



United States Department of Agriculture

San Bernardino National Forest

Wild and Scenic Rivers

Final Environmental Assessment



North Fork San Jacinto River



Bautista Creek



Fuller Mill Creek



Palm Canyon Creek

Photos taken by VHB



Forest Service San Bernardino National Forest San Jacinto Ranger District

August 2020

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CONTENTS

Contents	iii
List of Tables	iv
List of Figures	iv
Chapter 1. Purpose and Need	1
Introduction	1
Background	1
Purpose of and Need for Action	8
Project Area.....	9
Public Involvement and Tribal Consultation.....	15
Issues and Impact Topics	16
Chapter 2. Alternatives	17
Alternatives Considered and Analyzed in Detail	17
Comparison of the Alternatives.....	20
Alternatives Considered but Dismissed	20
Chapter 3. Affected Environment and Environmental Consequences.....	21
General Methodology for Analyzing Impacts.....	21
Hydrology.....	22
Recreation and Scenery	24
Botany	28
Wildlife.....	36
Heritage Resources (Historic and Cultural)	42
Other Disclosures	45
References.....	47
Draft EA Comment Analysis	49
Appendix A: Comprehensive River Management Plan.....	A-1

LIST OF TABLES

Table 1. Classification of San Bernardino National Forest Rivers	3
Table 2. Outstandingly Remarkable Values for North Fork San Jacinto River, Fuller Mill Creek, Bautista Creek, and Palm Canyon Creek Wild and Scenic Rivers	7
Table 3. Current Daily User Capacity Levels	18
Table 4. User Capacity Triggers and Management Actions	19
Table 5. Summary Comparison of the Alternatives	20
Table 6. Forest Service Region 5 Sensitive Botanical Species	29
Table 7. Federally Listed Botanical Species	33
Table 8. Forest Service Region 5 Sensitive Wildlife Species	37
Table 9. Federally Listed Wildlife Species	39
Table 10. Draft EA Comments	49

LIST OF FIGURES

Figure 1. Project Vicinity	5
Figure 2. North Fork San Jacinto River and Fuller Mill Creek Segment Classification.....	11
Figure 3. Palm Canyon Creek Segment Classification	12
Figure 4. Bautista Creek Segment Classification.....	13

CHAPTER 1. PURPOSE AND NEED

INTRODUCTION

The San Bernardino National Forest (the National Forest) is proposing to adopt a comprehensive river management plan for the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek. This proposed comprehensive river management plan would cover all four river corridors (approximately 9,685 acres) on the San Jacinto Ranger District of the San Bernardino National Forest. This plan is administrative in nature; actions proposed include establishing a permanent boundary and establishing user capacity levels for each of the four rivers. The four river corridors have been managed as wild and scenic rivers since the recommendations were made in the San Bernardino National Forest 2005 Land Management Plan.

This environmental assessment (EA) has been prepared in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal laws and regulations. This is not a decision document; the responsible official will document the decision regarding the comprehensive river management plan in a decision notice after a 30-day public review of the pre-decisional environmental assessment.

This environmental assessment discloses the direct, indirect, and cumulative environmental effects that would result from the proposed actions and alternatives. The document is organized into three chapters and an appendix, as described below:

- Chapter 1 (Purpose and Need) includes information on the history of the proposal, the purpose and need for the proposal, and a brief summary of the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the will of the proposal and how the public responded. Issues and concerns are identified in this chapter.
- Chapter 2 (Alternatives) provides a detailed description of the agency's proposed action and alternatives. These alternatives were developed based on issues raised by the public or other agencies, internal concerns, or some combination of those things.
- Chapter 3 (Affected Environment and Environmental Consequences) describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized by resource; for example, hydrology, botany, etc. Within each section, the affected environment and current conditions are described first; they provide a baseline for evaluating and comparing the alternatives.
- Appendix A: Comprehensive River Management Plan describes how the wild and scenic river corridor would be managed. It includes a User Capacity Analysis for the four Wild and Scenic River Corridors.

BACKGROUND

The Wild and Scenic Rivers Act ("the Act") was signed into law in 1968. The Act protects free-flowing waters, water quality, and outstandingly remarkable values of many of our Nation's most spectacular rivers and safeguards the special character of these rivers, while also recognizing the potential for appropriate use and development. The Act purposefully strives to balance river development with permanent protection for the Nation's most outstanding free-flowing rivers.

To accomplish this, the Act prohibits Federal support for actions, such as the construction of dams or other instream activities that would adversely affect the river's free flow, water quality, or outstanding resource values. Designation neither prohibits development nor gives the Federal Government control over private property. The Act specifically:

- prohibits dams and other federally assisted water resource projects licensed by the Federal Energy Regulatory Commission on any designated river (Section 7(a) of the Act);
- defines a standard for water resources projects proposed above, below, or on a tributary to the designated river (Section 7(b));
- protects and enhances outstanding natural, cultural, or recreational values, with primary emphasis on protecting esthetic, scenic, historic, archaeological, and scientific features (as long as limiting uses for this protection and enhancement does not interfere with public use and enjoyment of these values) (Section 10(a) of the Act);
- withdraws public lands that are within the river boundary from "entry, sale, or other disposition" (Section 8(a)(b));
- directs the Secretaries of the Interior and Agriculture (and heads of other Federal agencies) to develop management policies and plans that are necessary for protecting designated rivers (Section 12(a), and for the heads of other Federal agencies to "cooperate with the Secretary of the Interior and...State water pollution control agencies" to eliminate or reduce pollution in the rivers (Section 12(c));
- ensures water quality is maintained (Section 1(b)); and
- requires the creation of a comprehensive river management plan that addresses resource protection, development of lands and facilities, user capacities, and other management practices necessary to achieve the purposes of the Act. (Section 3(d)(1)).

During development of San Bernardino National Forest's 2005 Land Management Plan, the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek were analyzed to determine their eligibility for inclusion into the National Wild and Scenic Rivers System.

In 2009, Congress passed the 2009 Omnibus Public Land Management Act (Public Law 111-11), which added 10.2 miles of the North Fork San Jacinto River, 3.5 miles of Fuller Mill Creek, 9.8 miles of Bautista Creek, and 8.1 miles of Palm Canyon Creek to the National Wild and Scenic Rivers System. Each river was established under Public Law 111-11 as either wild, scenic, recreational, or some combination thereof. Public Law 111-11 states that the entire designated stretch of Bautista Creek will be administered as a recreation river, and the entire designated stretch of Palm Canyon Creek will be administered as a wild river. Portions of the designated stretch of the North Fork San Jacinto River will be administered as wild river, with lesser stretches administered as scenic and recreational. Portions of the designated stretch of Fuller Mill Creek will be administered as a scenic river, with a lesser stretch administered as a recreational river.

Classification

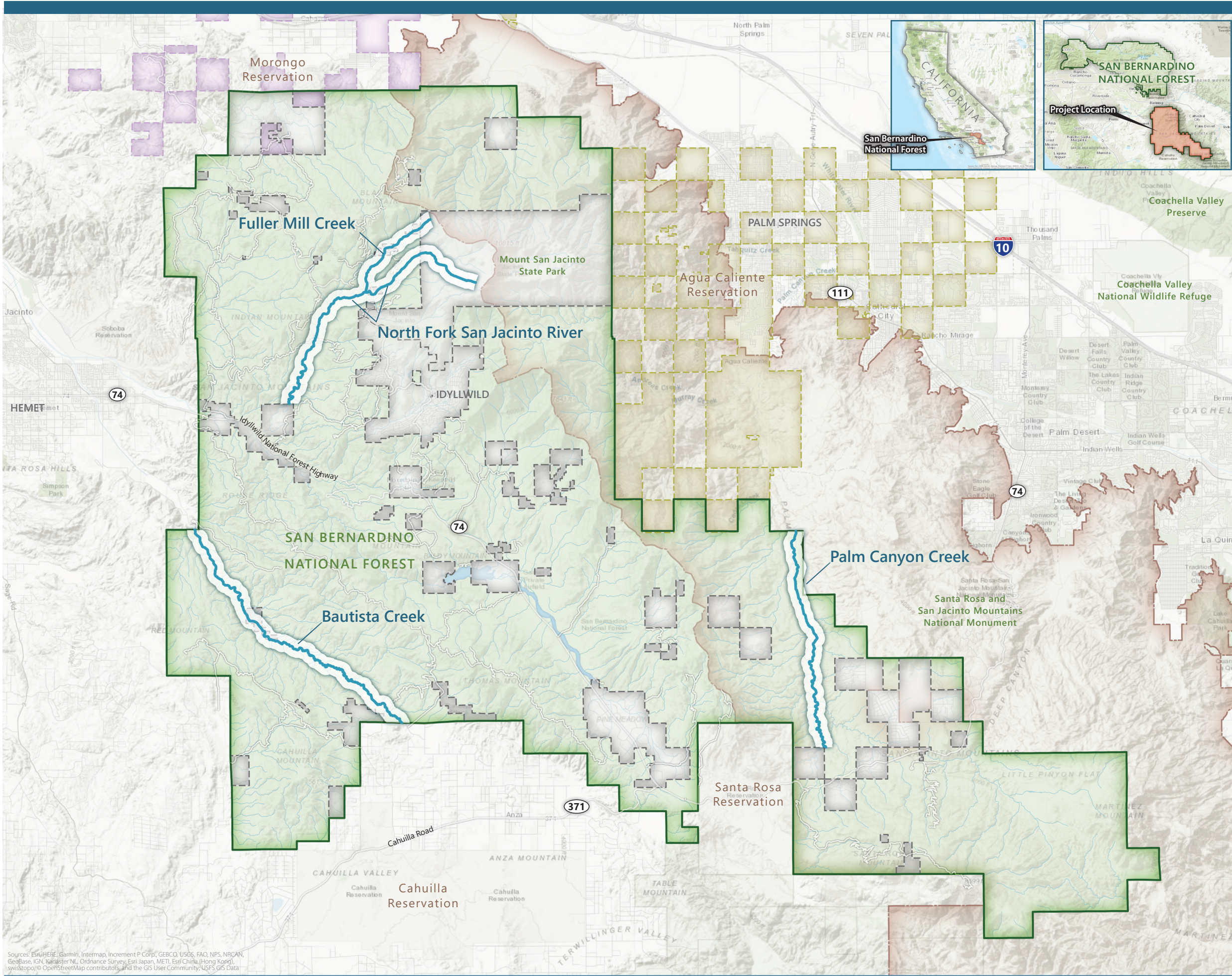
The wild and scenic rivers and their respective segments were classified based on an eligibility study approved in the 2005 Land Management Plan (USDA Forest Service 2005a-c) and designated in the 2010 Land Management Plan Amendment (USDA Forest Service 2010). Collectively, these documents are referred to in this EA as the Forest Plan. There are three classes of river designated in the Forest Plan: wild, scenic, and recreational. These classes represent a development scale and serve as a framework for future

management; they are not synonymous with the river’s outstandingly remarkable values. Table 1 below summarizes the classifications of each river and figure 1 shows the location of each segment.

