhead

The Beaverhead Recreation Use Unit is the third largest unit at 32,416 acres. It includes a wide area bounded by I-17 on the east, Highway 89A on the west, the Cornville Road on the south and Highway 179 and House Mountain on the north. It has numerous sub-units including the Dry Beaver Creek Drainage, the Beaver Head Flat Road area, and the foothills south and west of House Mountain east of the Page Springs Road and the intermingled private-NF ownership between Highway 89A and the Page Springs Road. It has approximately 88 miles of system roads and almost no trails. Recreation use is mostly ATVs and 4x4s with some water based use at Spring Creek and Mormon Crossing on Lower Oak Creek. The Historic Chavez Wagon Road crosses the flats between the Beaver Head Flat Road and Beaver Head Spring offering historical interpretation opportunities as does the Stagestop Monument near the spring. Refer to Map 8-Beaverhead Recreation Use Unit in the Map Appendix.

A substantial amount of ATV use is occurring east of Cornville along the Melon Well Road where locals have developed a play area and established a major network of non-system ATV trails and roads. The area around Beaverhead Spring for one half mile downstream from Stagestop has become a popular place for swimmers and day users due to the permanent water source along Dry Beaver Creek.

There are conflicts between recreation users and private landowners in and adjacent to Cornville and McGuireville.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Grassland and Sparse Pinyon-Juniper Above the Rim (MA10)

3,941 acres or 12% of RUU

Verde Valley (MA 11)

18,256 acres or 56% of RUU

Beaverhead Landscape Analysis Results

Beaverhead RUU Land Status

- Total RUU Acres 32,416
- Non-USFS Acres 9,379
- Total USFS Lands 23,037

- Total USFS Commonly Used Acres
  (acres of slope <40%) 21,275

Table 2829. Beaverhead Landscape Analysis Results

Beaverhead Recreation Use Unit				
ROS Class	**Acres (without Riparian Habitat)**	**Commonly Used Acres (acres with slope under 40% and Acres without Riparian Habitat**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	974 -0 acres = 974	896 -0 acres = 896	896 x .0013	1
Semi-Primitive Motorized (SPM)	9,908 -452 acres = 9,456	9,439 -412 acres = 9,027	9,027 x .0013	12
Roaded Natural (RN)	7,512 -238 acres = 7,274	7,426 -226 acres = 7,200	7,200 x .0138	99
Rural (R)	4,643 -277 acres = 4,366	4,406 -254 acres = 4,152	4,152 x .138	573
			P/V-AOT Total for RUU	**685**

Adjustment Notes:

1. The landscape model calculations were run using the original usable acres minus 967 riparian acres.
2. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

Significant Managerial and Physical Attribute Considerations

Fragile riparian areas occur along Oak Creek, Sheepshead, Spring and Dry Beaver creeks.

Capacity Adjustments

Table 29. Beaverhead Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Beaverhead	685	3.5	0.8	0.9	1,726.2	630,063

LAC Recommendations

1. Monitor for impacts to riparian area from recreation use with photo point intervals.
2. Monitor total use levels with both traffic counters and one hour personal observations to determine seasonal, daily and hourly use and the percentage of commercial and non-commercial use.
3. Monitor winter road damage.
4. Inventory road maintenance condition yearly using INFRA and complete road analysis work.
5. Monitor new “non-system” road and new campsites.

Broken Arrow

The Broken Arrow Recreation Use Unit is one of the smallest at 391 acres but is the most controversial. The unit offers stark contrasts and breathtaking beauty to visitors and residents who enjoy the opportunity to enjoy the challenge of a 4X4 or a mountain bike or the simple opportunity for a walk. Forest Users gain access to the Broken Arrow RUU through Morgan Road residential area. An increasing number of homeowners have voiced their displeasure with tour traffic and noise. Note that more than one-third of all Coconino National Forest guided users take the Broken Arrow 4X4 Tour.

Broken Arrow is mostly forested (66 percent) with interspersed forest (open PJ woodland) occupying 30 percent of the area. The unit has two miles of system roads and two miles of system trails. Major recreation uses include 4X4 touring, mountain bikes and hiking. Some walking for pleasure occurs along the Broken Arrow Jeep Road. The Broken Arrow Trailhead is southern trailhead access for the Marg’s Trail, a Wilderness trail in the Munds Mountain Wilderness. The popular Broken Arrow Trail is used by mountain bikers and hikers and ties into the Little Horse Trail thru the Chicken Point Area. Refer to Map 9- Broken Arrow Recreation Use Unit in the Map Appendix.

Management Direction & Land Status

The predominant Management Areas in this RUU are as Follows:

Redrock Frontcountry (MA 26)

391 acres or 100% of RUU

Landscape Analysis Results

Broken Arrow RUU Land Status

• Total RUU Acres	391
• Non-USFS Acres	0
• Total USFS Lands	391
• Total USFS Commonly Used Acres (acres of slope <40%)	335

Table 30. Broken Arrow Landscape Analysis Results

Broken Arrow Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time Per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	111	101	101 x .0013	.13
Semi-Primitive Motorized (SPM)	260	217	217 x .0013	.28
Roaded Natural (RN)	20	17	17 x .138	2.35
			P/V-AOT Total for RUU	**3**

Significant Managerial and Physical Attribute Considerations

1. No dispersed camping and/or campfires within RUU
2. Current vehicular traffic use on highly erodible soils within the RUU have lead to unacceptable erosion
3. Failing to meet management objectives within Semi-primitive Non-motorized and Semi-primitive Motorized ROS designated areas.

Capacity Adjustments

Table 31. Broken Arrow Capacity Adjustments

RUU	P/V-AOT	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Broken Arrow	3	3.5	0.8	0.9	7.56	2,759

Adjustment Notes:

These capacity calculations are quite low in number and were based on Recreation Opportunity Spectrum Mapping developed for Amendment 12 of the Forest Plan which included the vast majority of the acreage in the Broken Arrow RUU as Semi-Primitive motorized and non-motorized. Amendment 12 provides the following recreation objective for Broken Arrow which recognizes that social encounters could be allowed at a higher level than shown in the capacity calculations shown above. Amendment 12 Red Rock Front Country includes the following statement……. Manage Broken Arrow Basin away from the parking and staging area, for Semi-

primitive Motorized ROS settings while recognizing the inconsistencies in social encounters that can be expected. The level of use on the main four-wheel drive road is higher than generally desired for SPM areas, but the physical setting and maintenance level of the road should be managed as SPM.

Changes in ROS Class and/or social encounter coefficients for the Broken Arrow RUU is a NEPA decision which will not be addressed in this document.

LAC Recommendations:

1. Monitor for the ratio of commercial and non commercial recreation visits
2. Monitor road conditions.
3. Monitor impacts to area around sinkhole in relation to bat habitat.
4. Document the best management practices that are in place, see if they are effective.6.5 Casner.
5. Monitor and re-photograph the established Broken Arrow Photo Points recorded in 1995 and re-photographed in 2005.
6. Monitor and read vegetation transects and road carsonite post transects located along the Broken Arrow Road in 1991 and recorded again in 1995 and 2001.
7. Monitor total use with hourly observations and traffic counters.
8. Monitor the effectiveness of road maintenance and the accomplishment of road analysis prescribed work.

Casner

The Casner Recreation Use Unit is small at 1,107 Acres and is mostly forested (62 percent). It follows the 245 KV powerline and Forest Trail Number 8, the Casner Mountain Trail. The unit rises 2,000 vertical feet from the bottom along FR525C to the top located on the Mogollon Rim. The trail is a power company access road. It is open yearlong for ATV's less than 50 inches wide and is available from mid-May thru mid-Oct. per amendment 12 for non-commercial special use permits for 4X4 groups with vehicles greater than 50 inches in width. There is a maximum of 10 vehicles per group.

Casner Mountain 4X4 Trail number 8 is currently available by permit to noncommercial full-size vehicles (>50 inch width) from May 16 through October 14 to accommodate migrating wildlife. Smaller vehicles do not have this seasonal use restriction. Locked gates at the top and bottom prevent access for the restricted vehicles while allowing access for the narrower ones. Refer to Map 10- Casner Recreation Use Unit in the Map Appendix.

Management Direction & Land Status

The predominant Management Areas in this RUU are as Follows:

Savannah (MA27)

296 acres or 28% of the RUU

Transition (MA29)

754 acres or 67% of RUU

Landscape Analysis Results

Casner RUU Land Status

- Total RUU Acres 1,107
- Non-USFS Acres 0
- Total USFS Lands 1,107
- Total USFS Commonly Used Acres (acres of slope <40%) 972

Table 32. Casner Landscape Analysis Results

Casner Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Motorized (SPM)	1,050	926	926 x .0013	1
Roaded Natural (RN)	57	46	46 x .0138	.63
			P/V-AOT Total for RUU	**2**

Significant Managerial and Physical Attribute Considerations

1. Seasonal and number limitation for vehicles wider than 50 inches on main access road (Powerline Road)

Capacity Adjustments

Adjustment Notes:

No adjustments were made to the Landscape Model calculations

Table 33. Casner Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Casner	2	3.5	0.8	0.75	4.2	1533

LAC Recommendations

1. Routine monitoring along the powerline road.
2. Monitor total use with traffic counters.
3. Monitor and close illegal roads, especially on top of the “Flat” on Casner Mountain.
4. Monitor grade dip condition and make recommendations for repairs.
5. Monitor wilderness intrusions on top of Casner Mountain into the RRSM and Sycamore Canyon Wilderness.

Cathedral

The Cathedral Unit has 5,081 acres. The unit is largely influenced by Cathedral Rock and Highway 179. Remarkable contrasts of red rock, dark green vegetation, good weather and blue sky combine in magical ways in this unit. The mix of forested and unforested area means that visitors have a greater chance of seeing each other in this unit, and they have a greater effect on each other than in totally forested units. It is one of the steepest units with 16 percent of the land area over 40 percent slopes. It is bounded by the Village of Oak Creek (VOC) on the south, the Back-O-Beyond Road on the north, the Verde Valley School Road on the west and includes the non-Wilderness portion of the Big Park Area on the east. The area includes the world famous view of Cathedral Rock from the flowing Oak Creek above Crescent Moon Ranch. This is one of the top two most photographed locations in the State of Arizona besides the Grand Canyon.

Inventories show the unit contains almost 17 miles of roads and over 20 miles of trail. Some of the trails are famous, including: the Bell Rock Pathway, Little Horse, Cathedral Saddle, Templeton, H.T., Big Park Loop and Baldwin trails. Another significant trail, the Llama Trail, is currently being constructed and added to the system. The unit includes major trailheads including the Bell Rock Pathway, Little Horse, Back-O-Beyond and Baldwin Trailheads. Refer to Map 11-Cathedral Recreation Use Unit in the Map Appendix.

Management Direction & Land Status

The predominant Management Areas in this RUU are as Follows:

Neighborwoods (MA 24)

1,033 acres or 20% of the RUU

Redrock Frontcountry (MA 26)

3,703 acres or 73% of the RUU

Landscape Analysis Results

Cathedral RUU Land Status

- Total RUU Acres 5,081
- Non-USFS Acres 346
- Total USFS Lands 4,735
- Total USFS Commonly Used Acres (acres of slope <40%) 3,924

Table 34. Cathedral Landscape Analysis Results

Cathedral Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	3,336	2,660	2,660 x .0013	3
Roaded Natural (RN)	936	836	836 x .0138	12
Rural (R)	463	428	428 x .138	59
			P/V-AOT Total for RUU	**74**

Significant Managerial and Physical Attribute Considerations

1. No dispersed camping or campfires
2. No motorized off road travel

Capacity Adjustments

Table 35. Cathedral Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Cathedral	74	3.5	0.8	0.9	186.48	68,065

LAC Recommendations

1. Monitor for the ratio of commercial and non commercial recreation visits.
2. Monitor vandalism occurrences through the Arizona site visitor stewards.
3. Locate and monitor photo points established in 1995 and re-photographed in 2005.
4. Monitor permanent impact and control vegetative transects recorded in 1995 and again in 2001.
5. Monitor new, “non-system” trails constructed and used in the area.
6. Monitor damage to Cathedral Saddle. Record use on trails and trailheads with one hour counts and traffic counters.

Cedar Flat

The Cedar Flat Unit at 34,384 acres is very isolated and lightly used. It is mostly forested, includes around 11 miles of system trails and over 80 miles of system roads. Access to Cedar Flat RUU is via FR 214. This road presents an ideal opportunity for 4X4, hummer, ATV, equestrian, and mountain bike tours. The rugged nature of the road discourages motorized use from general public. Hunters frequent the area possibly because few, other than them, venture into this remote area.