Table 1. Classification of San Bernardino National Forest Rivers

	North Fork San Jacinto River	Fuller Mill Creek	Palm Canyon Creek	Bautista Creek
Mileage of Classified WILD Sections	7.2	--	8.1	--
Mileage of Classified SCENIC Sections	2.2	2.6	--	--
Mileage of Classified RECREATION Sections	0.7	0.9	--	9.8
Total designated mileage	10.1	3.5	8.1	9.8

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San Bernardino National Forest
 San Jacinto Ranger District
 Riverside County, California



- San Bernardino National Forest (US Forest Service)
- Santa Rosa and San Jacinto Mountains National Monument
- Morongo Reservation
- Agua Caliente Reservation
- Non Forest Service Land
- ~ Wild and Scenic River



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, © OpenStreetMap contributors, and the GIS User Community; USFS GIS Data

**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 1
 Project Vicinity

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Outstandingly Remarkable Values

The Act requires that each river possess one or more outstandingly remarkable values (ORVs) to qualify for designation. A summary of the ORVs is shown in table 2 below. In order to be assessed as outstandingly remarkable, a river-related value must be a unique, rare, or exemplary feature that is significant at a comparative regional or national scale. While the spectrum of resources that may be considered is broad, all values should be directly river-related. A resource assessment was started in 2005 during development of the Land Management Plan, to evaluate river eligibility and determine which resources within the designated corridor qualify as an ORV. This assessment was revisited and completed in November 2017 to support development of the comprehensive river management plan.

Table 2. Outstandingly Remarkable Values for North Fork San Jacinto River, Fuller Mill Creek, Bautista Creek, and Palm Canyon Creek Wild and Scenic Rivers

	North Fork San Jacinto River	Fuller Mill Creek	Palm Canyon Creek	Bautista Creek
Scenery	X	--	X	--
Botany	--	—	X	X
Wildlife	X	X	--	X
Heritage Resources (Historic)	--	—	--	X
Heritage Resources (Cultural)	--	—	X	X

River Descriptions

North Fork San Jacinto River

A total of 10.1 miles of the North Fork San Jacinto River is designated as a wild, scenic, or recreational river. These segments are described below.

Three segments of the river are designated as wild including: 1) the 2.12-mile segment from the source of the river at Deer Springs in Mt. San Jacinto State Park (the State Park) to the State Park boundary, 2) the 2.15-mile segment from the river's confluence with Fuller Mill Creek to a quarter mile upstream of the 5S09 road crossing, and 3) the 2.91-mile segment from the Stone Creek confluence to the northern boundary of Township (T)5S, Range (R)2E, Section (Sec)17, using the San Bernardino Baseline Meridian (SBBM).

Two segments are designated as scenic including: 1) the 1.66-mile segment from the State Park boundary to the Lawler Park boundary and 2) the 0.6-mile segment from a quarter mile upstream of the 5S09 road crossing to the river's confluence with Stone Creek.

One segment is designated as recreational: the 0.68-mile segment from the Lawler Park boundary to the confluence with Fuller Mill Creek.

These segments have outstandingly remarkable values for scenery and wildlife. The wild river segments are free of impoundments, inaccessible except by trail, and in a primitive watershed with unpolluted waters. The recreational segment of the North Fork San Jacinto River is readily accessible by road and trail and has some recreation improvements along its shore such as developed recreation sites and cabins.

Fuller Mill Creek

The entire 3.5-mile length of Fuller Mill Creek is designated as either a scenic or recreational river. Two scenic river segments include: 1) a 1.2-mile segment from the source of the creek to the Pinewood property and 2) a 1.4-mile segment from the Pinewood property boundary to its confluence with the North Fork San Jacinto River. One recreational river segment consists of a 0.9-mile segment in the Pinewood property boundary. Fuller Mill Creek has outstandingly remarkable values for wildlife. It is readily accessible by road or trail, has some development, and less than pristine water quality.

Palm Canyon Creek

The 8.1-mile segment of Palm Canyon within the National Forest boundary is designated as a wild river. It has outstandingly remarkable values for scenery, botany, and heritage resources (cultural). It is free of impoundments, inaccessible except by a non-motorized trail, and in a primitive watershed with unpolluted waters.

Bautista Creek

The 9.8-mile segment of Bautista Creek within the National Forest boundary is designated as a recreational river. The creek has outstandingly remarkable values for botany, wildlife, and heritage resources (historic and cultural). The creek is readily accessible by road or trail, has some development on the State lands, and less than pristine water quality.

PURPOSE OF AND NEED FOR ACTION

Purpose

The purpose of this proposal is to adopt a comprehensive river management plan to protect and enhance the values for which the rivers were designated (free flowing, water quality, and outstandingly remarkable values) and identify and implement Forest Service management actions needed to protect these values within the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek corridors. Section 3 of the WSRA (16 USC 1274, as amended) specifies a comprehensive river management plan will be developed for the designated river corridor.

Planning is needed to integrate management of multiple resources, resource designations, and activities in the planning area. Management of uses on public lands is necessary in this congressionally designated area to address private, public, and administrative access needs; protect resources; promote public safety; and minimize conflicts among uses of public lands.

Based upon the review of the public input, evaluation of corridor conditions, and need for action, the comprehensive river management plan will focus on the following:

- as required by law, develop a comprehensive river management plan that addresses resource protection, land use, user capacities, and other management practices
- protect outstandingly remarkable values
- ensure free flowing conditions and water quality is maintained

The purpose of this environmental assessment is to provide a basis for comparing management alternatives and adopting a comprehensive river management plan for the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek corridors.

Need

By designating the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek as wild and scenic rivers, Congress directed the Forest Service to develop a comprehensive management plan for the river segments under their jurisdiction (appendix A). As part of this action, the Forest Service must also develop an environmental assessment to fulfill this mandate for the designated segments of the four rivers under their jurisdiction.

PROJECT AREA

The following designated rivers are all in the State of California, Riverside County, San Bernardino National Forest.

North Fork San Jacinto River

The North Fork San Jacinto River has headwaters at two major locations, both at 10,000 feet in the Mt. San Jacinto State Park. One fork is located in Little Round Valley just west of San Jacinto Peak at T4S, R3E, Sec20, SBBM. The other fork is located at Deer Springs on Marion Mountain at T4S, R3E, Sec 29, SBBM. Mileage is computed from the Little Round Valley headwater. The river first flows westerly through the State Park. The river then leaves State lands, flowing through the National Forest into Section 24, crossing National Forest System Road 4S02. From there it enters the Lawler Park private land parcel in Section 26, then joins Fuller Mill Creek (described below). It then re-enters the National Forest, flowing west and southwest. The North Fork San Jacinto River enters another parcel of private land at Section 17, finally joining the South Fork of the San Jacinto River near State Highway 74 at 2,200 feet at T5S, R2E, Sec 18, SBBM. Many tributary creeks feed into this river. See figure 2 for a map of the North Fork San Jacinto River.

Fuller Mill Creek

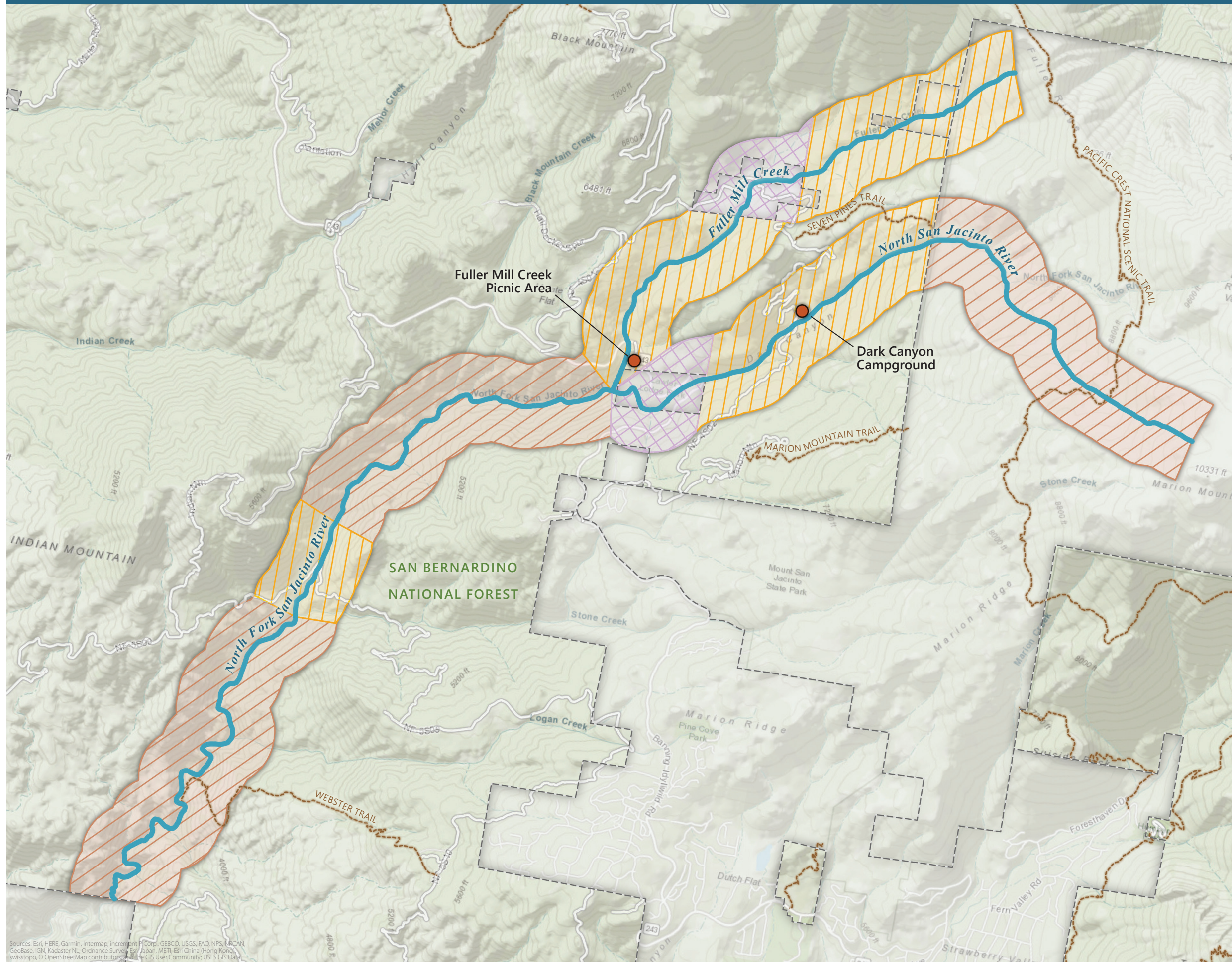
Fuller Mill Creek headwaters is located at 7,800 feet on the southwestern flank of Fuller Ridge in the Mt. San Jacinto State Park at T4S, R3E, Sec 18, SBBM. The creek first flows southwesterly through the State Park. The creek then leaves State lands, flowing through the Pine Wood parcel of private land in Section 13. From there it enters the National Forest, flowing southwest and south. From there it flows under State Highway 243, skirts the Lawler Park parcel of private land, and then joins the North Fork San Jacinto River (described above) at 5,100 feet at T4S, R2E, Sec 26, SBBM. See figure 2 for a map of Fuller Mill Creek.

Palm Canyon Creek

The intermittent creek in Palm Canyon has many minor headwaters in the Vandeventer Flat area of the Santa Rosa Indian Reservation (the Reservation) at 4,800 feet at T7S, R4E, Sec 25, SBBM. The creek first flows north to northeast through the Reservation, crossing under California State Highway 74. It then leaves Reservation lands, flowing through a parcel of private land in Section 7. After that, it travels through the National Forest within the Santa Rosa and San Jacinto Mountains National Monument, eventually entering Bureau of Land Management lands at 2,000 feet at T6S, R4E, Sec 1, SBBM. See figure 3 for a map of Palm Canyon Creek.

Bautista Creek

Bautista Creek has its headwaters at 4,600 feet on the southwest flank of a ridge between Horse Creek Canyon and Bautista Canyon at T6S, R3E, Sec 31, SBBM. The creek first flows southeasterly through the National Forest. The creek then leaves the National Forest, flowing through private land. From there it re-enters the National Forest, flowing northwest through Bautista Canyon. Then it enters State of California lands in Section 20. Bautista Creek re-enters the National Forest in Section 18, reaching the National Forest boundary again at 2,300 feet at T6S, R1E, Sec 2, SBBM. See figure 4 for a map of Bautista Creek.



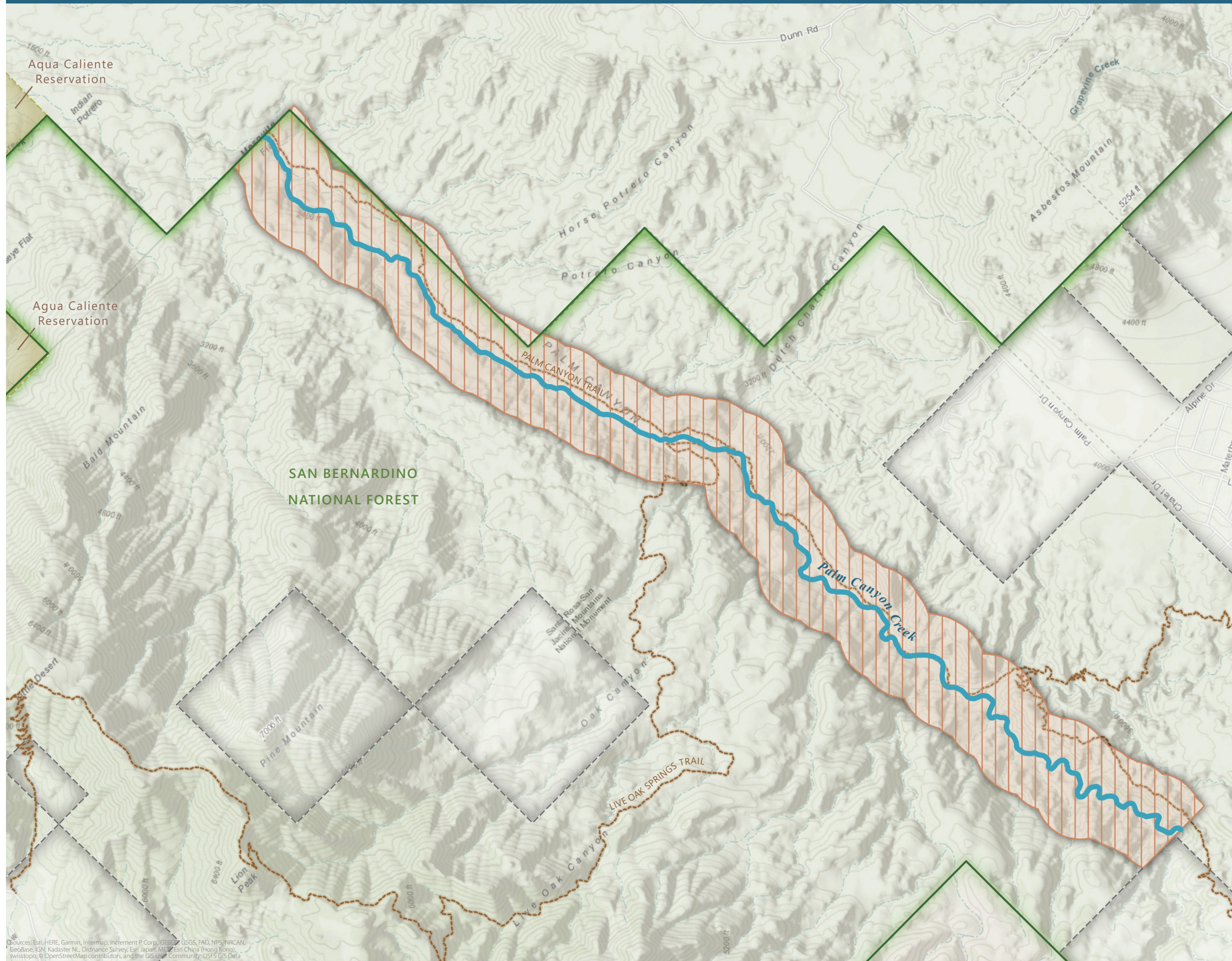
- San Bernardino National Forest (US Forest Service)
- Santa Rosa and San Jacinto Mountains National Monument
- Non Forest Service Land
- Wild and Scenic River
- Trails
- Recreational River
- Scenic River
- Wild River



**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 2
**North Fork San Jacinto River
 and Fuller Mill Creek
 Segment Classification**

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community; USFS GIS Data



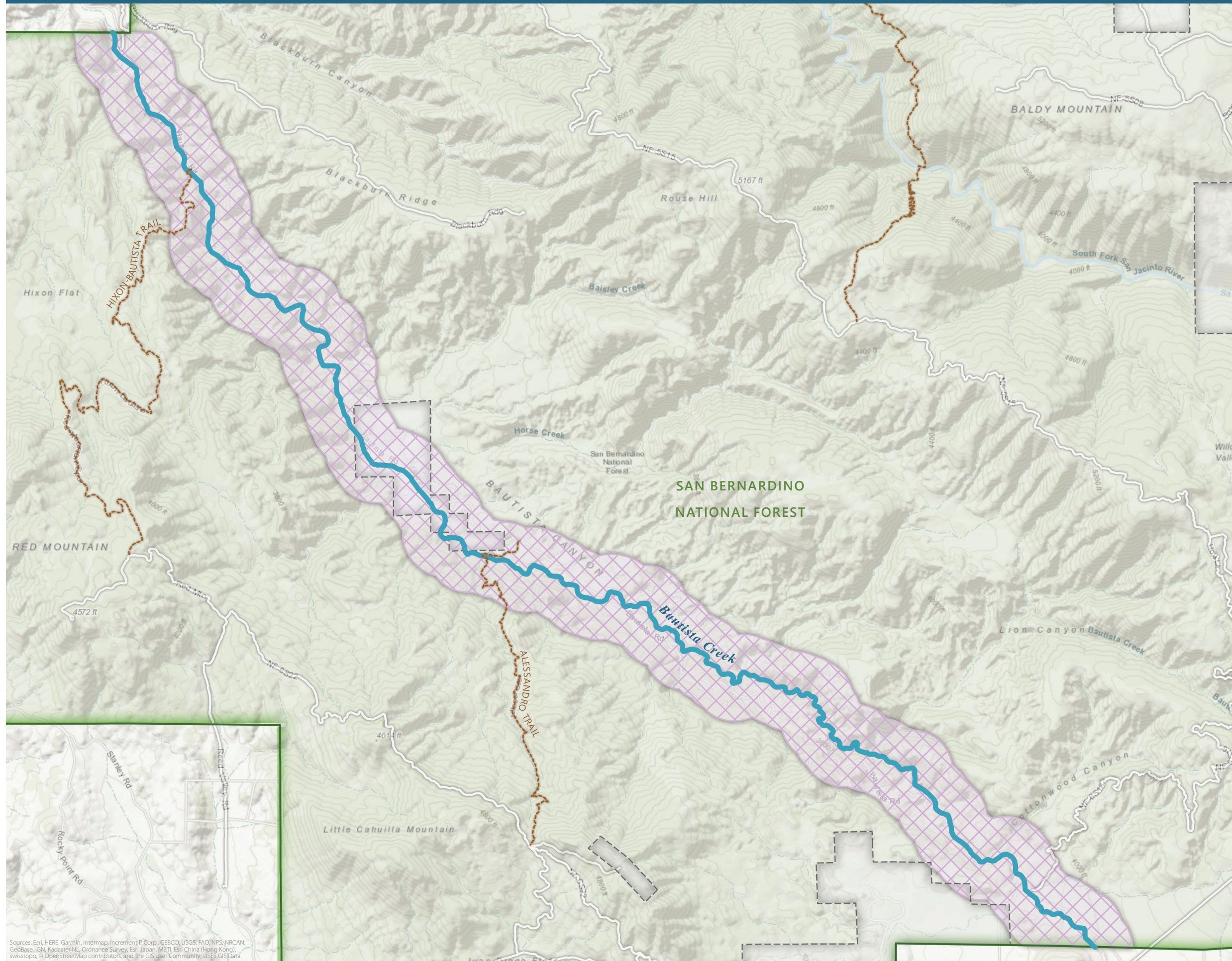
- San Bernardino National Forest (US Forest Service)
- Santa Rosa and San Jacinto Mountains National Monument
- Agua Caliente Reservation
- Non Forest Service Land
- Wild and Scenic River
- Trails
- Recreational River
- Scenic River
- Wild River



**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 3
**Palm Canyon Creek
 Segment Classification**

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community, USFS GIS Data



- San Bernardino National Forest (US Forest Service)
- Santa Rosa and San Jacinto Mountains National Monument
- Non Forest Service Land
- Wild and Scenic River
- Trails
- Recreational River
- Scenic River
- Wild River



**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 4
**Bautista Creek
 Segment Classification**

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community, USGS GIS Data

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PUBLIC INVOLVEMENT AND TRIBAL CONSULTATION

Public Involvement

The proposal was listed in the San Bernardino National Forest's current schedule of proposed actions beginning November 21, 2019. A scoping notice was posted on the Forest website and was provided to the public and other agencies for comment during the scoping period (December 12, 2019 to January 11, 2020). Public notice was also posted in the Idyllwild Town Crier on December 12, 2019. No comments were received. The Draft EA and CRMP was posted on the Forest website and was provided to the public and other agencies for comment from February 20, 2020 to March 20, 2020. See "Response to Comments" section for information on comments received and responses.

Tribal Consultation and Government Consultation

Per Public Law 111-11, for Palm Canyon, all segments are to be administered by the Secretary of Agriculture, and the Secretary shall enter into a cooperative management agreement with the Agua Caliente Band of Cahuilla Indians to protect and enhance river values.