The Cedar Flat Unit includes the large expanse of Pinyon-Juniper Woodland that sits at the mile high elevation level and includes many rough and potentially muddy roads on the basalt rock formations. The trails include the Walker Basin and Bell Trails which consist of a combination of user created roads and trail segments which loosely make up the trail system. Recreation use is almost exclusively hunting, cultural resource site visiting and fuel wood gathering with some very limited ATV and wildlife photography. T he unit includes a major Wilderness portal access point and trail at Bald Hill for Trail 17, the West Clear Creek Trail. The access point is along a severely damaged road and the trail is damaged as it descends into West Clear Creek and trailhead is hard to locate and not signed or delineated. It needs work. Refer to Map 12- Cedar Flat Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Pinyon-Juniper Woodland, Less than 40 Percent Slopes (MA 7)

12,334 acres or 36% of RUU

Management Emphasis:

Emphasize firewood production, watershed condition, wildlife habitat, and livestock grazing. Other resources are managed in harmony with the emphasized resources.

Grassland and Sparse Pinyon-Juniper above the Rim (MA10)

17,853 acres or 52% of RUU

Management Emphasis:

Emphasize range management, watershed condition, and wildlife habitat. Other resources are managed to improve outputs and quality.

Landscape Analysis Results

Cedar Flat RUU Land Status

- Total RUU Acres 34,384
- Non-USFS Acres 0
- Total USFS Lands 34,384
- Total USFS Commonly Used Acres (acres of slope <40%) 33,715

Table 36. Cedar Flat Landscape Analysis

Cedar Flat Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Motorized (SPM)	28,671	28,137	28,137 x .0013	37
Roaded Natural (RN)	5,713	5,578	5,578 x .0138	77
			P/V-AOT Total for RUU	**114**

Significant Managerial and Physical Attribute Considerations

1. Seasonal Road closure during wet season
2. RUU has limited access.

Capacity Adjustments

Table 37. Cedar Flat Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity** (291)
Cedar Flats	114	1.3	0.8	0.75	88.92	25,876

Adjustment Notes:

1. The entire RUU is not available to the majority of the recreational use for 74 days (January 1 – March 15) of the year due to the seasonal closure of the main access road. Therefore the daily capacity was multiplied by 291 days instead of 365 days to get the annual capacity for the RUU.

2. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

LAC Recommendations

1. Utilize data from routine patrols.
2. Monitor total use levels with both traffic counters and one hour personal observations to determine seasonal, daily and hourly use and the percentage of commercial and non-commercial use.

3. Monitor winter road damage. Inventory road maintenance condition yearly using INFRA and complete road analysis work.
4. Monitor new “non-system” roads and new campsites.

Dry Creek

The Dry Creek Recreation Use Unit includes the Vultee Arch and Long Canyon Roads which are the gateway into some spectacular scenery. They are also the gateway to trails that travel through some of this scenic area. The Dry Creek RUU presents a unique challenge in that one cannot travel far from the road before entering Red Rock-Secret Mountain Wilderness. The area is also heavily laden with archaeological sites. An abundance of social trails exist that access heritage sites as well as Wilderness.

The unit is 2,770 acres, and is mostly forested with P-J woodland, has seven miles of system trail and 12 miles of Forest System Roads. It is mostly within the Semi-primitive Motorized Recreation Opportunity Class. Trails include the Deadman’s Pass, Long Canyon (Tr.122), Brins Mesa and Devils Bridge trails. Trailheads include the Devil’s Bridge, Secret Canyon, Vultee Arch/Dry Creek, Brins Mesa and Long Canyon. The Dry Creek Unit is one of the major Wilderness portals to the Red Rock/Secret Mountain Wilderness. Refer to Map 13- Dry Creek Recreation Use Unit in the Map Appendix.

Management Direction & Land Status

The predominant Management Areas in this RUU are as Follows:

Dry Creek Basin (MA 21)

2,482 acres or 90% of the RUU

Landscape Analysis Results

Dry Creek RUU Land Status

- Total RUU Acres 2,770
- Non-USFS Acres 202
- Total USFS Lands 2,568
- Total USFS Commonly Used Acres (acres of slope <40%) 2,423

Table 38. Dry Creek Landscape Analysis Results

Dry Creek Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Motorized (SPM)	2,166	2,034	2,034 x .0013	3
Roaded Natural (RN)	393	381	381 x .0138	5
Rural (R)	9	8	8 x .138	1
			P/V-AOT Total for RUU	**9**

Managerial and Physical Attribute Considerations

1. Significant portions of the RUU have wilderness boundary managerial considerations including intrusions by mountain bikes and “unauthorized” trails. 8.4 Capacity Adjustments

Table 39. Dry Creek Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Dry Creek	9	3.5	0.8	0.9	22.68	8,278

LAC Recommendations

1. Monitor road and trail encounters by number/size of group per day by ROS class.
2. Monitor changes to vegetation. Monitoring would be done by Recreation Staff.

Fossil Creek Road

The Fossil Creek Road Recreation Use Unit is a long area stretching 16 plus miles from Highway 260 to Fossil Creek along the Fossil Creek Road and then along Forest Road 502 almost to Childs on the south and to Irving to the east. FR 708 (Fossil Creek Road) provides primary access for Verde Valley residents to the ever popular Verde Hot Springs on the Tonto National Forest. Bathers routinely drive vehicles across the Verde River to access the Hot Springs area. Most other uses are concentrated in the riparian area as well. The 23,426 acre area includes 8 miles of trail and 58 miles of Forest System Roads. Trails include the Towel Creek, Sycamore, Flume and

the Cimarron Springs Trails. The Unit is one of the steepest with 15% of the acres over 40% slopes. Refer to Map 14- Fossil Creek Road Recreation Use Unit in the Map Appendix.

Management Direction & Land status

The predominant Management Areas in this RUU are as Follows:

Verde Valley (MA 11)

22,424 acres or 96% of the RUU

9.2 Landscape Analysis Results

Fossil Creek Road RUU Land Status

- Total RUU Acres 23,426
- Non-USFS Acres 594
- Total USFS Lands 22,832
- Total USFS Commonly Used Acres (acres of slope <40%) 19,263

Table 40. Fossil Creek Road Landscape Analysis Results Concentrated Use Area

Fossil Creek Road Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	2,634	1,666	1,666 x .0013	2
Semi-Primitive Motorized (SPM)	7,056	6,800	6,800 x .0013	9
Roaded Natural (RN)	12,362	10,036	10,036 x .0138	139
Rural (R)	780	761	761 x .138	105
			P/V-AOT Total for RUU	**255**

Significant Managerial and Physical Attribute Considerations

Desirable recreation condition attributes remoteness to private land and infrastructure (trailheads, campgrounds, roads and trails) has resulted in a predictable uneven distribution of use throughout the RUU.

Capacity Adjustments

Table 41. Fossil Creek Road Capacity Adjustments

RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
Fossil Creek Road	255	3.5	0.8	0.75	229.5	83,768

Adjustment Notes
1. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

LAC Recommendations

1. Monitor for impacts to riparian area from recreation use by identifying the number of campsites.
2. Monitor permanent vegetative transects and photo points established in 1995 and measured again in 2001.
3. Continue one hour personal observation data collection. Install traffic counters on FR152 at two locations (one close to hwy. and one interior).
4. Monitor illegal trail construction. Monitor length of stay for various activities/experiences.

Kachina

The Kachina Recreation Use unit is 5,909 acres in size and is located southwest of Sedona. It is bordered by Highway 89A on the north and west, the Lower Red Rock Loop Road (FR 216) on the east and it includes Oak Creek on the southeast. The ridges southeast of Oak Creek are the boundary. Therefore Oak Creek is included in the unit. The unit consists of 74% pinyon-juniper forests, 14% interspersed forest consisting of P-J Forests with a mixture of grass and brush meadows and 12% grass meadows. Major roads in the unit besides Highway 89A include the Deer Pass Ranch Road, the Elmerville Road and FR 9845 (the old County Road). Refer to Map 1- Beaverhead Recreation Use Unit in the Map Appendix. Refer to Map 15- Kachina Recreation Use Unit in the Map Appendix.

Management Direction & Land Status

The predominant Management Areas in this RUU are as Follows:

Neighborwoods (MA 24)

1,388 acres or 24% of the RUU

Savannah (MA 27)

2,499 acres or 42% of the RUU

Landscape Analysis Results

Kachina RUU Land Status

- Total RUU concentrated area Acres 5,909
- Non-USFS Acres 787
- Total USFS Lands 5,122
- Total USFS Commonly Used Acres (acres of slope <40%) 4,848

Table 42. Kachina Landscape Analysis Results

Kachina Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	376	256	256 x .0013	0.3
Semi-Primitive Motorized (SPM)	2,873	2,740	2,740 x .0013	4
Roaded Natural (RN)	1,638	1,623	1,623 x .0138	22
Rural (R)	235	229	229 x .138	32
			P/V-AOT Total for RUU	**58**

Managerial and Physical Attribute Considerations

1. The portion of Oak Creek in this RUU is an official "Important Bird Area" and riparian habitat.

Capacity Adjustments

Table 43. Kachina Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Kachina	58	3.5	0.8	0.9	146.16	53,348

LAC Recommendations

1. Monitor in the riparian areas that coincide with the concentrated use areas.
2. Install traffic counters on FR9845 on both ends.
3. Continue hourly observation data collection. Monitor average length of stay for various user groups.
4. Monitor new illegal road and trail starts.
5. Monitor road maintenance and continue road analysis INFRA data collection.

Lower Schnebly

The Lower Schnebly Recreation Use Unit is relatively small at 1,379 acres. It is located along the Lower Schnebly Hill Road from the end of the pavement to Schnebly Hill Vista and includes the area north of the Munds Mountain Wilderness Area, Bear Wallow Canyon and areas north to the Casner Canyon Research Natural Area. Lower Schnebly RUU features FR 153 (Schnebly Hill Road) and Old Munds Highway trail, plus the Huckaby Trailhead and a non-Forest System trail into the Cowpies. The RUU provides access to the Mogollon Rim with a heavily used road corridor through this Semi-primitive Motorized area.

The unit includes five miles of the Schnebly Hill Road and seven miles of Forest System Trail including the Munds Wagon Trail, the Schnebly Trail and portions of the Huckaby Trail. The unit includes a mixture of P-J woodlands, chaparral vegetation, bare rock and grassy openings.

Elevations range from 4,500 feet on the west end to over 6,000 feet at the top of the Mogollon Rim. This unit includes one of the most scenic roads anywhere with magnificent views of the Supai red sandstone, the white Apache Limestone topped by the black basalt formations. Photographic opportunities abound with views of the Munds Mountain Wilderness, Sedona, Oak Creek Canyon, Mitten Ridge, Wilson Mountain and the Mogollon Rim. Vegetation ranges from the upper Sonoran including pinyon and juniper interspersed with chaparral, yucca and agave to views of Ponderosa Pine and even Douglas-fir on the north aspects of Munds Mountain.

Heritage resources play a major part in the Lower Schnebly Unit. Its name alone brings back memories and stories of Sedona and Carl Schnebly. The road was originally a trail used by pioneers J.J. Thompson, John Loy, the Munds Family and others as an access between upper Oak Creek and the Flagstaff area and to run cattle from winter to summer pastures during the late 1800's. The Munds Wagon Trail was built by J.J. Thompson and John Loy at the turn of the twentieth century using black powder to blast and teams of horses to drag rocks and grade. The Schnebly Hill Road was built during the 1930's in its current location. The rich cultural history of the roads and trails and pioneers is a major tale worth telling.

Amendment 12 of the Coconino Forest Plan states "In areas away from parking, roadway and staging sites, manage Schnebly Hill for Semi-primitive characteristics with no motorized access, while recognizing the ROS inconsistencies in existing social encounters and road access." The RRRD recognizes that there is an area of concentrated use which increases the social encounters in the areas of the RUU associated with the road, parking and staging areas. Refer to Map 16-Lower Schnebly Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Redrock Frontcountry (MA 26)

1251 acres or 100% of RUU

Landscape Analysis Results

Lower Schnebly RUU Land Status

- Total RUU Acres 1,379
- Non-USFS Acres 0
- Total USFS Lands 1,379
- Total USFS Commonly Used Acres (acres of slope <40%) 879

Table 44. Lower Schnebly Landscape Analysis Results

Lower Schnebly Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres/1000 X Coefficient**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	488	276	276 X .0013	.35
Semi-Primitive Motorized (SPM)	840	569	569 x .0013	.74
Roaded Natural (RN)	51	34	34 x .138	5
			P/V-AOT Total for RUU	**6**

Capacity Adjustments

Table 45. Lower Schnebly Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Lower Schnebly	7	3.5	0.8	0.9	15.2	5,519

Adjustment Notes: These capacity calculations are quite small in number and were based on Recreation Opportunity Spectrum Mapping developed for Amendment 12 of the Forest Plan which included substantial acreage in the Lower Schnebly RUU as Semi-Primitive non-

motorized. As stated above in Item 11 and in Amendment 12 of the Forest Plan, we recognize the ROS inconsistencies in existing social encounters in this area.
Changes in ROS Class and/or social encounter coefficients for the Lower Schnebly RUU is a NEPA decision which will not be addressed in this document.