Tribal consultation was conducted with the Agua Caliente Band of Cahuilla Indians in February and July of 2020.

As part of its ongoing commitment under Section 7 of the Endangered Species Act (ESA), the Forest Service has completed several consultations with the US Fish and Wildlife Service (USFWS) for ongoing land management activities. These consultations are the site-specific counterparts to the programmatic-level consultation conducted for the 2005 revised Land Management Plan. Eleven ongoing activities were included in these consultations including invasive species management, roads and trails maintenance, forest products harvesting, and recreation. The recreation management program, as described in the consultations, included (but was not limited to) campgrounds, visitor centers, dispersed recreation, target shooting, and trail/trailhead use. These Ongoing Activity Consultations covered all federally-listed plants and wildlife known to occur on the San Bernardino National Forest, including those found within the four Wild and Scenic Rivers. Design Criteria were incorporated into the Ongoing Activity Consultations to minimize or avoid adverse impacts to federally-listed plants and wildlife. Incidental Take Statements were provided for many of the species evaluated in the consultations for recreation management activities. Ongoing recreation activities on the San Bernardino National Forest are compliant with the ESA. Specific consultations include:

- FWS-05B0017-05F0009-R002. Biological Opinion Programmatic Biological Opinion for the Revised Land Management Plans for the Four Southern California National Forests. September 30, 2013.
- FWS-SB/WRIV-08B0680-09F0227. Biological and Conference Opinions for Various Ongoing Activities on the San Bernardino National Forest with Effects to Eight Riparian Species. December 6, 2012.
- FWS-SB-13BO247-13I0210. Letter of Concurrence - Request for Informal Section 7 Consultation regarding Ongoing Activities that Affect coastal California Gnatcatcher in the San Bernardino National Forest. April 12, 2013.

- FWS-WRIV-12B0007-12FOO10. Formal Section 7 Consultation for Ongoing Activities that Affect Quino Checkerspot Butterfly on the San Bernardino National Forest, San Jacinto Ranger District. May 3, 2013.
- FWS-SB-13B0290-13F0277. Formal Section 7 Consultation for Ongoing Activities that Affect Desert Tortoise on the San Bernardino National Forest, Front Country and Mountaintop Ranger Districts. May 10, 2013.
- FWS-ERIV-13B0044-13I0242. Letter of Concurrence - Section 7 Consultation for Forest Service On-going Activities that May Affect Peninsular Bighorn Sheep in the San Bernardino National Forest, San Jacinto Ranger District. May 13, 2013.
- FWS-WRIV-12B0209-12F0357. Biological Opinion for Use and Maintenance of the Fuller Mill Creek Picnic Area and Dark Canyon Campground, San Bernardino National Forest. August 8, 2013.
- FWS-SB-13B0079-13F0109. Biological Assessment of Ongoing Activities that affect Twelve Mountain Plant Species on the San Bernardino National Forest, Mountaintop Ranger District. March 7, 2019.

ISSUES AND IMPACT TOPICS

As defined in NEPA regulations (40 CFR 1500.4[1]), key issues are used in the development of alternatives to the proposed action. The key issues are given special consideration by the decision maker when selecting an alternative. Guided by the Forest Plan, the interdisciplinary team addressed the key issues identified during scoping. The following key issues were identified for development of the comprehensive river management plan:

- resource protection
 - water quality
 - heritage values
 - wildlife and botany values
- development of lands and facilities
- user capacities

CHAPTER 2. ALTERNATIVES

This chapter describes the alternatives considered for managing the river corridors. It compares the alternatives, providing a basis for choice among options by the decision maker and the public. The Forest Service is required by law to develop a comprehensive river management plan that addresses resource protection, development of lands and facilities, user capacities, and other management practices necessary to achieve the purposes of the Act.

ALTERNATIVES CONSIDERED AND ANALYZED IN DETAIL

Because no unresolved conflicts emerged from issues that fell within the scope of the project, this environmental assessment evaluates a single action alternative—the proposed action. A no-action alternative—in which management continues under existing standards and guidelines—is analyzed to provide a baseline for comparing environmental impacts.

Alternative 1 (No-Action Alternative)

Under the no-action alternative, the current Forest Plan, Section 7 of the Act, state water quality standards, existing Forest Service policy 2670.32 which directs management for Forest Service sensitive species, and other applicable laws would continue to guide management of the project area. Section 7 of the Act states that Federal agencies must:

“protect federally designated rivers and congressionally authorized study rivers from the harmful effects of water resources projects. It requires evaluation of federally assisted water resources projects and a determination by the river-administering agency.” (IWSRCC No Date)

In addition to the Forest Plan, the ESA and Wilderness Act govern the species and wilderness encompassed within the river corridors. Specifically, the ESA regulates the conservation and protection of endangered and threatened species as well as their habitats (USFWS 2019). The Wilderness Act manages wilderness areas with the intent of preserving their unique character (Wilderness Act of 1964, Public Law 88–577). The corridor boundary would continue to be temporary and be located approximately 1/4 mile from the banks of each river. Scenery management along these river corridors would continue to be guided by *Landscape Aesthetics: A Handbook for Scenery Management* (USDA Forest Service 2003). Under the no-action alternative, this boundary would remain an interim boundary and therefore subject to change. No additional management strategies or thresholds would be implemented to accomplish the purpose of the wild and scenic river designation.

Alternative 2 (Proposed Action)

This alternative would adopt a comprehensive river management plan for each of the four rivers which includes the same management as the no-action alternative, and which also includes desired conditions, standards and guidelines, as well as management strategies to address key issues and achieve the purpose of the Act. Most of these actions are a continuation of current management laid out in the Forest Plan, with a few additional protections. Additional protections include recommending a permanent boundary for each of the four rivers and establishing user capacity levels and associated thresholds for taking

action. Recommended permanent boundaries are shown in Figures 2 through 4 and user capacity levels and thresholds are discussed below. See appendix A for the full comprehensive river management plan and additional details of management strategies.

Section 3(d)(1) of the Wild and Scenic Rivers Act directs federal river-administering agencies to “address...user capacities” in a comprehensive river management plan. Table 3 lists the proposed action’s user capacities for each river corridor, the estimated current use levels for each river corridor, and expresses the current use levels as a percentage of user capacity. Additional information describing the approach and methodology used to calculate user capacities can be found in the *User Capacity Analysis for San Bernardino National Forest Wild and Scenic River Corridors Technical Memo* appended to appendix A.

Table 3. Current Daily User Capacity Levels

River	Estimated Current Daily Use Levels	Daily User Capacities	Current Use as Percentage of Capacity
Fuller Mill Creek	42 visitors per day	229 visitors per day	18%
Palm Canyon Creek	15 visitors per day	1,947 visitors per day	1%
N. Fork San Jacinto R.	20 visitors per day	120 visitors per day	16%
Bautista Creek	5 vehicles per day	1,727 vehicles per day	.2%

Monitoring use levels in the corridors is a necessary component of alternative 2 because if use levels were to climb, the proposed action recommends potential management actions that could be taken at various stages of capacity, or “triggers.” For example, if Fuller Mill Creek Picnic Area were to fill to capacity at some point during at least 50% of monitoring days (Trigger 1), increased onsite staffing presence would be recommended. If that Trigger 1 management action did not reduce use levels sufficiently, and the Picnic Area were to fill to capacity at some point during at least 75% of monitoring days, other management actions could be taken. These management actions would be subject to additional NEPA review as warranted. This system of triggers and management actions is described below in Table 4 and in further detail in the *User Capacity Analysis for San Bernardino National Forest Wild and Scenic River Corridors Technical Memo* appended to appendix A.

Table 4. User Capacity Triggers and Management Actions

River	Trigger	Management Action
Fuller Mill Creek	Trigger 1. Fuller Mill Creek Picnic Area fills to capacity at some point during at least 50% of monitoring days.	<ul style="list-style-type: none"> ■ Increase distribution of information about other picnic sites in the area. ■ Increase onsite staffing presence to enforce creek closure area.
	Trigger 2. Fuller Mill Creek Picnic Area fills to capacity at some point during at least 75% of monitoring days.	<ul style="list-style-type: none"> ■ Make necessary changes to picnic area access, such as sizing the parking lot to accommodate fewer visitor groups at one time or instituting time limits on parking.
Palm Canyon Creek ¹	Trigger 1. Average hourly intergroup encounters on the Palm Canyon Trail exceeds 5 (~80 visitors per hour).	<ul style="list-style-type: none"> ■ Collect data on intergroup encounters during the next visitor season to refine the relationship between trail counts and intergroup encounters. ■ Increase distribution of information about other similar resources in the area. ■ Encourage visitors to start their visit earlier or later in the day to avoid peak use times.
Palm Canyon Creek ² (continued)	Trigger 2. Average hourly intergroup encounters on the Palm Canyon Trail exceeds 10 (~160 visitors per hour).	<ul style="list-style-type: none"> ■ Make necessary changes to trail access, such as limiting parking to reduce the number of visitors on the trail at one time, institute a mandatory daily reservation system to spread use to off-peak days, or limit use with a mandatory permit system.
N. Fork San Jacinto River	Trigger 1. Dark Canyon Campground fills to capacity on 15% of nights during the use season.	<ul style="list-style-type: none"> ■ Monitor occupancy during the next visitor season through direct observations. ■ Increase distribution of information about other campgrounds in the area.
	Trigger 2. Dark Canyon Campground fills to capacity on 30% of nights during the use season.	<ul style="list-style-type: none"> ■ Make necessary changes to campground access, such as instituting a mandatory reservation system to make sure campground occupancy does not exceed capacity.
Bautista Creek	Trigger 1. Average hourly intergroup encounters on the Cottonwood Truck Trail exceeds 10 (~72 visitors/vehicles per hour).	<ul style="list-style-type: none"> ■ Collect data on intergroup encounters during the next visitor season to refine the relationship between trail counts and intergroup encounters. ■ Increase distribution of information about other similar resources in the area. ■ Encourage visitors to start their visit earlier or later in the day to avoid peak use times.
	Trigger 2. Average hourly intergroup encounters on the Cottonwood Truck Trail exceeds 20 (~144 visitors/vehicles per hour).	<ul style="list-style-type: none"> ■ Make necessary changes to trail access, such as instituting a mandatory daily reservation system to spread use over all days, or limit use with a mandatory permit system.

¹ All tribal access to and use of the Palm Canyon Creek WSR corridor will be exempt from the system of user capacity triggers and corresponding management actions.

² All tribal access to and use of the Palm Canyon Creek WSR corridor will be exempt from the system of user capacity triggers and corresponding management actions.

COMPARISON OF THE ALTERNATIVES

Table 5 below provides a brief summary comparing the actions proposed for each of the alternatives discussed above.

Table 5. Summary Comparison of the Alternatives

No-Action Alternative	Proposed Action
Existing Forest Service management plans, Forest Service policies, and other applicable laws continue to be implemented to protect resources.	Same as the no-action.
River corridor boundaries will continue to be temporary and subject to change.	A permanent boundary would be established for each of the four river corridors, located 1/4 mile from the bank of each river.
No user capacities or associated thresholds would be implemented.	User capacity for each river would be established, along with thresholds for taking management action.

ALTERNATIVES CONSIDERED BUT DISMISSED

During the internal scoping meeting conducted at the November 2017 San Bernardino National Forest Comprehensive River Management Plan Workshop, an alternative was considered that could improve the free-flowing quality of Bautista Creek. The Hixon Off-Highway Vehicle (OHV) Trail (2E43) is currently hardened with rock each spring where it crosses Bautista Creek prior to the Arroyo Toad breeding season. This action is undertaken to prevent breeding within the crossing and to reduce any sedimentation into the stream (USFWS 2012). Alternatives to this rock hardening were considered, such as a bridge over the stream. The design and cost of these alternatives were considered infeasible and were dismissed from further consideration.

CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section summarizes the affected environment and the potential changes and impacts due to implementation of an alternative and the basis for comparison of alternatives. Resources determined by the interdisciplinary team to be potentially affected are identified and analyzed; these include the ORVs relevant to each river as well as global resource values, such as hydrology and recreation (user capacity). The summaries focus on the resource issues and project goals disclosed in chapter 1.

GENERAL METHODOLOGY FOR ANALYZING IMPACTS

In accordance with the CEQ regulations for implementation of NEPA, direct, indirect, and cumulative impacts are described under each impact topic (40 CFR 1502.16), and the impacts are assessed in terms of context and intensity (40 CFR 1508.27). To determine impacts, the current condition of each resource analyzed is presented below, followed by a comparison with the alternatives described in chapter 2.

In the comprehensive river management plan (appendix A), river managers must make user capacity decisions even when use levels do not currently threaten river values or the established desired conditions for those values. In San Bernardino National Forest, existing information suggests that current use levels in the wild and scenic river corridors are relatively low and are not likely to threaten river values or the established desired conditions for those values. Decisions about capacity would not result in near-term management actions to regulate use levels.

Cumulative Impacts Analysis Methodology

Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts were determined for each impact topic by combining the impacts of the alternative being analyzed and other past, present, and reasonably foreseeable future actions that would also result in beneficial or adverse impacts. Several actions were identified through the project scoping process and are summarized below.

Past, Present, and Reasonably Foreseeable Future Actions

Anza Electric Permit Renewal. This project is to renew the operating permit for Anza Electric, the public utility on the southern half of the San Jacinto Ranger District. The purpose of this project is to bring the permit up-to-date with current land management objectives and guidelines for resources in the area (USDA Forest Service 2013). Reissuing the permit would meet the necessity of continued electrical service in rural communities, benefiting visitors, residents, and USFS employees, while ensuring that all permitted activities are compatible with existing animal, plant, hydrologic, and heritage resources (USDA Forest Service 2013). The project area overlaps with the Bautista Creek corridor. The project proposes continued operation of existing power lines as well as continued access to existing non-Forest Service-system roads.

Mountain Yellow-Legged Frog Reestablishment and Translocation. The USFWS proposes to approve the reestablishment of federally endangered mountain yellow-legged frog and issue 10(a)(1)(A) permits in accordance with the ESA, for the reestablishment and/or population augmentation of the species (USDA Forest Service 2019 and USFWS 2018). The project area overlaps with the North Fork San Jacinto River and Fuller Mill Creek corridors.

Recovery Plan for Southern California Distinct Population Segment of the Mountain Yellow-Legged Frog. The USFWS's recovery plan to help restore Southern California populations includes "habitat acquisition, nonnative trout removal, recreational closures, disease research, extensive surveys and monitoring, education outreach, and captive breeding and reestablishment" (2018).

HYDROLOGY

Affected Environment

The North Fork San Jacinto River, Fuller Mill Creek, and Bautista Creek are all headwater streams within the Upper San Jacinto River 5th hydrologic unit code watershed (HUC #1807020201) that drains to the San Jacinto River, which lies within a partially endorheic watershed draining into Lake Elsinore in the western end of Riverside County, California. Palm Canyon Creek is a headwater stream within the Palm Canyon Wash 5th hydrologic unit code watershed (HUC# 1810020102) that drains into Whitewater River and to the south into the endorheic Salton Sea drainage basin in Riverside and Imperial Counties, California.

The North Fork San Jacinto River is free flowing from its headwaters to a diversion on private land in Section 17, a distance of 11.4 miles. The creek flows intermittently for some of its length during the mid to late summer and fall, with a mean annual flow of 12.2 cubic feet per second. The North Fork San Jacinto River watershed is steep with an elevation of over 10,000 feet at the upper ridge and an elevation of 3,100 as the river leaves the National Forest. The watershed is primitive with evergreen forest and shrub/scrub as the dominant land cover. The dominant soil condition is well- to somewhat excessively drained gravelly, sandy soils atop weathered and unweathered bedrock. Annual precipitation is approximately 27.5 inches. The natural condition of the stream channel and watershed leads to negligible pollutants within the channel waters.

Fuller Mill Creek is free flowing from its headwaters to the intersection with the North Fork San Jacinto River, a distance of 3.4 miles. The creek flows intermittently for some of its length during the mid to late summer and fall, with a mean annual flow of 2.3 cubic feet per second. The Fuller Mill Creek watershed is steep with an elevation of over 8,700 feet at the upper ridge and an elevation over 5,000 feet at the confluence with the North Fork San Jacinto River. The watershed is primitive with evergreen forest as the dominant land cover. The dominant soil condition is well- to somewhat excessively drained gravelly, sandy soils atop weathered and unweathered bedrock. Annual precipitation is approximately 30 inches. The natural condition of the stream channel and watershed leads to negligible pollutants within the channel waters.

Palm Canyon Creek is free flowing from its headwaters to the National Forest boundary, a distance of 13.1 miles. The creek flows intermittently for all of its length during late spring to early winter with a mean annual flow of 3.45 cubic feet per second. The Palm Canyon Creek watershed is moderately steep

with elevations peaking at over 8,000 feet at the upper watershed boundary at the Santa Rosa Mountain to over 2,000 feet as the stream exists the National Forest. The watershed land cover is primarily low-density shrub/scrub with evergreen forest along its western and southern upper watershed boundary, and a small area of low intensity residential development in the southeastern headwaters. Soils are predominantly sand and unweathered bedrock with rock outcroppings with a high runoff potential. Annual precipitation is approximately 15.6 inches. Due to the high runoff potential, low vegetation, and low development cover, pollutant levels are expected to be less than pristine, with sediment and sand mobilized during flash flood events as the highest potential pollutant.

Bautista Creek is free flowing from its headwaters to the intersection with the National Forest boundary, a distance of 13.4 miles. The creek flows intermittently for some of its length during the mid to late summer and fall, with a mean annual flow of 3.0 cubic feet per second. The Bautista Creek watershed is steep to moderately steep with an elevation of over 6,500 feet at the upper ridge to the north and a low elevation of approximately 2,300 feet as the stream exits the National Forest. The watershed land cover is predominantly scrub/shrub with the main channel's headwater dominated by low intensity residential and institutional development land cover. The dominant soil condition is well- to excessively drained gravely and cobbly sandy soils atop weathered bedrock. Annual precipitation is approximately 19 inches. The sandy soils provide a good medium for water filtration; however, the lack of forested land with its dense root zone combined with low intensity development in the upper watershed leads to less than pristine water quality. The most likely pollutant would be sediment, such as sand particles as they mobilize during flashy high flow events.

Impacts of No-Action Alternative

Under the no-action alternative, existing federal guidelines, such as those in the Forest Plan and Section 7 of the Act, as well as state water quality standards, would continue to protect water quality in the four designated rivers. Under the no-action, not adopting the CRMP would cause the Forest Service to be out of compliance with the Act. Section 7 of the Act states that Federal agencies must:

“protect federally designated rivers and congressionally authorized study rivers from the harmful effects of water resources projects. It requires evaluation of federally assisted water resources projects and a determination by the river-administering agency.” (IWSRCC No Date)

Overall, the no-action alternative would have no impact on hydrology because this value is already protected by the existing protections of the Act and State water quality standards.

Impacts of Proposed Action

Under the proposed action, impacts would be the same as current management strategies, but would add additional protection for hydrology resources, such as a permanent boundary and user capacity thresholds. Any proposed water resources projects would have to be reviewed under section 7 of the Act. This would have no impact on hydrology because this value is already protected by the existing Act. Establishing a permanent boundary would result in a beneficial impact because it would include additional protection of the river corridor from development, which could prevent sediment runoff into the river that may otherwise degrade water quality. Similarly, establishing capacity thresholds would have a beneficial

impact on water quality because they would afford additional protections due to less impact from recreational use.

Cumulative Impacts

There would be no impacts on hydrology under the no-action alternative and there would be beneficial impacts under the proposed action. Although other past, present, and reasonably foreseeable actions may affect the area's hydrology, the alternatives would have beneficial impacts. Consequently, there would be no cumulative impacts on hydrology under the no-action alternative and a beneficial impact under the proposed action.

RECREATION AND SCENERY

Affected Environment

Recreation

Recreation use of the four river corridors are all low. Management estimates of recreation use at Fuller Mill Creek are low, based on Forest reports of current use levels at the Fuller Mill Creek Picnic Area. Management estimates of recreation use at North Fork San Jacinto River are low to moderate, based on Forest reports of current use levels at Dark Canyon Campground. Management estimates of recreation use at Palm Canyon Creek are low to moderate. Management estimates of recreation use at Bautista Creek are also low. Recreation uses, as described below, are primarily in the corridor and not on the rivers.

The North Fork San Jacinto River is readily accessible by road, including State Highway 243, which crosses the river, and by trail, including the Pacific Crest National Scenic Trail and Seven Pines Trail, which cross the upper river. The river has some recreation improvements along its shore from the State Park boundary downstream to Highway 243, including a picnic area; one campground is located within the vicinity of the river. Downstream of Highway 243 to the junction with Road 5S09, the river corridor lies within a Backcountry Motorized Use Restricted Land Use Zone. The upper 2.3 miles of the North Fork San Jacinto River is in Mt. San Jacinto State Park Wilderness. Additionally, the Azalea Trails Girl Scout Camp is located within 0.1 mile of the North Fork San Jacinto River and operates under a special use permit. In operation since the 1940s, this camp is used by young campers and camp staff during the summer. There are several structures in the camp, including a clubhouse, sleeping quarters building, restrooms, volleyball court, horse corral, access road, and water system. North Fork San Jacinto River is managed as a Roaded Natural setting, which is characterized in the Forest Plan by predominately natural-appearing environments with moderate evidence of the sights and sounds of people (USDA Forest Service 2005a-c 2010). User capacity estimates determined for this river are 120 visitors per day.