LAC Recommendations

1. Monitor road and trail encounters by number/size of group per day by ROS class.

Monitor photo points for vegetation changes.

2. Monitor permanent photo points and impact and control vegetative transects installed and measured in 1995 and again in 2001.
3. Install traffic counters at three locations along the road.
4. Continue one hour total use data collection to determine mix of commercial and non-commercial use.
5. Determine average length of stay for various user groups.

Middle Verde

The Middle Verde Recreation Use Unit is 27,133 acres in size and is bounded by I-17 on the southeast, the Cornville Road on the north, Highway 89A on the west and the Verde River on the south. The unit is in an area known by locals as the White Hills, a calcite deposit left by an ancient lake. It is characterized by rolling hills broken by rocky relatively shallow arroyos and canyons. The unit includes 77 miles of Forest system roads including FR 119A (Middle Verde/Grandpa's Wash Road), FR 671 (Tissaw Rd.) and numerous other roads through the White Hills. There are no Forest System Trails in the area. The unit consists of an interspersed forest setting of Pinyon-Juniper with Mesquite, Creosote bush, Crucifixion thorn, Cliff rose and a variety of other interesting plants. The area of use associated with easy access on the main roads and trails and adequate infrastructure was identified as an area of concentrated use within the RUU. Refer to Map 17- Middle Verde Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Verde Valley (MA 11)

19,805 acres or 73% of the RUU

Landscape Analysis Results

Middle Verde RUU Land Status

- Total RUU Acres 27,133
- Non-USFS Acres 6,897
- Total USFS Lands 20,236
- Total USFS Commonly Used Acres (acres of slope <40%) 20,132

Table 46. Middle Verde Landscape Analysis Results Concentrated Use Area

Middle Verde Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	9,907	9,883	9,883 x .0013	13
Semi-Primitive Motorized (SPM)	6,015	5,981	5,981 x .0013	8
Roaded Natural (RN)	4,314	4,268	4,268 x .0138	59
			P/V-AOT Total for RUU	**80**

Capacity Adjustments

Table 47. Middle Verde Capacity Adjustments

RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
Middle Verde	80	3.5	0.8	0.9	201.6	73,584

LAC Recommendations

1. Monitor for use type and rate of change in fish and wildlife habitat (bald eagle).
2. Install traffic counters on FR119A at both ends and FR119B and FR119D.
3. Monitor access points and damage to Oak Creek and the Verde River.
4. Monitor illegal road and trail construction activity.

Montezuma

The Montezuma Unit is bounded on the west by Interstate 17, on the east by the Russell Wash Sub-watershed and Middle Schroeder Butte and on the south by Wickiup Mesa and the Wickiup Mesa Road. The southwest boundary is the Montezuma Castle Highway. Within the heart of this Unit are Montezuma Castle National Monument and the Yavapai-Apache Casino Tourist

Attractions. The Unit is influenced by Rimrock on the north and Camp Verde on the south. It includes almost three miles of the heavily used lower Beaver Creek drainage. The unit contains non-system trails that are popular with 4x4 users in the Jackson Flat area from adjacent private property or accessed via FR 119C. Cross country use impacts the heritage sites located along the trail system. The area of use associated with easy access and adequate infrastructure of the main roads and trails was identified as an area of concentrated use within the RUU. Refer to Map 18-Montezuma Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Verde Valley (MA 11)- 5,657 Acres or 57% of the RUU

Management Emphasis:

Emphasize watershed conditions, range management, wildlife habitats for upland game birds, and dispersed recreation.

Landscape Analysis Results

Montezuma RUU Land Status for concentrated use area

- Total RUU Acres 10,013
- Non-USFS Acres 4,155
- Total USFS Lands 5,858
- Total USFS Commonly Used Acres (acres of slope <40%) 5,655

Table 48. Montezuma Landscape Analysis Results for Concentrated Use Area

Montezuma Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	2,216	2,160	2,160 x .0013	3
Semi-Primitive Motorized (SPM)	412	411	411 x .0013	.5
Roaded Natural (RN)	3,230	3,084	3,084 x .0138	43
			P/V-AOT Total for RUU	**47**

Managerial and Physical Attribute Considerations

Wet Beaver Creek is important riparian and Southern Bald Eagle Habitat.

Capacity Adjustments

Table 30. Montezuma Capacity Adjustments

RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
Montezuma	47	3.5	0.8	0.9	118.44	43,231

Adjustment Notes:

No adjustments were made.

LAC Recommendations-

1. Utilize data from routine patrols.
2. Install traffic counters and monitor use on FR9206S, FR119C and FR618C.
3. Monitor damage from the old Yavapai-Apache Horse Tour Trails and monitor and close access points to Wet Beaver Creek.

Mud Tanks

The Mud Tanks Unit is one of the larger units at 30,935 acres. It includes the plateau located between the Verde Valley and the Ponderosa Pine Forests of the Mogollon Rim. Located at 6,000 feet elevation it is bounded by West Clear Creek on the north, the edge of the "Rim" on the west, Fossil Creek Canyon on the south and the Red Rock District Boundary Line on the east. The unit is divided in half from east to west by the General Crook Highway (SR 260). The unit is thinly forested with pinyon pine, one seed and alligator juniper, transition ponderosa pines in drainages including gambel oak and includes many large meadows. Wildlife is abundant, particularly elk. The unit has around 58 miles of road and 14 miles of System Trail. Trails include two of the most significant historic trails in Arizona—The General Crook Trail and the Mail Trail. The area of use associated with easy access and adequate infrastructure of the main roads and trails was identified as an area of concentrated use within the RUU. Refer to Map 19- Mud Tanks Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Pinyon-Juniper Woodland, Less than 40 Percent Slopes (MA 7)
20,795 acres or 67% of the RUU
Grassland and Sparse Pinyon-Juniper above the Rim (MA10)
7,829 acres or 255 of the RUU

Landscape Analysis Results

RUU Land Status Concentrated Use Area

- Total RUU Acres 30,935
- Non-USFS Acres 0
- Total USFS Lands 30,935
- Total USFS Commonly Used Acres (acres of slope <40%) 30,287

Table 31. Mud Tanks Landscape Analysis Results

Mud Tanks Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	1,083	990	990 x .0013	1
Semi-Primitive Motorized (SPM)	19,066	18,595	18,595 x .0013	24
Roaded Natural (RN)	10,786	10,702	10,702 x .0138	148
			P/V-AOT Total for RUU	**173**

Managerial and Physical Attribute Considerations

1. The Mud Tanks RUU is habitat for the "Threatened and Endangered" Chiracahua Leopard Frog

Capacity Adjustments

Adjustment Notes:

1. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

Table 32. Mud Tanks Capacity Adjustments

RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Mud Tanks	173	1.3	0.8	0.75	134.94	49,253

LAC Recommendations

1. Monitor for impacts on wet weather roads.
2. Monitor vandalism occurrences to heritage resources through Arizona site visitor stewards.
3. Monitor total use levels with both traffic counters and one hour personal observations to determine seasonal, daily and hourly use and the percentage of commercial and non-commercial use.
4. Monitor winter road damage.
5. Inventory road maintenance condition yearly using INFRA and complete road analysis work. Monitor new “non- system” roads and new campsites.

Oak Creek Canyon

The Oak Creek Canyon Unit is 7,348 acres bounded by the Red Rock/Secret Mountain Wilderness on the west, the rim on the east, Midgely Bridge on the south and FR 535—Mexican Pocket on the north. It includes Munds Canyon on the east. The area includes one of the heaviest used recreation areas in Arizona. West Fork of Oak Creek begins in this RUU and quickly enters Red Rock-Secret Mountain Wilderness. It is extremely popular with tour buses and public school activities. The Mayhew Lodge (heritage site) is a short walk from the parking lot and is located just outside the Wilderness boundary.

The resources in this unit combine to provide an outstanding scenic backdrop including substantial geological formations, a great variety of vegetation types from Upper Sonoran in the lower canyon to the Canadian Life Zone on north slopes in the upper canyon. There are twelve developed recreation sites including four campgrounds, two swim areas, three picnic areas, and two scenic vista sites and the West Fork Trailhead. Ten Forest System Trails are located in the Canyon for a total of 16 miles of trail. There are also 26 miles of road in the unit. It is also the steepest of the Units (except for Wilderness) with 56 percent of the acreage at 40 percent or higher slopes. Refer to Map 20- Oak Creek Canyon Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Oak Creek Canyon (MA14)

5,242 acres or 71% of the RUU

Landscape Analysis Results

Oak Creek Canyon RUU Land Status

- Total RUU Acres 7,348
- Non-USFS Acres 459
- Total USFS Lands 6,889
- Total USFS Commonly Used Acres (acres of slope <40%) 2,978

Table 33. Oak Creek Canyon Landscape Analysis Results

Oak Creek Canyon Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	1,836	315	314 x .0013	.40
Semi-Primitive Motorized (SPM)	263	248	265 x .0013	.34
Roaded Natural (RN)	4,790	2,415	2,415 x .0138	33
			P/V-AOT Total for RUU	**34**

Managerial and Physical Attribute Considerations

The majority of the recreation within the Oak Creek Canyon is concentrated in and limited by infrastructure such as trailhead parking and campgrounds.

Capacity Adjustments

Table 34. Oak Creek Canyon Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Oak Creek Canyon	34	3.5	0.8	0.9	85.68	31,273

LAC Recommendations

1. Monitor for water quality.
2. Monitor narrow-headed garter snake.
3. Monitor development of non-system trails.
4. Monitor amount of litter in riparian areas.
5. Continue to monitor trail use using trail registers and trail counters.
6. Monitor wilderness intrusions.
7. Use Arizona Department of Transportation Counter Data to monitor use on Hwy. 89A.
8. Continue to monitor use information provided by the Developed Site Concessionaire.

9. Monitor areas of concentrated public use along Oak Creek for the amounts of trash and human waste.

Red Cliff

The Red Cliff Unit includes 8,841 acres and stretches from the non-Wilderness portion of Boynton Canyon on the east including the area up to the Wilderness boundary of the Red Rock/Secret Mountain Wilderness wrapping its way along the foot hills of the Red Cliffs all the way to Black Mountain. The unit has incredible views of the characteristic and strikingly beautiful red rocks anchored by dark green vegetation and framed by a brilliant blue sky. No other place on the Coconino National Forest has such views. The magnificence of the scenery feed the eyes, the heart, the mind and the soul. There is no wonder why the Yavapai, Tonto Apache and the Hopi consider the Red Cliffs Sacred. It includes Red Canyon, Hartwell Canyon, Loy Canyon and Robbers Roost. The unit is about half forest and half interspersed forest setting with 45 miles of road and 5 miles of trail. Roads within the unit include some immensely popular ones including the Red Canyon Ranch Road (FR 525) and the Boynton Pass Road (FR 152C). The unit includes such world class heritage resource sites as the Palatki Ruin and the Red Cliff Rock Art Site and the Honanki Ruin. Refer to Map 21- Red Cliff Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Red Cliff (MA25)

3,978 acres or 45% of the RUU

Verde Valley (MA 11)

4,025 acres or 46% of the RUU

Landscape Analysis Results

Red Cliff RUU Land Status

- Total RUU Acres 8,841
- Non-USFS Acres 408
- Total USFS Lands 8,433
- Total USFS Commonly Used Acres (acres of slope <40%) 7,773

Table 35. Red Cliff Landscape Analysis

Red Cliff Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	629	611	611 x .0013	0.8
Semi-Primitive Motorized (SPM)	5,860	5,303	5,283 x .0013	7
Roaded Natural (RN)	1,944	1,859	1,859 x .0138	26
			P/V-AOT Total for RUU	**34**

Managerial and Physical Attribute Considerations

The majority of the recreation within Red Cliff RUU is concentrated in and limited by infrastructure such as trailhead and archeological site parking areas.

Capacity Adjustments

Adjustment Notes:

The number of parking spots is a good indicator of its capacity. In addition to the landscape model calculation for daily capacity the RRRD included the number of vehicle parking areas available within the RUU. The Red Cliff RUU has a designated vehicle parking capacity of 120.