Fuller Mill Creek is readily accessible for much of its length by road, including State Highway 243, which crosses the creek, and by trail, including the Pacific Crest National Scenic Trail, which crosses its upper reaches. The creek has some rural development in the Pinewood area as well as a Forest Service picnic area. The upper 0.4-mile segment is in the Mt. San Jacinto State Park Wilderness. Fuller Mill Creek is managed as a Roaded Natural setting, which is characterized in the Forest Plan by predominately

natural-appearing environments with moderate evidence of the sights and sounds of people (USDA Forest Service 2005a-c 2010). User capacity estimates determined for this river are 229 visitors per day.

Palm Canyon Creek is accessible by road from Highway 74 and South Palm Canyon Drive. It is also accessible by the Palm Canyon Trail (4E01), which parallels most of the length of the creek, and which is where most of the recreation in this area takes place. Some hiking on Palm Canyon Trail continues outside of the river corridor and onto Agua Caliente Reservation land. Recreation activities in Palm Canyon are nonmotorized and include hiking, horseback riding, mountain biking, wildlife viewing, and sightseeing. However, Indian Canyons prohibits mountain bikes in this area due to their impact on trails and the Forest Service recommends continuing user education about this impact. Palm Canyon Creek is managed as a “Semi-Primitive Non-Motorized” setting, as established in the Forest Plan, which does not allow for motorized uses and the environment appears largely natural (USDA Forest Service 2005a-c 2010). User capacity estimates determined for this river are 1,947 visitors per day.

Bautista Creek is accessible via road, including Bautista Canyon Road, and by trail, including the Hixon-Bautista Trail (2E43), Alessandro Trail (2E44), and on Cottonwood Truck Trail (6S16). Bautista Creek has little recreation use along the creek; most recreation use is along the trails, including a popular area for recreational shooting on the Cottonwood Truck Trail. The Juan Bautista de Anza National Historic Trail, managed by the National Park Service, passes through Bautista Canyon and there is an interpretive panel on State of California lands within the creek corridor. Bautista Creek is managed as a Roaded Natural setting, which is characterized in the Forest Plan by predominately natural-appearing environments with moderate evidence of the sights and sounds of people (USDA Forest Service 2005a-c 2010). User capacity estimates determined for this river are 1,727 vehicles per day.

Scenery

Scenery contributes to wild and scenic river designations for two rivers analyzed in this EA: North Fork San Jacinto River and Palm Canyon Creek. The existing conditions of scenery for each of these two rivers are described below.

The North Fork San Jacinto River is located in the San Jacinto Mountains and is characterized by steep, rugged, river cut canyons. The scenery is diverse, particularly as the elevation changes. Spectacular views of montane meadow with colorful seasonal wildflowers and southern California subalpine forest occur at the highest elevations. As the elevation decreases, mixed conifer and big cone Douglas fir forest come into view. Oak woodlands, chaparral, and grasslands blanket the slopes at the lower elevations. Riparian woodland consisting of white alder, cottonwood, and various willow species is present throughout the river corridor. Some of the landscape along the river has been influenced and altered by development, with roads, cabins, and recreation infrastructure present. Seasonal variations in the scenery are very apparent, especially in the fall as the wetland tree species turn golden before shedding their leaves. As defined in the Forest Plan, the North Fork San Jacinto River is managed to a Scenic Integrity Objective (SIO) of “High.” An SIO of High is defined as conditions where human activities are not visually evident and where the landscape character appears intact (USDA Forest Service 2005a-c 2010).

Palm Canyon Creek, located in the lower eastern slope of the San Jacinto Mountains, is characterized by steep slopes and narrow ridges with deep, rugged canyons. The high desert mountains support pinyon-juniper vegetation communities. Chaparral blankets the hills and Colorado desert vegetation covers the

desert floor at lower elevations. The unique presence of California's only native palm, the California fan palm, gives this canyon its name. The creek is a nationally significant palm oasis. The creekbed in Palm Canyon is almost always dry, flowing underground for much of the year. A few short reaches have modest seasonal surface flow, providing haven for small oases. Some of the landscape here has been influenced and altered by development, especially in the Santa Rosa Indian Reservation, with roads and cabins present. Seasonal variations are not readily apparent, except within the riparian corridor when the willows turn golden before dropping their leaves in the fall. The scenery here is regionally spectacular, with deep, rugged canyons, thick riparian vegetation, and palm oases. Winter and early spring storms bring ephemeral waterfalls. As defined in the Forest Plan, Palm Canyon Creek is managed to an SIO of "High," where human activities are not visually evident and where the landscape character appears intact (USDA Forest Service 2005a-c 2010).

Impacts of No-Action Alternative

Recreation

Under the no-action alternative, recreation of all four rivers would continue to be managed according to the Recreation Opportunity Spectrum settings discussed in the Forest Plan. The setting for North Fork San Jacinto River, Fuller Mill Creek, and Bautista Creek would remain as "Roaded Natural," which would maintain the predominately natural-appearing environment with moderate evidence of the sights and sounds of people (see User Capacity Analysis report in appendix A). Palm Canyon Creek would remain as "Semi-Primitive Non-Motorized," which would continue to not allow motorized uses and the environment would continue to be largely natural appearing. The no-action alternative would not impact either river corridor's recreation opportunities because management would continue to be guided by existing direction.

Scenery

The North Fork San Jacinto River and Palm Canyon Creek would continue to each be managed to a High SIO, as defined under the Forest Plan. Human activities would continue to not be visually evident and the landscape character would continue to appear intact. Management of these river corridors would continue to be guided by *Landscape Aesthetics: A Handbook for Scenery Management* (USDA Forest Service 2003). The no-action alternative would not impact either river corridor's scenic value because management would continue to be guided by existing direction.

Impacts of Proposed Action

Recreation

Under the proposed action, a comprehensive river management plan would establish programmatic management direction specific to the river corridors that would protect their ORVs, free-flowing condition, and water quality from threats from recreational use while also maintaining appropriate recreational opportunities. The proposed action would also establish a permanent river boundary, which could increase opportunities for user education about river protection. Current use levels in the river corridors are relatively low and therefore unlikely to negatively affect river values (see User Capacity Analysis report in appendix A). The river corridors would continue to be managed to maintain their established Recreation Opportunity Spectrum settings discussed in the Forest Plan (Roaded Natural for

North Fork San Jacinto River, Fuller Mill Creek, and Bautista Creek and Semi-Primitive Non-Motorized for Palm Canyon Creek) but would also be managed to the recreation capacities set by the user capacity analysis (see User Capacity Report in appendix A). The capacity analysis determined the appropriate level of visitor use and activities that would not impact the ORVs while maintaining existing recreation opportunities. Current recreation use estimates in all four river corridors are substantially lower than their capacities. Consequently, the proposed action would be unlikely to affect recreation use in any of the river corridors because current recreational use is not anticipated to be restricted or otherwise changed. The user capacity analysis, however, establishes a framework for monitoring and triggering potential management actions in the river corridors if use approaches these capacities. If that point were to be reached, recreation use could potentially be restricted, which may result in an adverse impact if users are no longer able to recreate on the rivers as they currently are. The proposed action would have a potential long-term adverse impact on recreation if capacity-related management actions were triggered and recreational use of any of the river corridors were restricted; however, because current use is substantially below capacities, implementation of management actions are unlikely to occur in the foreseeable future.

Scenery

Under the proposed action, a comprehensive river management plan would establish programmatic management direction specific to the river corridors that would protect their outstandingly remarkable values, free-flowing condition, and water quality from threats to scenic integrity such as recreational use and development. Under the proposed action, a permanent river boundary would be established, which would have a beneficial impact on scenery by preserving views along the river corridor. The river corridors would still be managed to maintain a High SIO but would also be managed to the recreation capacities set by the user capacity analysis (see appendix A). The capacity analysis determined the appropriate level of visitor use and activities that would further protect scenery. Because of the added protection from future increases in recreational use, the proposed action would have a beneficial impact on scenery.

Cumulative Impacts

Other past, present, or reasonably foreseeable actions that have or would contribute to the cumulative impacts on recreation and scenery include the Recovery Plan for Southern California Distinct Population Segment of the Mountain Yellow-Legged Frog project. Efforts associated with this project include occasional recreational closures as well as surveying and monitoring, which could impede scenic views. Although these closures would likely be temporary and relatively brief, closures and disruptions could have a minor adverse impact on recreational and scenic experiences.

Under the no-action alternative, there would be no impacts on recreation or scenery. Although the Recovery Plan for Southern California Distinct Population Segment of the Mountain Yellow-Legged Frog project may have an adverse impact on recreation and scenery, the alternatives would have no new impacts and therefore would not contribute to the impacts of other actions. Consequently, there would be no cumulative impacts on recreation or scenery under the no-action alternative.

Under the proposed action, the CRMP could contribute a long-term adverse increment to the cumulative impact on recreation due to the establishment of user capacity thresholds, which could trigger management actions that restrict recreational use of the river corridors (even though implementation of

these actions is unlikely to occur because use is below capacity). However, the proposed action could have a beneficial impact on scenery due to added protection from a permanent river boundary and capacity analysis that could help protect scenery. Therefore, the slightly adverse impact of the other present action combined with the adverse impact of the proposed action would result in an overall cumulative adverse impact to recreation, but an overall beneficial impact to scenery.

BOTANY

Affected Environment

Botany contributes to wild and scenic river designations for two rivers analyzed in this EA: Palm Canyon Creek and Bautista Creek. The existing conditions of botany for each of these two rivers are described below.

Palm Canyon Creek supports the largest California fan palm oasis in the United States. California fan palms are relics from millions of years ago when the area that is now desert was wetter and occupied by a tropical forest. Palms are also a culturally significant species because they are considered ancestors by the Cahuilla Indians. Today, these native North American trees occur only in locations with a high water table. Permanent streams within steep canyons or large springs provide habitat for the largest groves. Smaller groves grow where seeps or moist canyon sides provide moisture even where surface water is intermittent. The Palm Canyon oases are adjacent to underground faults that bring water to the surface. The abundance of these palms is nationally significant and unique. California fan palms, reaching a maximum of 82 feet, are the dominant feature in the overstory of the creek. The oasis community is long-lived with individual trees reaching the age of 150-200 years. Reproduction occurs only from mature trees and only after extremely wet winters. Fire is an integral part of the ecology of the palm oases. Fire removes the understory shrubs allowing more water for the fire-tolerant palms and also results in a flush of palm growth as small palms are released from shade. Where fire is allowed to occur, there is a combination of mature trees in the canopy and smaller palms in the understory.

Bautista Creek provides nationally significant, occupied habitat for the slender-horned spineflower, a federally endangered plant species. These annual plants occur on alluvial benches or adjacent to the stream channel. Habitat is created by deposition of sediments carried by the stream. The habitat is dependent on proper functioning condition of the creek; therefore, downstream habitat is affected by hydrologic alterations upstream. Proper management of water and watersheds is important because the plant habitat is tied to hydrology and fluvial geomorphology and also because many of the remaining occurrences of the spineflower are located downstream, off of National Forest System lands.