Table 36. Red Cliff Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Red Cliff	34	3.5	0.8	0.9	85.68	31,273

LAC Recommendations

1. Monitor width and depth of trails.
2. Monitor for ratio of commercial and non-commercial recreation visits.
3. Monitor vandalism occurrences of heritage resources through Arizona site visitor stewards.
4. Monitor permanent photo points and vegetation transects at Honanki.
5. Install traffic counters and continue hourly observations on roads within the unit.

6. Continue trail counts where they are currently being gathered from trail register data and add new registers and trail counters and monitor.

Savannah/House Mountain

The Savannah/House Mountain Unit contains 12,998 acres and is located bordered by Highway. 179 (VOC Unit) and the Beaverhead Flat Road on the east; Beaver Head Tanks on the south, the summit of House Mountain and the ridge above Oak Creek on the west. The Unit includes 22 miles of system, mostly back country roads, and 4.3 miles of system trails including some of the Turkey Creek and the House Mountain Trails.

The Savannah/House Mountain Unit is a Semi-primitive area or island surrounded by the bustling communities on the north and south. Its primary landmark, House Mountain, is different from the surrounding Red Rock Country. House Mountain is a major landmark in the Verde Valley named by Mrs. Dumas, one of the first settlers in the area. House Mountain and most of the unit is volcanic in origin and the area is covered with basalt rocks and boulders. House Mountain rises almost 1,000 feet above the surrounding landscape. The rough, high clearance roads offer tremendous views of the Verde Valley to the south, Oak Creek and the upper Verde to the southwest and even views looking directly down into the Village of Oak Creek. The area is a haven for deer, javelina, coyotes and other wildlife and offers rough 4X4 opportunities reasonably close to Sedona. Predominant vegetation is Juniper woodland interspersed with grassland and chaparral. The area is remarkably wild and attractive in a rough way. Refer to Map 22-Savannah/ House Mountain Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Savannah (MA27)-

12,998 acres or 100% of the RUU

Landscape Analysis Results

Savannah/ House Mountain RUU Land Status

- Total RUU Acres 12,998
- Non-USFS Acres 0
- Total USFS Lands 12,998
- Total USFS Commonly Used Acres (acres of slope <40%) 11,695

Table 37. Savannah/ House Mountain Landscape Analysis Results

Savannah/ House Mountain Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	3,361	2,775	2.775 x .0013	4
Semi-Primitive Motorized (SPM)	8,640	7,999	7.999 x .0013	10
Roaded Natural (RN)	995	921	921 x .0138	13
			P/V-AOT Total for RUU	**27**

Managerial and Physical Attribute Considerations

No conditions attributes affect capacity

Capacity Adjustments

Table 38. Savannah/House Mountain Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Savannah/ House Mtn	27	3.5	0.8	0.75	56.7	20,696

Adjustment Notes

1. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

LAC Recommendations

1. Monitor additional number and miles of non-system roads, and evidence of litter.
2. Monitor additional number and miles of non-system roads.
3. Monitor winter and monsoon road damage to FR120A and FR9952 and install traffic counters.
4. Continue one hour data counting forms.

Schnebly Rim

The Schnebly Rim Unit is located on the Mormon Lake Ranger District and is within the boundaries of amendment 12 to the Coconino National Forest Land Management Plan and is along Forest Road 153 from Schnebly Vista on the west to Interstate 17 on the east. It is also bordered by Jack's Point and locations accessed by 153A, a high clearance road, on the south and goes one half mile to the north of the Schnebly Hill Road. The unit is 5,167 acres. It includes 30 miles of road and 3 miles of trail (Schnebly Trail). T he Schnebly Rim Unit is substantially different than other units located in the analysis area. Vegetation is predominantly within the Ponderosa Pine vegetation type with large areas covered by alligator juniper and pinyon type. Refer to Map 23- Schnebly Rim Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Schnebly Rim (MA)

5,084 acres or 98% of the RUU

Landscape Analysis Results

Schnebly Rim RUU Land Status

- Total RUU Acres 5,167
- Non-USFS Acres 83
- Total USFS Lands 5,084
- Total USFS Commonly Used Acres (acres of slope <40%) 5,009

Table 39. Schnebly Rim Landscape Analysis Results

Schnebly Rim Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	78	74	74 x .0013	0.09
Semi-Primitive Motorized (SPM)	5,006	4,935	4,935 x .0013	6.41
			P/V-AOT Total for RUU	**7**

Managerial and Physical Attribute Considerations

1. Recognize the relatively high level of use and encounter levels along Schnebly Hill Road, but maintain the road character as appropriate for the Semi-primitive Motorized ROS setting.
2. Woods Canyon Closure, 4,277 acres are closed to motorized use from December 15-April 1.

Capacity Adjustments

Adjustment Notes:

1. The 4,277 acres associated with the Woods Canyon Closure Area are not available to the majority of the recreational use for 106 days of the year. The Woods Canyon Area accounts for 83% of the usable acres in Schnebly Rim RUU. Therefore 83% of the daily capacity was multiplied by 259 (365-106) days to get to annual capacity.

2. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

Table 40. Schnebly Rim Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity (259 days)
Schnebly Rim	7	3.5	0.8	0.75	14.7	3,807

LAC Recommendations

1. Utilize data from routine patrols.
2. Monitor total use levels with both traffic counters and one hour personal observations to determine seasonal, daily and hourly use and the percentage of commercial and non-commercial use.
3. Monitor winter road damage.
4. Inventory road maintenance condition yearly using INFRA and complete road analysis work.
5. Monitor new “non-system” roads and new campsites.

Sedona

The Sedona Recreation Use Unit is 9,600 acres in size and includes 28 miles of road and 32 miles of trails. It includes the City of Sedona, Highway 89A and Highway 179 and has substantial private land located in the unit. It includes the “Neighborwoods” management area and is characterized mostly by the Red Rock Trail System also known as the Sedona Urban Trails and Pathways System and secondary roads such as the Schnebly Hill Road to the Huckaby Trailhead, Jordan Road, Soldier’s Pass Road, Airport Road, the Dry Creek Road, Thunder Mountain Road,

Sky View Drive and the Cultural Park Road. National Forest management, use and recreation are characterized by the need to provide visitor access to the National Forest while respecting the rights of residents. Major trails within the unit include the Mystic, Huckaby, Jim Thompson, Jordan, Cibola Pass, Teacup, Thunder Mountain, Chimney Loop, Two Fence, Brewer and Airport Loop Trails and parts of others not mentioned. Refer to Map 24- Sedona Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Neighborwoods (MA24)

3,670 acres or 38% of the RUU

Landscape Analysis Results

Sedona RUU Land Status

- Total RUU Acres 9,600
- Non-USFS Acres 5,952
- Total USFS Lands 3,648
- Total USFS Commonly Used Acres (acres of slope <40%) 3,272

Table 41. Sedona Landscape Analysis Results

Sedona Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	455	278	278 x .0013	.36
Semi-Primitive Motorized (SPM)	1,167	1,129	1,129 x .0013	1
Roaded Natural (RN)	411	349	349 x .0138	5
Rural (R)	1,615	1,516	1,516 x .138	209
			P/V-AOT Total for RUU	**215**

Managerial and Physical Attribute Considerations

The majority of the recreation within the Sedona RUU is concentrated in and limited by infrastructure such as trailhead parking and campgrounds.

Capacity Adjustments

Adjustment Notes:

This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

Table 42. Sedona Capacity Adjustments

RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
Sedona	215	3.5	0.8	0.9	541.8	197,757

LAC Recommendations

1. Routine patrols will monitor amount of available parking spaces at developed sites. Focus on whether demand is being met.
2. Monitor use at the numerous trails and trailheads in this RUU by continuing to gather trail register data.
3. Gather counts of the number of vehicles occupying trailheads including Jim Thompson, Sugar Loaf, Andante, Thunder Mtn., Cultural Park, Schuerman Mtn., Huckaby, Sombart and Airport Saddle.
4. Monitor the continuous construction and use of “non-system” trails. Monitor “urban” interface intrusions from people’s back yards. Continue to expand on Sarah Hankins Master’s Thesis Data gathering on this subject.

Skeleton Bone

The Skeleton Bone Unit at 28,225 acres is one of the largest units only exceeded by Apache Maid, Beaverhead, Cedar Flat and Wickiup. It is bordered by Highway 89A on the east, the Bill Grey Road (FR761); the Sycamore Canyon Wilderness on the north; and the Verde River and the Cottonwood/Clarkdale area on the south. The Unit has 13.6 miles of system trail including the trails near Dead Horse Ranch State Park and the Lime Kiln Historic Trail. It also includes 95 miles of Forest System, limited maintenance mostly primitive road.

Major features located within or adjacent to the Unit include Dead Horse Ranch State Park, Tuzigoot Natl. Monument, the Verde Canyon Railroad, the upper Verde River and the Bridgeport/Cottonwood/Clarkdale private land “interface” located along a 10 mile Forest Boundary Line on the southwest side of the Unit. The Skeleton Bone Unit is traversed by the Bill Grey (FR 761), Buckboard (FR258) and the Duff Flat Road (FR 131). It also has numerous old natural gas and uranium exploration roads especially in the DK Well area and along the Chalk Hills. The area has some of the most diverse plant life found anywhere in Arizona and includes the Verde Valley Botanical Area. The diverse plants include many endangered species including the Arizona Cliff Rose and Ripley’s Buckwheat. Many other interesting plants grow there including Crucifixion Thorn, Creosote Bush, Tabossa Grass, Needle and Thread Grass, Mesquite

and a wide variety of cactus. Refer to Map 25- Skeleton Bone Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Verde Valley (MA 11)
21,566 acres or 76% of the RUU

Landscape Analysis Results

Skeleton Bone RUU Land Status

- Total RUU Acres 28,225
- Non-USFS Acres 5,217
- Total USFS Lands 23,008
- Total USFS Commonly Used Acres (acres of slope <40%) 22,449

Table 43. Skeleton Bone Landscape Analysis Results

Skeleton Bone Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Motorized (SPM)	22,723	22,164	22,164 x .0013	28.8
Roaded Natural (RN)	232	232	232 x .0138	3.20
Rural (R)	53	53	53 x .138	7
			P/V-AOT Total for RUU	**39**

Managerial and Physical Attribute Considerations

No managerial or physical condition attributes affect capacity.

Capacity Adjustments

Table 44. Skeleton Bone Capacity Adjustments

RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
Skeleton Bone	39	3.5	0.8	0.9	98.28	35,872

LAC Recommendations

1. Utilize data from routine patrols.
2. Install traffic counters on FR761, FR258 and FR131. Continue one hour use data collection on these roads.
3. Monitor use on “rock crawler” 4X4 routes including Smasher Canyon.
4. Monitor illegal road and trail use and maintenance.
5. Monitor damage to the Verde Valley Botanical Area and new trails branching out from the Dead Horse Ranch Trails.
6. Monitor the affects of use on the Towers Southern Bald Eagle Nest location.

Soldier Pass

The Soldier Pass Recreation Use Unit is the smallest of the units in the analysis at only 196 acres. Although small, the unit offers some of incredible scenery with wonderful, up close, views of the Supai Red Sandstone and Coconino Sandstone rock formations of the Mogollon Rim. The stark contrast of red rock, blue sky and dark green vegetation marks this area as one with some of the most breath taking scenery on earth. The unit contains one mile of Forest system trail (the Soldier Pass Trail) and approximately two miles of road. The majority of the Unit is pinyon-juniper forest.

The area includes many places named by the pioneers such as Soldier Pass, where Apache and Yavapai Scouts and Soldier from nearby Fort Verde pursued Tonto Apaches; and Devil’s Kitchen sink hole which first appeared in 1888 when the James Family was startled by a large dust cloud coming from the area. It also includes theatrical names given to places in Soldier Pass such as the Seven Sacred Pools. The road easement accessing the area has a gate which is closed between 8 AM and 6 PM and is operated by the local homeowner’s association. It should be recognized that a relatively high level of use and encounter levels occurs along FR 9904, the main access road. Refer to Map 26- Soldier Pass Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Neighborwoods (MA24)

196 acres or 100% of the RUU

Landscape Analysis Results

Soldier Pass RUU Land Status

- Total RUU Acres 196
- Non-USFS Acres 0
- Total USFS Lands 196
- Total USFS Commonly Used Acres (acres of slope <40%) 188

Table 45. Soldier Pass Landscape Analysis Results

Soldier Pass Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Motorized (SPM)	184	176	176 x .0013	0.22
Rural (R)	12	12	12 x .138	2
			P/V-AOT Total for RUU	**2**

Managerial and Physical Attribute Considerations

Relatively high level of use and encounter levels along main access road.

Capacity Adjustments

Table 46. Soldier Pass Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Soldier Pass	2	3.5	0.8	0.9	5.04	1,840

LAC Recommendations

1. Monitor for type and rate of change of upland vegetation.
2. Monitor for development of non-system trails.

3. Monitor for user conflicts.
4. Monitor permanent vegetation transects installed in 1995 and recorded again in 2001.
5. Monitor permanent photo points established in 1995.
6. Install a traffic counter on the Soldier's Pass Road and record daily and continue hourly data form collections to determine hourly contact frequencies, percent commercial and non-commercial use, and type of vehicle.
7. Continue monitoring trail and trailhead use by counting cars in the trailhead and recording trail use on the Soldier's Pass, Teacup and Jordan Trails.
8. Determine length of stay for various activities.

Thirteen Mile Rock

The Thirteen Mile Rock Unit is one of the larger units at 13,327 acres. It is split east and west by Highway 260 (The General Crook Highway) and is bordered on the north by West Clear Creek, the south by the rim above the Fossil Creek Road and on the west by the rim. The Thirteen Mile Rock RUU has limited access from Highway 260 that transects the unit with very few access roads into its interior. The Unit has seven miles of road (mostly Highway. 260) and seven miles of trail (the General Crook Trail). There is another system trail in the unit, the Sycamore Trail which is two miles long and almost never used. The unit is mostly forested. This Unit is one of the steepest with over 32 percent of the acreage at slopes of over 40 percent.

The unit offers tremendous views of the Verde Valley as it ascends 1,500 feet in only seven miles. Major features in the unit besides the General Crook Highway are Thirteen Mile Rock, a major landmark in the Verde Valley, the Thirteen Mile Rock Interpretive Site and Parking Lot and the General Crook Trail. The area is important to the Yavapai-Apache Nation. The portion of the General Crook Trail located on this unit is arguably the most scenic and interesting of the entire General Crook Trail which goes from Prescott to Fort Apache. The reasons for that are that it is completely intact; it is extremely scenic with views of the Verde Valley and Thirteen Mile Rock; and there are two intact parallel portions including a steeper route and a less steep route descending from the Rim. Refer to Map 27- Thirteen Mile Rock Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Verde Valley (MA 11)

13,000 acres or 98% of the RUU

Landscape Analysis Results

Thirteen Mile Rock RUU Land Status

Concentrated Use Area

- Total RUU Acres 13,327
- Non-USFS Acres 0
- Total USFS Lands 13,327
- **Total USFS Commonly Used Acres (acres of slope <40%) 9,024**

Table 47. Thirteen Mile Rock Landscape Analysis Results

Thirteen Mile Rock Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	4,404	2,858	2,858 x .0013	4
Semi-Primitive Motorized (SPM)	4,485	2,915	2,915 x .0013	4
Roaded Natural (RN)	4,438	3,251	3,251 x .0138	45
			P/V-AOT Total for RUU	**53**

Managerial and Physical Attribute Considerations

Road system and steep terrain without water naturally concentrated recreation along the Roaded natural polygon.

Capacity Adjustments

Adjustment Notes

1. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

Table 48. Thirteen Mile Rock Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Thirteen Mile	53	3.5	0.8	0.75	111.3	40,625

LAC Recommendations

1. Utilize data from routine patrols.
2. Monitor winter road damage.
3. Inventory road maintenance condition yearly using INFRA and complete road analysis work.

4. Monitor new “non-system” roads and new campsites

Towel

The Towel Unit is one of the larger units in the analysis area at 18,044 acres. It includes 10.8 miles of trail including the Towel, Hackberry and Bull Run Trails and only 3.4 miles of road. The Towel Creek RUU offers very limited road access with only a few trails; it merits candidacy for Roadless Area status. The Towel Unit is one of the steepest with 27 percent of the acreage located on slopes greater than 40 percent.

The Towel Unit is characterized by steep topography (elevations range from 3,000 feet elevation near the Verde River to almost 6,000 feet elevation at Hackberry Mountain). Vegetation varies from Upper Sonoran and riparian to pinyon-juniper woodland. The unit has a remarkable number of springs and riparian areas, particularly on the Verde River side and is relatively wild in character. Wildlife abounds and the area is very popular for hunting large and small game. Very lightly used trails such as Towel, Hackberry and Bull Run traverse the area. Numerous rugged canyons traverse the area such as Sycamore, Bull Run, Towel and Sally May. These canyons may offer canyoneering opportunities. Refer to Map 28- Towel Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Verde Valley (MA 11)- 18,018 acres or 99.9% of the RUU

Landscape Analysis Results

Towel RUU Land Status

- Total RUU Acres 18,044
- Non-USFS Acres 0
- Total USFS Lands 18,044
- Total USFS Commonly Used Acres (acres of slope <40%) 13,144

Table 49. Towel Landscape Analysis Results

Towel Recreation Use Unit: 83% Forested				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	10,217	7,226	7,226 x .0013	9
Semi-Primitive Motorized (SPM)	7,827	5,918	5,918 x .0013	8

	P/V-AOT Total for RUU	**17**

Managerial and Physical Attribute Considerations

There are no managerial or physical condition attributes affecting capacity in this RUU.

Capacity Adjustments

Adjustment Notes
1. This RUU is also muddy a significant portion of the year, therefore a season of use coefficient of .75 was applied.

Table 50. Towel Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
Towel	17	1.3	0.8	0.75	13.26	4,840

LAC Recommendations

1. Utilize data from routine patrols.
2. Monitor winter and monsoon road damage. Install a traffic counter on FR708 near Hwy. 260 and another one near FR502.
3. Also install a counter on FR503.
4. Monitor use on FR500.
5. Record and monitor new roads and ATV Trails.
6. Monitor intrusions into the FR500 Southern Bald Eagle Closure and the Verde Comprehensive River Management Plan Road Closures.

Upper Loop

The Upper Loop Unit is 6,232 acres in size including 22 miles of road and 14 miles of trail. This unit is one of the most scenic and heavily used units in the analysis area. Upper Loop RUU lies within close proximity and easy access from the City of Sedona. Crescent Moon Ranch and Red Rock Crossing Day Use are both situated within this RUU. It is bounded on the north by Sedona private land and airport mesa (Tabletop Mountain); on the east by Lower Oak Creek; the west by the Lower Red Rock Loop Road and Highway 89A and on the northwest by Dry Creek. Major roads in the area include the Upper and Lower Red Rock Loop Roads including access to Red Rock State Park. Trails include the Old Post, Carroll Canyon, Ridge, Herkenham, Scheurman Mountain, Lime Kiln and the Upper Loop Trail. These trails are some of the most scenic and easily accessed and most popular trails anywhere.

Some of the most magnificent views found in the Sedona area are found along the pullouts of the Upper Red Rock Loop Road. A wonderful mix of red rocks, basalt rock, dark green vegetation and mostly blue sky offers a striking landscape for visitors and residents alike. The unit is mostly forested and includes pinyon and juniper woodlands with Arizona Cypress along the drainages. The unit is very mountainous and rough with elevations ranging from 3,900 feet along Oak Creek to 4,900 feet on Scheurman Mountain. The unit includes three major landforms Scheurman Mountain, the edge of Airport Mesa (Table Mountain) and Lower Oak Creek. Refer to Map 29-Upper Loop Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Neighborwoods (MA24)

Landscape Analysis Results

Upper Loop RUU Land Status

- Total RUU Acres 6,232
- Non-USFS Acres 1,126
- Total USFS Lands 5,106
- Total USFS Commonly Used Acres (acres of slope <40%) 4,554

Table 51. Upper Loop Landscape Analysis Results

Upper Loop Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	2,462	2,137	2,137 x .0013	3
Semi-Primitive Motorized (SPM)	459	430	430 x .0013	0.55
Roaded Natural (RN)	1,315	1,155	1,155 x .0138	16
Rural (R)	870	832	832 x .138	115
			P/V-AOT Total for RUU	**135**

Managerial and Physical Attribute Considerations

There are no managerial or physical condition attributes affecting capacity in this RUU.

Capacity Adjustments

Table 52. Upper Loop Capacity Adjustments

RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
Upper Loop	135	3.5	0.8	0.9	340.2	124,173

LAC Recommendations

1. Utilize data from routine patrols.
2. Monitor available parking areas (PAOT).
3. Monitor use levels thru the developed site concessionaire at Crescent Moon Ranch Day Use Area.
4. Monitor areas of concentrated public use along Oak Creek. Count trail use with registers or counters on the Herkinham, Ridge, Lime Kiln, Old Post and the Red Rock Loop Trails.
5. Monitor use at the Chavez Ditch concentrated public use site.
6. Monitor new “illegal” trail and road construction and use.

Village of Oak Creek

The VOC Unit includes both the Big Park/Pine Valley Area on the east side of Highway 179 and the Verde Valley School and Verde Valley School Road Area on the west side of Highway 179. It is bounded on the east by the Munds Mountain Wilderness. It includes the Highway 179 corridor all the way to Interstate 17 and goes along the Verde Valley School Road all the way to Oak Creek to the northwest. On the south and west it follows a line along the steep ridges of House Mountain until it reaches Oak Creek.

The unit includes 30 miles of road and 10 miles of trail. Significant trails and trailheads include: Woods Canyon, Jacks Canyon, Hot Loop, Turkey Creek and the Baldwin Trailhead. The unit also includes a large part of the Verde Valley School Trail Study Area, The proposed Chavez Trailhead along Highway 179 and the Kel Fox Trail into Arabian Way in the Village of Oak Creek. The VOC Unit is the gateway to the Red Rock Country. It is the place where the Forest Service has chosen to locate the new Red Rock Ranger District Office. It is where visitors get their first view of the Red Rocks. Refer to Map 30- Village of Oak Creek Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Gateway (MA 22)

1425 acres or 13% of the RUU

Neighborwoods (MA24)

3,673 acres or 34% of the RUU

Transition (MA29)

2,139 acres or 20% of the RUU

Landscape Analysis Results

Village of Oak Creek RUU Land Status

- Total RUU Acres 10,866
- Non-USFS Acres 3,631
- Total USFS Lands 7,235
- Total USFS Commonly Used Acres (acres of slope <40%) 5,9850

Table 53. Village of Oak Creek Landscape Analysis Results

Village of Oak Creek Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	3,310	2,485	2,485 x .0013	3.23
Semi-Primitive Motorized (SPM)	1,227	861	861 x .0013	1.11
Roaded Natural (RN)	1,508	1,481	1,481 x .0138	20
Rural (R)	1,191	1,158	1,158 x .138	159
			P/V-AOT Total for RUU	**183**

Managerial and Physical Attribute Considerations

The RUU is adjacent to private land with easy access and predominant day use of area.

Capacity Adjustments

Table 54. Village of Oak Creek Capacity Adjustments

Village of Oak Creek RUU	P/VAOT	Adjustment Factors				
		Length of Stay (Visitor Day)	Pattern of Use	Season of Use	Adjusted Daily Capacity	Annual Capacity
	183	3.5	.8	0.9	461.16	168,323

LAC Recommendations

1. Monitor for development of non-system roads and trails.
2. Monitor trail and trailhead use at Woods Canyon (RR Ranger Sta.), Jack's Canyon, Kel Fox, Turkey Creek and Verde Valley School Trails with trail registers and/or trail counters.
3. Count trailhead use at the Jack's Canyon Trailhead and Stage Stop Trailhead.
4. Monitor and record illegal trail construction.

Wickiup

The Wickiup Recreation Use Unit is the largest next to the Apache Maid Unit at 51,276 acres. It is bounded on the north by the Beaver Creek Unit (the ridge south of Walker Creek); on the east by the cliffs of the Mogollon Rim; on the south by Wingfield Mesa; and on the west by the Verde River, the Montezuma Unit and the Rimrock/Lake Montezuma Community. It includes 108 miles of mostly backcountry roads and only six miles of trail (Blodgett Basin, General Crook and West Clear Creek). The area of use associated with easy road and trail access and adequate infrastructure was identified as an area of concentrated use within the RUU Refer to Map 31-Wickiup Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Verde Valley (MA 11)
40,129 acres or 78% of the RUU

Landscape Analysis Results

Wickiup RUU Land Status

Concentrated Use Area

- Total RUU Acres 51,276
- Non-USFS Acres 8,439
- Total USFS Lands 42,837
- Total USFS Commonly Used Acres (acres of slope <40%) 39,841

Table 55. Wickiup

Wickiup Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT (Parties or Vehicles) At One Time**
Semi-Primitive Non-Motorized (SPNM)	7,913	6,211	6,211 x .0013	8
Semi-Primitive Motorized (SPM)	13,330	12,982	12,982 x .0013	17
Roaded Natural (RN)	15,430	14,623	14,623 x .0138	202
Rural (R)	6,164	6,025	6,025 x .138	831
			P/V-AOT Total for RUU	**1,058**

Managerial and Physical Attribute Considerations

Desirable recreation condition attributes and infrastructure (trailheads, campgrounds, roads and trails) has resulted in a predictable uneven distribution of use throughout the RUU.