Threatened, endangered, and sensitive botanical species occurrence information within the four Wild and Scenic River corridors is detailed in tables 6 and 7, below:

Table 6. Forest Service Region 5 Sensitive Botanical Species

Species Name	Common Name	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
<i>Abronia nana</i> var. <i>covillei</i>	Coville's dwarf abronia	N	N	N	N
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand verbena	Y	U	P	U
<i>Acanthoscyphus parishii</i> var. <i>cienegensis</i>	Cienega Seca puncturebract	N	N	N	N
<i>Allium marvinii</i>	Yucaipa onion	U	P	P	N
<i>Antennaria marginata</i>	white-margined everlasting	N	N	N	N
<i>Arctostaphylos glandulosa</i> subsp. <i>gabrielensis</i>	San Gabriel Manzanita	N	N	N	N
<i>Arctostaphylos parryana</i> subsp. <i>tumescens</i>	interior manzanita	U	P	P	N
<i>Arenaria lanuginosa</i> subsp. <i>saxosa</i>	rock sandwort	N	N	N	N
<i>Astragalus bernardinus</i>	San Bernardino milk-vetch	N	N	N	N
<i>Astragalus bicristatus</i>	crested milk-vetch	N	P	P	U
<i>Astragalus lentiginosus</i> var. <i>antonius</i>	San Antonio milk-vetch	N	N	N	N
<i>Astragalus lentiginosus</i> var. <i>sierrae</i>	Bear Valley milk-vetch	N	N	N	N
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's milk-vetch	P	U	U	N
<i>Astragalus tidestromii</i>	Tidestrom's milk-vetch	N	N	N	N
<i>Atriplex parishii</i>	Parish's brittle scale	N	N	N	N
<i>Boechera johnstonii</i>	Johnston's rockcress	N	N	N	N
<i>Boechera parishii</i>	Parish's rockcress	N	N	N	N
<i>Boechera peirsonii</i>	San Bernardino rockcress	N	N	N	N
<i>Boechera shockleyi</i>	Shockley's rockcress	N	N	N	N
<i>Botrychium crenulatum</i>	scalloped moonwort	U	U	U	U
<i>Calochortus palmeri</i> var. <i>munzii</i>	Munz's mariposa lily	U	P	P	N
<i>Calochortus palmeri</i> var. <i>palmeri</i>	Palmer's mariposa lily	U	U	U	U
<i>Calochortus striatus</i>	alkali mariposa lily	N	N	N	N
<i>Calyptidium pygmaeum</i>	pygmy pussypaws	N	N	N	N
<i>Canbya candida</i>	pygmy poppy	N	N	N	N
<i>Castilleja lasiorhyncha</i>	San Bernardino Mountains owl's clover	N	U	U	N
<i>Castilleja plagiotoma</i>	Mojave paintbrush	N	N	N	N

Species Name	Common Name	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
<i>Caulanthus simulans</i>	Payson's jewelflower	P	U	U	P
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	N	N	N	N
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	P	P	P	P
<i>Cladium californicum</i>	California saw grass	U	U	U	U
<i>Claytonia lanceolata</i> var. <i>piersonii</i>	Pierson's spring beauty	N	N	N	N
<i>Deinandra mohavensis</i>	Mojave tarplant	P	U	Y	N
<i>Delphinium hesperium</i> subsp. <i>cuyamaca</i>	Cuyamaca larkspur	U	U	U	U
<i>Dieteria canescens</i> var. <i>ziegleri</i>	Ziegler's aster	N	P	P	U
<i>Draba saxosa</i>	rock draba	N	P	Y	N
<i>Drymocallis cuneifolia</i> var. <i>cuneifolia</i>	wedgeleaf woodbeauty	N	N	N	N
<i>Dudleya abramsii</i> subsp. <i>affinis</i>	San Bernardino Mts. dudleya	U	U	U	U
<i>Ericameria parryi</i> var. <i>imula</i>	Parry's rabbitbrush	N	N	N	N
<i>Eriogonum evanidum</i>	vanishing wild buckwheat	U	U	U	U
<i>Eriogonum kennedyi</i> var. <i>alpigenum</i>	southern alpine buckwheat	N	N	N	N
<i>Eriogonum microthecum</i> var. <i>johnstonii</i>	Johnston's buckwheat	N	N	N	N
<i>Eriogonum microthecum</i> var. <i>lacus-ursi</i>	Bear Lake buckwheat	N	N	N	N
<i>Galium angustifolium</i> subsp. <i>jacinticum</i>	San Jacinto Mtns bedstraw	N	P	Y	N
<i>Galium californicum</i> subsp. <i>primum</i>	California bedstraw	N	P	P	N
<i>Gentiana fremontii</i>	moss gentian	N	N	N	N
<i>Gilia leptantha</i> subsp. <i>leptantha</i>	San Bernardino gilia	N	N	N	N
<i>Heuchera abramsii</i>	Abrams' alumroot	N	N	N	N
<i>Heuchera caespitosa</i>	urn-flowered alumroot	N	P	P	N
<i>Heuchera hirsutissima</i>	shaggy-haired alum root	N	P	P	N
<i>Heuchera parishii</i>	Parish's alumroot	N	P	P	N
<i>Horkelia cuneata</i> subsp. <i>puberula</i>	mesa horkelia	N	N	N	N
<i>Horkelia wilderae</i>	Barton Flats horkelia	N	N	N	N
<i>Hulsea vestita</i> subsp. <i>gabrielensis</i>	San Gabriel Mountains sunflower	N	N	N	N
<i>Hulsea vestita</i> subsp. <i>pygmaea</i>	pygmy hulsea	N	N	N	N
<i>Imperata brevifolia</i>	California satintail	N	N	N	P

Species Name	Common Name	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
<i>Ivesia argyrocoma</i> var. <i>argyrocoma</i>	Silver-haired ivesia	N	N	N	N
<i>Ivesia callida</i>	Tahquitz ivesia	N	N	N	N
<i>Lepechinia fragrans</i>	fragrant pitcher sage	N	N	N	N
<i>Leptosiphon floribundus</i> subsp. <i>hallii</i>	Santa Rosa Mtns leptosiphon	N	N	N	P
<i>Lewisia brachycalyx</i>	short-sepaled	U	U	U	U
<i>Lilium parryi</i>	Lemon lily	U	Y	Y	U
<i>Limnanthes alba</i> var. <i>parishii</i>	Parish's meadowfoam	U	U	U	U
<i>Linanthus concinnus</i>	San Gabriel linanthus	N	N	N	N
<i>Linanthus jaegeri</i>	San Jacinto prickly phlox	N	P	P	N
<i>Linanthus killipii</i>	Baldwin Lake linanthus	N	N	N	N
<i>Malaxis monophyllos</i> var. <i>brachypoda</i>	Adder's mouth	N	U	U	N
<i>Marina orcuttii</i> var. <i>orcuttii</i>	California marina	N	N	N	P
<i>Matelea parvifolia</i>	spearleaf	N	N	N	P
<i>Meesia uliginosa</i>	Broad-nerved hump moss	U	U	U	U
<i>Mimulus exiguus</i>	San Bernardino Mountain monkeyflower	N	N	N	N
<i>Mimulus purpureus</i>	purple monkeyflower	N	N	N	N
<i>Monardella australis</i> subsp. <i>jokersti</i>	Jokerst's monardella	N	N	N	N
<i>Monardella macrantha</i> subsp. <i>hallii</i>	Hall's monardella	P	P	Y	N
<i>Monardella nana</i> subsp. <i>leptosiphon</i>	San Felipe monardella	U	P	Y	U
<i>Monardella saxicola</i>	rock monardella	N	N	N	N
<i>Navarretia peninsularis</i>	Baja navarretia	N	P	P	N
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	Short-joint beavertail	N	N	N	N
<i>Oreonana vestita</i>	woolly mountain parsley	N	N	N	N
<i>Orobanche valida</i> subsp. <i>valida</i>	Rock Creek broom-rape	N	N	N	N
<i>Oxytropis oreophila</i> var. <i>oreophila</i>	rock loving point vetch	N	N	N	N
<i>Packera bernardina</i>	San Bernardino butterweed	N	N	N	N
<i>Parnassia cirrata</i> var. <i>cirrata</i>	Fringed grass-of-Parnassus	N	N	N	N
<i>Penstemon californicus</i>	California penstemon	N	N	N	N
<i>Phlox dolichantha</i>	Bear Valley phlox	N	N	N	N

Species Name	Common Name	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
<i>Plagiobothrys collinus</i> var. <i>ursinus</i>	Cooper's popcorn flower	U	P	P	U
<i>Potentilla rimicola</i>	cliff cinquefoil	N	P	P	N
<i>Pyrrocoma uniflora</i> subsp. <i>gossypina</i>	Bear Valley pyrrocoma	N	N	N	N
<i>Saltugilia latimeri</i>	Latimer's woodland gilia	P	P	P	P
<i>Schoenus nigricans</i>	black sedge	N	N	N	N
<i>Scutellaria bolanderi</i> subsp. <i>austromontanum</i>	southern mountain skullcap	P	P	P	U
<i>Sedum niveum</i>	Davidson's stonecrop	U	P	P	U
<i>Sidalcea hickmanii</i> subsp. <i>parishii</i>	Parish's checkerbloom	N	N	N	N
<i>Sidalcea malviflora</i> subsp. <i>dolosa</i>	Dwarf checkerbloom	N	N	N	N
<i>Sidalcea neomexicana</i>	Salt Spring checkerbloom	U	U	U	U
<i>Sidotheca caryophylloides</i>	chickweed starry puncturebract	U	Y	Y	U
<i>Sidotheca emarginata</i>	white-margined puncturebract	U	P	P	Y
<i>Sisyrinchium longipes</i>	Timberland blue-eyed grass	N	N	N	N
<i>Streptanthus campestris</i>	southern jewelflower	P	P	P	P
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	U	U	U	N
<i>Thelypteris puberula</i> var. <i>sonorensis</i>	Sonoran maiden fern	N	N	N	P
<i>Thysanocarpus rigidus</i>	rigid fringepod	P	P	P	P

***Occurrence Information:**

Y = Species is known to occur.

P = Occurrence of the species is possible; suitable habitat exists, and the species is known from nearby locations.

H = Part of the historical range but the species has likely been extirpated.

U = Occurrence of the species is unlikely based on habitat present.

N = Outside known distribution/range of the species.