Capacity Adjustments

Table 56. Wickiup Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Wickiup	1,058	3.5	0.8	0.9	2,666.16	973,148

LAC Recommendations

1. Monitor for impacts to heritage resources by Arizona Site Steward.
2. Monitor for development of non-system roads and trails.
3. Monitor use by installing a traffic counter on FR618 near Hwy. 260.
4. Monitor residential use in the Verde Lakes, Camp Verde and Lake Montezuma/Rimrock “suburban” interface areas.
5. Count use at the West Clear Creek Day Use area, FR9202 and the Clear Creek Caves Trailhead.
6. Monitor damage to the John Heath Ruin and the Clear Creek Caves Arch Sites with volunteers and Arizona Site Stewards.
7. Monitor use on FR618C.

Windmill

The Windmill Recreation Use Unit is one of the largest on the Red Rock District. It's in the heart of the District with major features such as Coffee Creek, Loy Canyon, Spring Creek, Anderson Butte and Windmill Mountain. It is bounded on the north by the Red Cliffs Unit, the east by the Sedona Unit, the southeast by Highway 89A and the west by the Skeleton Bone Unit. It is characterized as mostly hilly pinyon-juniper woodland with many back country roads which includes large grassland areas interspersed with mesquite, cat-claw with numerous intermittent arroyos punctuated with awesome views of the red rocks. It has the most roads of any unit except Apache Maid. It has 115 miles of road and14.5 miles of trail.

Roads include the Red Canyon Ranch Road (FR525), the road to Sycamore Pass (525C), portions of the Bill Grey Road (FR761) and other interesting and scenic roads including 525A, 761B, the Gas Pipeline Road (FR9513), the Greasy Spoon Road (FR125A) and the Bradshaw Ranch Road (FR525D). Most of the trails are located in the eastern part of the Unit adjacent to Sedona. These include the following trails: Rupp, Arizona Cypress, Dawa and Cockscomb. A portion of the historic Lime Kiln Trail goes thru the southeastern part of the unit near the junction of FR525 and Highway. 89A. This unit is mostly forested at 70 percent with interspersed forest setting and grass meadows of needle and thread and tabossa grass.

The unit offers wonderful views of the red rocks to the north, and the Verde Valley to the south, and contains many attractive locations such as the Bradshaw Ranch with rustic buildings, history of movie making, and beautiful setting and entrance road right at the foot of the Red Rocks. The unit also includes the private land headquarters of the largest grazing allotment in the United States, the Windmill Allotment owned by the Morrison Family. The original site of the Coffee Creek Ranger Station was located along Coffee Creek (FR525A) at the Windmill Ranch Headquarters. Refer to Map 32- Windmill Recreation Use Unit in the Map Appendix.

Management Direction

The predominant Management Areas in this RUU are as Follows:

Savannah (MA27)

22,986 acres or 82% of the RUU

Landscape Analysis Results

Windmill RUU Land Status

- Total RUU Acres 27,953
- Non-USFS Acres 1,441
- Total USFS Lands 26,512
- Total USFS Commonly Used Acres (acres of slope <40%) 26,328

Table 57. Windmill Landscape Analysis Results

Windmill Recreation Use Unit				
ROS Class	**Acres**	**Commonly Used Acres (acres of slope < 40%)**	**Calculations: Acres X Coefficient Parties at one time per Acre**	**PAOT Parties (or Vehicles) At One Time**
Semi-Primitive Motorized (SPM)	24,782	24,545	24,540 x .0013	32
Roaded Natural (RN)	1,744	1,743	1,743 x .0138	24
Rural (R)	40	40	40 x .138	6
			P/V-AOT Total for RUU	**62**

Managerial and Physical Attribute Considerations

There are no managerial or physical condition attributes affecting capacity in this RUU.

Capacity Adjustments

Table 58. Windmill Capacity Adjustments

RUU	P/V A O T	Adjustment Factors				
		Length of Stay (Visitor Day)	**Pattern of Use**	**Season of Use**	**Adjusted Daily Capacity**	**Annual Capacity**
Windmill	62	3.5	0.8	0.9	156.24	57,028

LAC Recommendations

1. Monitor for width and depth of roads and trails and development of non-system roads and trails.
2. Monitor use on FR525, FR525C and FR152A by installing traffic counters and by continuing to gather one hour personal observations to monitor the amount of commercial and non-commercial use, type of vehicles and total use.
3. Determine average length of stay for various activities.
4. Continue to monitor work required by the road analysis, record in INFRA and monitor road maintenance progress and road maintenance needs.

Appendix I: Total Use Calculations for each Recreation Use Unit—January, 2008 Bill Stafford

METHODOLOGY: Total Use was determined by a combination of methods using the best available data. It would be very difficult, expensive and time consuming to get precise counts on all roads. The Coconino NF Staff including the District Recreation Staff for the Red Rock Ranger District and the District Ranger decided one hour observations were the best tool to use as a measurement of the number of contacts made in the field for the heavier used recreation use units in this Recreation Special Use Assessment. The sample parameter used was related to Map 3 of Amendment 12 of the Coconino NF Land Management Plan and was defined as "Social Encounters Per Hour" for various recreation opportunity classes. We defined social contacts per hour to be measured as vehicle contacts per hour on the roads sampled. "The Tour Jeep Study Environmental Assessment—Visual and ROS Assessment of Alternatives" is the most significant document written about commercial tours in this area until this assessment. It lists on pg. 29-33 contacts per hour and per two hours as the unit used for "Limits of Acceptable Change". It also lists on pg. 33 that measurements of jeeps per hour were used to measure the "acceptable level of motorized use for most non-motorized users".

Vehicles per hour is also a good unit to use because it can be easily measured by the "layman" where vehicles on a road at one time cannot or vehicles per day. There is no reasonable way to measure vehicles on a road at one time or even per mile unless we sprout wings and fly. We have heard in numerous public meetings over the years from residents and visitors alike that they saw such and such number of vehicles per hour or per trip by it is very hard to define what a trip is and most people have trouble even knowing what a mile is in rough country. Therefore vehicles per hour is a much more understandable unit. Also, we have found from experience that if we use one hour as the unit, we can avoid double counting the same vehicle because most trips in our area take over one hour so the chance of double counting the same vehicle is unlikely. Also, traffic counters were deemed to expensive to purchase, maintain and operate for the limited time available during the "Recreation Special Use Program Assessment for the Red Rock Ranger District". Also traffic counters cannot record whether vehicles are commercial, non-commercial., vehicle type, company name, etc.

The "one hour observations" logistically could only be conducted on a limited number of roads and only in recreation use units which are "controversial units" where there has been either actual or permitted commercial tour activity or interest. The sampling protocol was a stratified random sample designed by the District Recreation Staff Officer. The sample year was stratified by season of use and the season was further stratified by weekdays and weekends/holidays. For the purpose of this document, summer and fall were sampled. Summer is typically has moderate use and fall high use on the Red Rock Ranger District, particularly in the Sedona Area where most of the "controversial units" are located. This sampling process has not been reviewed or certified by a statistician as having any particular confidence interval. It did, however involve relatively "unbiased" volunteers and Forest Service Employees making approximately 258 "in person" one hour observations using a standard protocol for each observation and recording the data in a controlled manner during the summer and fall of 2007. The sample locations were selected by Bill Stafford, District Recreation Staff Officer, to provide a reasonable representation of use

within the “controversial” RUUs within the Ranger District based on the time and staffing available during the “Recreation Special Use Program Assessment”.

One hour observations were obtained during the summer and fall months (as shown on the road summary forms included below for each recreation use unit) for the following roads including: FR9904 (Soldiers Pass Rd), FR761 (Bill Grey Rd), FR152A (Greasy Spoon), FR525C, FR9845 (Elmerville), FR152 (Vultee Arch Rd), FR9524 (Powerline Rd), FR152C (Boynton Pass Unpaved), FR525 (Red Cyn. Ranch Rd), FR153 (Schnebly Hill Rd), FR9549B (Loy/Nolan Rd) and 120A (House Mtn). FR 179F (Broken Arrow Rd.) received one hour observation counts during the summer and fall of 2007 and the winter of 2007/2008. These one hour observations provided the data used for the location of the one hour observation survey points are shown on map. The following form was used for the one hour counts:

date:
time: from: to:
location:

Number of non commercial vehicles	**Number of commercial vehicles**	**Vehicle (ATV, jeep, SUV, hummer, van…)**	**If commercial license plate**	**If commercial company name**
Total				

Other means were used to determine total use on the Apache Maid, Beaver Creek Beaverhead, Casner, Cathedral, Cedar Flat, Fossil Creek Road, Middle Verde, Montezuma, Mud Tanks, Oak Creek Canyon, Sedona, Thirteen Mile, Towel, Upper Loop, Village of Oak Creek and Wickiup Recreation Use Units. These included traffic counter data from the National Visitor Use Monitoring Survey from 2004, other traffic counter data from 2004, trail register data from 2007 and professional estimates made by individuals who have observed the units over the years. If at all possible, actual count data was used and extrapolated to get estimates of vehicles or parties per hour, or per year. Percent commercial and non-commercial was obtained using the one hour observations or where that was not available estimates were reached based on the best available data available to Bill Stafford at the time of this writing which was permitted commercial allocations for the RUUs. Trail use numbers from trail registers are relatively accurate and are based on what is written in the trail registered that is then expanded by a coefficient that represents the number of people that walk by the registers but do not make an entry. This is

updated by our volunteers from personal observations of the number of people that register and varies by trailhead.

Parties or Vehicles per Hour, per Day or per Year

For the purposes of this total use estimate and this assessment a common unit needs to be used to describe capacity and use. For motorized users a vehicle is the measurement. For trails the Red Rock Ranger District has “traditionally” used the term “parties”. A party is one group of six people. We determined, over the years, that individuals or small groups of hikers, bikers or equestrians do not generally infringe on an individuals social ROS setting indicator until they total roughly six people i.e. and individual hiker has little influence on ones sense of solitude but a group of six does have an influence. The ROS Field Guide under social encounters lists parties met per day as an indicator. We have defined a party as a unit of six people. Amendment 12 Map 3 states “An encounter is defined as 1 vehicle or 6 or fewer people. For example, if you pas a group of 14 on the trail that would equal 3 encounters; if you pass two jeeps, that would equal 2 encounters”. Forest Plan Amendment 12 was an E.I.S. that established this direction, that is why we use this.

Over the years, interdisciplinary teams evaluating new permits on the Red Rock District have felt that a group of six hikers, mountain bikers or horsemen influence social setting indicator of ROS about the same as one vehicle. RUUs have both roads and trails where use needs to be measured for both vehicles and parties of non-motorized users and combined into a common unit. It doesn’t matter how many people are in a vehicle it still counts as one vehicle. The question involving social encounter criteria is “How many encounters between people within a defined area can occur before the setting becomes incompatible with the ROS experience goals for the area?” These encounters include vehicles, and hikers, bikers etc. there is a need to include both. That is why we have used the unit parties of six or vehicles per unit of time.

The Development of Total use for each RUU is displayed below.

APACHE MAID

FR 213 is the road used to measure use (it is the indicator or measurement road per professional judgment).
2005 NVUM FR213 counts 107 + 482=589 divided by 2 twenty four hour counts=295 veh./day

295 veh./day X 365 days=107,675 veh. Per year

6 hr. count per NVUM= 58 veh.divided by 6 hours=10 veh./hr.
6 hr. count per NVUM=109 veh. Divided by 6 hours= 18 veh./hr.
Avg.=10 + 18 divided by 2= 14 veh./hr.

BEAVER CREEK

Total Use Veh. per hour estimates
FR 618 counts NVUM 2004-2005 Data 578+240+531+151+79=1579 veh. Total
FR 618 counts 2004 Traffic Counters FR618 and SW Academy Rd. Junc.
44+34+74+63+81=296 veh. Total
30 minute counts by USFS patrol people in 2004 converted to all day counts

128+235+232+224+128=947 veh. Total
Grand Total= 1579+296+947=2822 divided by 15 samples=Avg. 188 veh/day
188 veh./day divided by 8 hours (avg. length of Rec. day)=Avg. 23 veh./hr.

Total Use per year estimates
2007 Trail register data Bell 6926 people divided by 6 people per party=1154
1154 divided by 365 days=3 parties per day
188 veh./day+3 parties/day Bell Trail=191 parties or veh./day
191 X 365=69,715 parties or veh./year

BEAVERHEAD

FR796 (Mormon xing & spr.ck.)	5 veh./day
Winter Cabin Rd.	2 veh./day
Green Gate ATV Area	4 veh./day
Dry Ck. Access (turntable)	2 veh./day
FR9952	2 veh./day
Total=	15 veh./day

15 X 365=5,475 veh./yr.
15 veh./day divided by 8 hrs./day=2 veh./hr.

BROKEN ARROW

ROAD # 179F_____
REC. USE UNIT __Broken Arrow_____

Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
						12

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
9	69	66	35	34	104	12

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
3	36	52	33	48	69	23

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
3	34	46	40	54	74	25

Winter Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
7	54	90	6	10	60	9

Winter Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
4	26	72	10	28	36	9

Weighted avg. calculation. _12___ Veh./Hr. Summer Weekday(.23) + _23__Veh./Hr. Summer Weekend & Hol.(.10) + ___23__Veh./Hr. Fall Weekday (.23) + _25___Veh./Hr. Fall Fall Weekend & Holiday (.10) + __9___Veh./Hr. Winter Weekday (.23)+__9_Veh./Hr. Winter Weekend & Holiday(.10) = __16___ Veh./Hr. Avg.
16 veh./hr. X 8 hrs. X 365 days=46,720 veh/yr.
BROKEN ARROW CONT.
Avg. % commercial Weighted Avg. Calcul. = 66% (.33 of total yr.) + 52%(.23yr)+46%(.1yr)+90%(.23yr)+72%(.1 yr.)=67 % comm. And 33% non-comm.

CASNER

3 ATV'S per day
3 X 365 days=1,095 veh./yr.
3 atv's per day divided by 8 hr. recreation day= less than 1 per hour

CATHEDRAL

From 2007 Trail Register Data
Cathedral Trail
39,858 people/yr. divided by 6 people per party=6,643 parties/yr.
Bell Rock Trail
21,447 people/yr. divided by 6= 3,575 parties/yr.
Bell Rock Pathway Trail
63,484 people/yr. divided by 6= 10,580 parties/yr.
Little Horse Trail
14,608 people/yr. divided by 6= 2,435 parties/yr.
Baldwin Trail
Estimated 15,000 people/yr. divided by 6= 2,500 parties/yr.
Misc. veh. Pull offs Hwy. 179 using Forest
3 veh./hr. X 8 hr. X 365 days= 8,760 parties/yr.
2005 NVUM Verde Valley School Rd. Counts
189 veh./day X 365 days= 68,985 parties/yr.
Total= 103,500 p-v's/yr.
103,500 p-v's/yr. divided by 365 days/yr. divided by 8 hrs./day=35 p-v's/hr.

CEDAR FLAT

FR214 Cedar Flat Road
NVUM Bald Hill/West Clear Creek= 35 veh/day
35 veh./day divided by 2 (2 counts/veh.)=17 X 365=6,206 veh./yr.
17 veh./day divided by 8 hrs./day=2 veh./hr.

DRY CREEK

ROAD # _152_____
REC. USE UNIT _Dry Creek_____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
8	41	30	95	70	136	17

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
4	13	20	51	80	64	16

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
11	50	26	195	74	245	22

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
3	8	9	84	91	92	31

_17___ Veh./Hr. Summer Weekday(.36) + _16__Veh./Hr. Summer Weekend & Hol.(.14) + ___22__Veh./Hr. Fall Weekday (.36) + __31__Veh./Hr. Fall Fall Weekend & Holiday (.14) = __20____ Veh./Hr. Avg.
Total yearly 20 veh./hr. X 8 hrs. X 365 days=58,400 veh./yr.
% Comm.weighted avg.=30(.36)+20(.14)+26(.36)+9(.14)=25%
% Non-comm.=75%

FOSSIL CREEK ROAD

2005 NVUM FR708 17 + 137=154 154 Divided by 2=77 veh./day
2004 Traffic Counters Counts
130+73+71+70+82+61=487
44+33+79+41+64+75+=336
487+336=823 divided by 12 counts=69 veh/day
Avg.= (77+69) divided by 2=73 veh/day
73veh/day X 365 days=26,645 veh./yr.
Veh./Hr.-73 veh/day divided by 8 hr. day=9 Veh./hr.

KACHINA

ROAD # _9845_____
REC. USE UNIT Kachina_____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
8	2	29	5	71	7	1

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
6	0	0	6	100	6	1

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
7	1	9	10	91	11	2

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
6	0	0	17	100	17	3

Weighted Avg.% Comm=29(.36) + 0 +9(.36) + 0=10+0+3+0=13% and 87% Non.Comm.
__1__ Veh./Hr. Summer Weekday(.36) + _1__Veh./Hr. Summer Weekend & Hol.(.14) + ___2__Veh./Hr. Fall Weekday (.36) + __3__Veh./Hr. Fall Fall Weekend & Holiday (.14) = __1.64____ Veh./Hr. Avg.=2 veh./hr.
Total Use=2 veh/hr. X 8 X 365=5,840 veh./yr.

LOWER SCHNEBLY

ROAD # __153_____
REC. USE UNIT Lower Schnebly_____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
5	41	47	46	53	87	17

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
5	66	38	108	62	174	35

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
4	29	28	76	72	105	26

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
4	**46**	**33**	**92**	**67**	**138**	**35**

Weighted Avg.% Comm=47(.36)+38(.14)+28(.36)+33(.14)=37% and 63% Non.Comm.

__17__ Veh./Hr. Summer Weekday(.36) + _35__Veh./Hr. Summer Weekend & Hol.(.14) + _26____Veh./Hr. Fall Weekday (.36) + _35___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __25____ Veh./Hr. Avg.= veh./hr.

Total Use Veh/ry.=25/hr. X 8 hrs X 365 Days=73,000

MIDDLE VERDE

Estimated by professional judgment

FR119A	30 veh/day
9235	4 veh./day
119D	1 veh/day
FR671	10 veh/day
9806C	2 veh/day
Verde Santa Fe Resident Use	30 people = 5 parties/day
Cornville Residential Use	20 people/day=3 parties/day
Middle Verde Incidental Use	15 people/day=2 parties/day
Total=	57 parties/veh./day

57 p-v's/day X 365=20,805 parties/veh./day

Avg./Hr.=57 veh/day divided by 8 hrs. per day=7 parties or veh/hr.

MONTEZUMA

2004 Data

Cilff Castle/Montezuma Castle Rd. FR119C

29+39+39+9+21=137 veh.

137 veh. Divided by 5 samples=27 veh. Both directions

27 veh. Divided by 2=14 veh/day X 365 days/yr=5,110 veh or parties/yr.

Avg. Veh/hr=14 veh/day divided by 8 hrs.=2 veh/hr.

MUD TANKS

Estimate

Salmon Butte Rd. FR677	2 veh/day
142G and 142H	1 veh/day
Divide Tank Rd.	2 veh/day
Mud Tanks Rd.(Mail Tr.)	2 veh/day
Mud Tanks Rd.(Lazy T7)	2 veh/day
Meadow Cyn. R. West	1 veh/day
Sawlog Rd.	2 veh/day
Total=	12 veh/day

12 veh/day X 365=4,380 veh or parties/yr.

Avg. Veh/hr=12 veh/day divided by 8 hours/day=2 veh/hr

OAK CREEK CANYON

2004 data from concessionaire Rec Resource Mgt.

Bootlegger CG 3761 Divided by 3/veh=1254 div. by 365= 4 veh/day
Banjo Bill Picnic 8773 div. by 3 div. by 365= 8 veh/day
Halfway 2 avg. veh occupancyX 4 turnover/day= 8 veh/day
Manzanita CG 12,539 div by 3 div by 365= 12 veh/day
Slide Rock Swim (250 paot) 200,000 people/yr div 365=
=548 div 6=91 veh/day= 91 veh/day
Midgely Bridge (16 sites) 5 veh avg X 8 turnover/day= 40 veh/day
Grasshopper Swim Site 22,922 people div 6 people/parties div
By 365=11 parties/day 11 parties/veh/day
Visitor Center 10,998 div by 6 div by 365= 5 parties-veh/day
Dispersed Parking along Hwy 89a Oak Ck. Use
10 veh at one time X 4 turnover per day= =40 veh/day
Total= 710 veh/day

Trails

Cookstove	.5 p-v's/day
Thomas Point	.5 p-v's/day
Harding Spr.	.5 p-v's/day
Allens Bend	1 "
Huckagy (in L. Schnebly)	
AB Young	2 "
Wilson Mtn. (covered by Midgely)	
West Fork (covered by Call of the Canyon)	
Sterling Pass	2 "
Grand Total=	**717 parties- veh./day**
Avg Veh/hr=717 div by 8 hours=88	**88 avg party-veh/day**
Avg parties or veh/yr= 88/day X 365 =	**261,700 veh-P's/day**

RED CLIFFS

Roads used FR152C, FR525 and FR9524

ROAD # __152C_
REC. USE UNIT Red Cliffs_____

Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
10	65	43	85	57	150	15

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
5	**29**	**34**	**56**	**66**	**85**	**17**

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
8	47	40	70	60	117	15

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
3	10	24	32	76	42	14

Weighted Avg.% Comm=43(.36)+34(.14)+40(.36)+24(.14)=37% and 63% Non.Comm.
__15__ Veh./Hr. Summer Weekday(.36) + _17__Veh./Hr. Summer Weekend & Hol.(.14) + _15____Veh./Hr. Fall Weekday (.36) + _14___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __15____ Veh./Hr. Avg.= veh./hr.

ROAD # __525_
REC. USE UNIT Red Cliffs____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
4	2	10	18	90	20	5

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
8	11	24	35	76	46	6

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
4	9	19	38	81	47	12

Weighted Avg.% Comm=20(.36)+10(.14)+24(.36)+19(.14)=20% and 80% Non.Comm.
__10__ Veh./Hr. Summer Weekday(.36) + _5__Veh./Hr. Summer Weekend & Hol.(.14) + _6____Veh./Hr. Fall Weekday (.36) + _12___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __8____ Veh./Hr. Avg.= veh./hr.

ROAD # __9524_
REC. USE UNIT Red Cliffs____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
4	1	100	0	0	1	.25

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
1	0	0	0	0	0	0

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
5	0	0	2	100	2	.4

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
6	1	100	0	100	1	.2

Weighted Avg.% Comm=100(.36)+0+0+100(.14)=50% and 50% Non.Comm.
__.25__ Veh./Hr. Summer Weekday(.36) + _0__Veh./Hr. Summer Weekend & Hol.(.14) + _.4____Veh./Hr. Fall Weekday (.36) + _.2___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __.26____ Veh./Hr. Avg.= veh./hr.
Veh/yr=.26 X 8 X 365=759 parties or veh/yr.

Grand Total Red Cliffs RUU

152C 15 veh/hr.
525 8 veh/hr.
9524 .3 veh/hr.
Total 23.3 veh/hr.
23.3 X 8 hrs X 365=68,036 veh. Or parties/yr.
Avg. % Comm.
152C 37%
525 20%
9524 50%
Total 107% div. by 3=36% Comm. And 64% Non-Comm.

SAVANNAH/HOUSE MTN.

ROAD # __120A_
REC. USE UNIT Savannah/House Mtn.____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
5	0	0	1	100	1	.2

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
5	0	0	1	100	1	.2

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
5	0	0	4	100	4	.8

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
4	0	0	2	100	2	.5

Weighted Avg.% Comm=0 and Non.Comm. 100
__.2__ Veh./Hr. Summer Weekday(.36) + _.2__Veh./Hr. Summer Weekend & Hol.(.14) + _.8____Veh./Hr. Fall Weekday (.36) + _.5___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __.5____ Veh./Hr.
Total veh-parties/hr.=.5+.5+.5+.1+.1+=1.7 veh.-parties/hr.
Veh/yr=.5 X 8 hrs. X 365=1460 parties or veh/yr.

FR 9952 (Beaverhead Tanks) Estimate
.5 veh/hr
.5 veh/hr X 8 hrs. X 365 days=1,460 veh/yr.
Turkey Creek Trail Estimate
5 people/day X 365=1,825 people/yr. div 6 people/party=304 Parties/yr.
Kel Fox Trail Estimate
10 people/day X 365 days=3650 people/yr. div 6 people/party=608 Parties/yr.
Grand Total Savannah/House Mtn.
FR120A .5 veh/hr 1,460 veh/yr.
FR9952.5 veh/hr 1,460 veh/yr.
Turkey Ck. .1 veh/hr 304 veh/yr.
Kel Fox Tr. .1 veh/hr 608 veh/yr.
Total Veh-parties/yr. 3,832

SCHNEBLY RIM

Estimate

Lower Schnebly FR153
Avg. for Lower Schnebly FR153 is 25 veh./hr.
Estimated one half of the use at Lower Schnebly goes to Upper Schnebly
Avg. 25 veh/hr div by 2=12 veh/hr.
Total Use=25 X 8 hrs. X 365 days=73,000 veh or parties/yr.
Estimate 50% of traffic of Lower Schnebly goes to Upper Schnebly
Total Use=73,000 veh/yr X 50%=36,500 veh/yr

SEDONA

Developed Sites

Sombart Trailhead Estimate 4 Parties-veh/day
Huckaby TrHd Actual 07 count 25 "
Jim Thompson TrHd Estimate 5 vehX 4 turnover/day= 20 "
Sugar Loaf TrHd Estimate 3 vehX4 turnover/day= 12 "
Andante TrHd Estimate .5 veh at one timeX4 turnover=2"
Thunder Mtn. TrHd count 07 @4 veh X 4 turnover= 16 "
Cultural Park TrHd Estimae 3 veh one timeX4 turnover=12 "
Schuerman Mtn. TrHd Estimate 1 veh @one timeX4= 4 P-v's/day

Airport Saddle actual count= 24 P-v's/day

Grand Total= 119 p-v's/day

General Residential Use Estimates

Jordan 1 person/hr X 4 turnovers/day div. by 6 people/party= .7 p-v's/day
Jim Thompson Tr 2 people/hrX4 turnov's div by 6 peop/part= 1.3 p-v's/day
Teacup Tr 2 people/hr X 4 turnovers/day div by 6 peop/part= 1.3 P-v's/day
Thunder Mtn. Tr 3 peop/hrX4 turno's/day div by 6 peop/prt= 2 p-v's/day
Chimney Rock Tr 2 peop/hrX4 turn/day div 6 peop/party= 1.3 p-v's/day
Girdner Trail 1 person/hrX4 turn/day div by 6 peop/party= 1.3 p-v's/day
Airport Loop Tr 2 peop/hr X4 turn/day div by 6 peop/party= 1.3 p-v's/day
Mystic Tr 2 peop/hr X 4 turn/day div by 6 peop/party= 1.3 p-v's/day
Carroll Cyn Tr 3 peop/hr X 4 turn/day div by 6 peop/party= 1.3 p-v's/day
Total General Residential use Estimates 11.8 p-v's/day

2005 National Visitor Use Monitoring Survey

Airport Saddle 24 Hr Count 302 + 1621 + 1876=3799 veh total
3799 div by 3= 1266 veh/day
1266 div by 24 hrs/day div by 2 counts/veh=26 veh/hr
Schnebly Rd (first half mile)= 25 veh/hr

Total Developed Sites= 119 parties-veh/day
Total General Residential Use= 11.8 " "
Total Schnebly portion in this RUU 25 veh/hrX8 hr= 200 " "
539 " "

Grand Total Sedona RUU 539 p-v's/day div by 8 hrs/day= 67 veh/hr
Percent Comm. Same as Schnebly Road=37% Comm
63% Non-Comm

Grand Total use/yr
539 parties-veh/day X 365 days/yr=196,735 parties-veh/yr.

SKELETON BONE

ROAD # __761_
REC. USE UNIT Skeleton Bone____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
1	0	0	5	100	5	5

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
0	0	0	0	0	0	0

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
2	5	62	3	38	8	4

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
1	0	0	11	100	11	11

Weighted Avg.% Comm=0 + 0 + 62(.36) +=22% and Non.Comm. 78%
__5__ Veh./Hr. Summer Weekday(.36) + _5__Veh./Hr. Summer Weekend & Hol.(.14) + _4____Veh./Hr. Fall Weekday (.36) + _11___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __5____ Veh./Hr. Avg.= veh./hr.
Total Use= 5 veh/hr X 8 hrs X 365 days= 14,600 veh or parties/yr
FR258 estimate
2 veh/hr X 8 hrs X 365= 5,840 veh or parties/yr
FR131 Based on actual Trail Register Counts for Parsons Trailhead
Parsons Trail=5242 people div by 6 people/party=874 veh or parties/yr
Grand Total=14,600 + 5,840 + 874=21,314 veh or parties/yr.

SOLDIER PASS

ROAD # __9904_
REC. USE UNIT Soldier's Pass____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
1	0	0	5	100	5	5

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
3	11	35	20	65	31	10

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
2	11	37	19	63	30	15

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
2	9	69	4	31	13	7

Weighted Avg.% Comm=0 + 35(.14) + 37(.36) +69(.14)=28% and Non.Comm. 72%
__5__ Veh./Hr. Summer Weekday(.36) + _10__Veh./Hr. Summer Weekend & Hol.(.14) + _15____Veh./Hr. Fall Weekday (.36) 7___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __10____ Veh./Hr. Avg.= veh./hr.
Total Use= 10 veh/hr X 8 hrs X 365 days= 29,200 veh or parties/yr

THIRTEEN MILE

Hwy. 260 general forest access use
1 veh/hr
9243N (13 mi. Butte Rd)
.1 veh/hr
28498 and 28021 (Jawbone Rd.)
.1 veh/hr
00009C (Sycamore Buckskin Rds.)
.1 veh/hr
Total=1.3 veh/hr X 8 hrs/day X 365 days/yr=3,796 Parties-vehicles/yr.

TOWEL

Towel Ck. Trail and Hackberry Trail
.2 veh-parties/day X 365 days=73 veh-parties/yr
Hunting Season Use
5 people/day div by 6 people/party
Aug.-Dec. 1 veh-party/day X 150 days=150 parties-veh/yr
Total 73 parties-veh/yr + 150 parties-veh/yr=223 parties-veh/yr

UPPER LOOP

Developed Sites Concessionaire Records
2004 Crescent Moon Developed Site Visitation
123,363 people X 3 people/veh avg div by 365 days/yr=111 veh/day
Trails Estimates

Herkenham	1	person/hr	X 4	turnovers/day	div	6	people/veh	=.7	parties/day	
Ridge	1	“	X 4	“	div	6	“	=.7	“	
Lime Kiln	.2	“	X 4	“	div	6	“	=.2	“	
Old Post	1	“	X4	“	div	6	“	=.7	“	
Red Rock Loop	3	people/hr	X 4	turnovers per day	div		“	=2	“	
Total Trails										**4.3 “**

Dispersed Estimates
Oak Creek 3 veh@onetime X 4 turnovers in veh/day = 12 veh/day
Chavez Ditch 2 veh@one time X 4 “ “ = 8 veh/day
Grand Total Upper Loop =135 parties-veh/day
135 p-v’s/day X 365 days/yr = 49,275 “ ‘
135 p-v’s/day div by 8 hrs/Recreation Day= 17 parties-veh/hr.

VILLAGE OF OAK CREEK

Stage Stop estimate 2 veh@one time X 4 turnover in veh/day= 8 veh/day
Trails
Woods Cyn. Tr. Count 1,573 people/yr = 3 veh/day

Jack’s Cyn Tr estimate = 3 p-veh/day

Kel Fox Tr estimate =3 p-veh/day
Turkey Ck Tr estimate = 3 p-veh/day
V. Valley School Trails = 3 p-veh/day
Total Trails =14 p-veh/day
Jack's Cyn Rd. 23 '2004 count 23 veh/hr X 8 hrs/day =184 p-veh/day
V. Valley School Rd Did not used was used for Cathedral RUU
Grand Total =206p-veh/day
Grand Total 206 parties-veh/day X 365 days =75,200 p-v's/yr
Jack's Cyn Rd was used as an indicator of veh/hr=23 p-v's/hr.

WICKIUP

FR618 (Junc. Hwy. 260) from Dec. 2004 Traffic Counter = 120 veh/day
Verde Lakes Estimated Residential Use
5 people/day div by 6 people/party = 1 p-v/day
Camp Verde Residential Use Estimated
10 people/day div 6 people/party = 1.7 p-v/day
Lake Montezuma/Rimrock Residential Use Estimated= 1 "
FR119 (Gun Range, other) = 6 "
FR9202Y = 2 "
West Clear Creek Day Use Area = 5 "
Clear Creek Caves = 1 "
Total = 138 p-v/day
Grand Total 138 p-v/day X 365 days =50,370 p-v/day
Total from Avg. FR618 count 120 veh/day div 8 hrs =15 p-v's/Hr

WINDMILL

Includes Actual Counts in CY 2007 for FR525 (beyond 525c Junc.), FR525c (beyond 525 junction) and FR 152A

ROAD # __525_
REC. USE UNIT Windmill____
Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
5	10	20	41	80	51	10

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
4	2	10	18	90	20	5

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
8	11	24	35	76	46	6

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
4	9	19	38	81	47	12

Weighted Avg.% Comm=20(.36) + 10(.14) + 24(.36) +19(.14)=20% and Non.Comm. 80%
__10__ Veh./Hr. Summer Weekday(.36) + _5__Veh./Hr. Summer Weekend & Hol.(.14) + _6____Veh./Hr. Fall Weekday (.36) + _12___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __8____ Veh./Hr. Avg.= veh./hr.

ROAD # __525C_
REC. USE UNIT Windmill____

Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
6	35	55	29	45	64	11

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
6	13	35	24	65	37	6

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
7	19	38	31	62	50	7

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
4	**13**	**30**	**30**	**70**	**43**	**11**

Weighted Avg.% Comm=55(.36) + 35(.14) + 38(.36) +30(.14)=43% and Non.Comm. 57%
__11__ Veh./Hr. Summer Weekday(.36) + _6__Veh./Hr. Summer Weekend & Hol.(.14) + _7____Veh./Hr. Fall Weekday (.36) + _11___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __10____ Veh./Hr. Avg.= veh./hr.

ROAD # __152A_
REC. USE UNIT Windmill____

Summer Weekdays

# Surveys	Comm.	% Comm	Non-Comm.	% Non.-Comm.	Total	Avg./Hr.
6	9	100	0	0	9	1.5

Summer Weekends & Holidays

# Surveys	Comm.	% Comm.	Non-Comm.	% Non. Comm.	Total	Avg./Hr.
6	9	82	2	18	11	2

Fall Weekdays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
8	14	93	1	7	15	2

Fall Weekends & Holidays

# Surveys	Comm.	% Comm.	Non. Comm.	% Non. Comm.	Total	Avg./Hr.
3	**3**	**60**	**2**	**40**	**5**	**2**

Weighted Avg.% Comm=100(.36) + 82(.14) + 93(.36) +60(.14)=88% and Non.Comm. 12%
__1.5__ Veh./Hr. Summer Weekday(.36) + _2__Veh./Hr. Summer Weekend & Hol.(.14) + _2____Veh./Hr. Fall Weekday (.36) + _2___Veh./Hr. Fall Fall Weekend & Holiday (.14) = __2____ Veh./Hr. Avg.= veh./hr.

Totals Windmill

FR525 **8 parties-veh/hr**
FR525C **10 parties-veh/hr**
FR152A **2 parties-veh/hr**
Total **20 parties-veh/hr**
Grand Total 20 p-v/hr X 8 hr/day X 365 days/yr=58,400 parties-veh/yr
Commercial %
152A **88 %**
525C **43 %**
525 **20 %**
Total **=** **151**
Avg. % Commercial Windmill 151 div 3 roads=50%

SUMMARY OF Total Use DATA

RUU	Annual Total Estimated Use by Parties of 6 or Vehicles Commercial & Non. Commercial	Estimated Avg. Percent Commercial Use	Estimated Avg. Percent Non-Commercial Use	Avg. Parties of 6 people or Vehicles Hour
Apache Maid	107,700	<1	99	14
Beaver Creek	69,700	3	97	23
Beaverhead	5,500	0	100	2
Broken Arrow	46,720	67	33	16
Casner	1,095	0	100	>1
Cathedral	103,500	7	93	35
Cedar Flat	6,200	0	100	2
Dry Creek	58,400	25	75	20
Fossil Creek Road	26,600	0	100	9
Kachina	5,800	13	87	2
Lower Schnebly	73,000	37	63	25
Middle Verde	28,800	0	100	7
Montezuma	5,100	0	100	2
Mud Tanks	4,400	0	100	2
Oak Creek Canyon	261,700	0	100	88
Red Cliffs	68,000	36	64	23
Savannah/House Mountain	3,830	0	100	2
Schnebly Rim	36,500	29	71	12
Sedona	196,740	37	63	67
Skeleton Bone	21,300	22	78	5
Soldier Pass	29,200	28	72	10
Thirteen Mile	3,800	0	100	1
Towel	220	0	100	<1
Upper Loop	49,300	11	89	17
Village of Oak Creek	75,200	6	94	23
Wickiup	50,400	0	100	15
Windmill	58,400	50	50	20