Table 7. Federally Listed Botanical Species

SPECIES NAME	COMMON NAME	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
ENDANGERED SPECIES					
<i>Acanthoscyphus parishii</i> var. <i>goodmaniana</i>	Cushenbury puncturebract	N	N	N	N
<i>Arenaria paludicola</i>	marsh sandwort	N	N	N	N
<i>Astragalus albens</i>	Cushenbury milk vetch	N	N	N	N
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	N	N	N	N
<i>Astragalus lentiginosus</i> var. <i>cochellae</i>	Coachella Valley milk vetch	N	N	N	N
<i>Astragalus tricarinatus</i>	triple-ribbed milk-vetch	N	N	N	N
<i>Berberis nevinii</i>	Nevin's barberry	U	U	U	U
<i>Doceahema leptoceras</i>	slender-horned spineflower	X	N	N	N
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	N	N	N	N
<i>Eriogonum ovalifolium</i> var. <i>vineum</i>	Cushenbury buckwheat	N	N	N	N
<i>Nasturtium gambelii</i>	Gambel's water cress	N	N	N	N
<i>Poa atropurpurea</i>	San Bernardino bluegrass	N	N	N	N
<i>Physaria kingii</i> ssp. <i>bernardina</i>	San Bernardino Mtns. bladderpod	N	N	N	N
<i>Sidalcea pedata</i>	bird's foot checkerbloom	N	N	N	N
<i>Taraxacum californicum</i>	California taraxacum	N	N	N	N
<i>Thelypodium stenopetalum</i>	slender-petaled mustard	N	N	N	N
THREATENED SPECIES					
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	N	N	N	N
<i>Castilleja cinerea</i>	ash-gray Indian paintbrush	N	N	N	N
<i>Eremogone ursina</i>	Bear Valley sandwort	N	N	N	N
<i>Erigeron parishii</i>	Parish's daisy	N	N	N	N
<i>Eriogonum kennedyi</i> var. <i>austromontanum</i>	southern mountain buckwheat	N	N	N	N
* Presence: X=Known to occur; P=Potential occurrence; U= Occurrence of the species is unlikely based on habitat present.					

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Impacts of No-Action Alternative

Under the no-action alternative, existing management direction such as the ESA would continue to protect federally listed species such as the slender-horned spineflower. The nationally significant California fan palm oasis would remain as the largest California fan palm oasis in the United States (USDA Forest Service 2005b). Overall, the no-action alternative would allow existing management direction to continue determining protection efforts for the slender-horned spineflower and California fan palm oasis. Overall, the no-action alternative would have no impact on the California fan palm oasis and slender-horned spineflower because these species are already protected by existing management direction.

Impacts of Proposed Action

Under the proposed action, a comprehensive river management plan would be implemented to protect botanical resources in the wild and scenic river segments. Impacts would be the same as current management strategies on the California fan palm and slender-horned spineflower but would add additional protection for botanical resources by establishing a permanent boundary and user capacity thresholds. Establishing a permanent boundary would result in additional protections of the river corridor from development, which could prevent trampling and damage to botanical resources. Similarly, establishing capacity thresholds would afford additional protections due to less impact from recreational use.

The comprehensive river management plan, combined with project-specific planning, would benefit the conservation of these habitat components over the long term. The proposed action would also help enhance habitat for the endangered slender-horned spineflower.

Cumulative Impacts

Other past, present, or reasonably foreseeable actions that have or would contribute to the cumulative impacts on botany include the Anza Electric Permit Renewal Categorical Exclusion project. Operations and maintenance activities could include work within the vicinity of slender-horned spineflower habitat in the Bautista Creek corridor; however, field visits have been conducted to locate the species, and design criteria will be incorporated to ensure that the resource is protected and disturbance to the species is minimized or avoided. Botany resources will be protected as directed in the Forest Plan (USDA Forest Service 2005a-c 2010). While design criteria exist to protect these resources, there is a slight chance disturbance or damage to individuals may occur during operations and maintenance activities. For this reason, the project may have a minor adverse impact on botany.

Under the no-action alternative, there would be no impacts on botany. Although the other reasonably foreseeable action may have an adverse impact on botany, the alternatives would have no new impacts and therefore would not contribute to the impacts of other actions. Consequently, there would be no cumulative impacts on botany under the no-action alternative.

Under the proposed action, the comprehensive river management plan would contribute a beneficial increment to the cumulative impact on botany due to specific protections being put in place in the form of long-term project planning, permanent river corridor boundaries, and user capacity thresholds. The slightly adverse impact of the other reasonably foreseeable action combined with the beneficial impact of the proposed action would result in an overall cumulative beneficial impact to botany.

WILDLIFE

Affected Environment

Wildlife species and their habitats contribute to the wild and scenic river designations for three of the four river corridors that comprise the project area: North Fork San Jacinto River, Fuller Miller Creek, and Bautista Creek. Species and habitats within these river corridors include federally endangered species, Forest Service Region 5 Sensitive Species, potential habitat for federally endangered species, and critical habitat for federally endangered species.

The North Fork San Jacinto River is historic habitat for and presently occupied by a population of mountain yellow-legged frog (listed as federally endangered). The river is also designated critical habitat for the Southern California Distinct Population segment of the mountain yellow-legged frog, which is a key area for the recovery of this endangered species. The river also supports habitat for a genetically isolated population of California spotted owl (listed as a Forest Service Region 5 Sensitive Species). Potential habitat for southwestern willow flycatcher (listed as a federally endangered species) is also present. The area also contains the best remaining habitat for the southern rubber boa and historic habitat for the San Bernardino flying squirrel (both listed as Forest Service Region 5 Sensitive Species) in the San Jacinto Mountains. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

Fuller Mill Creek is home to a population of mountain yellow-legged frog. The creek supports one of the last remaining populations of this federally endangered species in southern California. This species is highly imperiled. The creek is also designated critical habitat for the Southern California Distinct Population segment of the mountain yellow-legged frog, which is a key area for the recovery of this endangered species. The California spotted owl and the southern rubber boa are also present along Fuller Mill Creek. There is potential for the San Bernardino flying squirrel to occur. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

Bautista Creek possesses one of the largest number of endangered wildlife species of any location in the National Forest. The creek is home to populations of arroyo toad, nesting occurrences of the southwestern willow flycatcher, and the San Bernardino kangaroo rat, all federally endangered wildlife species. The U.S. Fish and Wildlife Service designated this area as critical habitat for the Quino checkerspot butterfly, a federally endangered insect. Forest Service Region 5 Sensitive Species present include the Southern California legless lizard, three-lined boa, two-striped garter snake, and San Diego ringneck snake. The greenest tiger beetle, a rare invertebrate, was collected in the 1970s along the creek and may still occur. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

Threatened, endangered, and sensitive wildlife species occurrence information within the four Wild and Scenic River Corridors are detailed in tables 8 and 9, below:

Table 8. Forest Service Region 5 Sensitive Wildlife Species

COMMON NAME	LATIN NAME	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
San Emigdio blue butterfly	<i>Plebulina emigdionis</i>	N	N	N	N
San Gabriel Mountains blue butterfly (golden blue butterfly)	<i>Plebejus saepiolus aureoles</i>	N	N	N	N
Arrowhead Blue Butterfly	<i>Glaucopshyce piasus (sagittigera)</i>	N	N	N	N
Ehrlich's checkerspot butterfly	<i>Euphydryas editha ehrlichi</i>	N	N	N	N
Dammer's Blue Butterfly	<i>(Euphilotes enoptes near dammersi ssp.) (Arrastre Creek near Dammersi ssp + Baldwin Lake near Dammersi ssp)</i>	N	N	N	N
vernal blue butterfly (Coxey Meadow)	<i>Euphilotes baueri (battoides) vernalis</i>	N	N	N	N
Pratt's blue butterfly	<i>Euphilotes enoptes cryptorufes</i>	N	N	N	P
San Gabriel Mountains elfin	<i>Incisalia mossii hidakupa</i>	N	N	N	N
Santa Ana speckled dace	<i>Rhinichthys osculus ssp.</i>	N	N	N	N
arroyo chub	<i>Gila orcutti</i>	N	N	N	N
large-blotched ensatina	<i>Ensatina klauberi</i>	U	Y	Y	U
yellow-blotched ensatina	<i>Ensatina eschscholtzii croceater</i>	U	Y	Y	U
San Gabriel Mountain slender salamander	<i>Batrachoseps gabrieli</i>	N	N	N	N
Western pond turtle	<i>Emys marmorata</i>	N	N	N	N
Southern California legless lizard	<i>Anniella stebbinsi (split from A. pulchra)</i>	P	P	P	P
Orange-throated whiptail	<i>Aspidoscelis hyperythrus</i>	P	N	N	N
southern rubber boa	<i>Charina umbratica</i>	N	Y	Y	N
three-lined boa	<i>Lichanura orcutti</i>	Y	N	N	Y
San Bernardino ringneck snake	<i>Diadophis punctatus modestus</i>	P	Y	Y	P
San Diego ringneck snake	<i>Diadophis punctatus similis</i>	P	Y	Y	P
San Bernardino mountain kingsnake	<i>Lampropeltis zonata parvirubra</i>	P	Y	Y	P

COMMON NAME	LATIN NAME	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
San Diego mountain kingsnake	<i>Lampropeltis zonata pulchra</i>	P	Y	Y	P
Two-striped garter snake	<i>Thamnophis hammondi</i>	P	P	P	P
red diamond rattlesnake	<i>Crotalus ruber ruber</i>	Y	N	N	Y
Brown pelican	<i>Pelicanus occidentalis</i>	N	N	N	N
northern goshawk	<i>Accipiter gentilis</i>	N	H	H	N
bald eagle	<i>Haliaeetus leucocephalus</i>	N	N	N	N
California spotted owl	<i>Strix occidentalis occidentalis</i>	N	Y	Y	N
Willow flycatcher (migrant)	<i>Empidonax traillii</i>	Y	U	U	P
San Diego cactus wren	<i>Campylorhynchus bruneicapillus sandiegense</i>	U	N	N	P
gray vireo	<i>Vireo vicinior</i>	P	N	N	Y
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	P	P	P	P
fringed myotis	<i>Myotis thysanodes</i>	P	P	P	P
pallid bat	<i>Antrozous pallidus</i>	P	P	P	P
San Bernardino flying squirrel	<i>Glaucomys sabrinus californicus</i>	N	H	H	N
White-eared pocket mouse	<i>Perognathus alticolus alticolus</i>	N	N	N	N
San Gabriel Mountains bighorn sheep	<i>Ovis canadensis nelsoni</i>	N	N	N	N
*Occurrence Information: N = Outside known distribution/range of the species. U = Occurrence of the species is unlikely based on habitat present. P = Occurrence of the species is possible; suitable habitat exists. L = Occurrence of the species is likely; suitable habitat exists and the species is known for nearby locations. Y = Species is known to occur. H = Part of the historical range but the species has been extirpated.		**HABITAT TYPES/HABITAT COMPONENTS a = aerial; usually seen in flight, often over several habitat types r = riparian (streamside thickets and woodlands) g = grasslands, fields, and agricultural areas m = marshes, meadows; both freshwater areas and moist meadows c = chaparral and coastal sage scrub wo = woodlands; pinyon-juniper, oaks mc = mixed conifer forests; jeffrey pine, ponderosa pine, bigcone douglas fir, coulter pine, sugar pine, white fir overstory d = desert; Joshua tree woodlands, creosote bush scrub, blackbrush scrub aq = aquatic; lakes, reservoirs, ponds, vernal pools/puddles u = urbanized areas w = washes and alluvial fans rk = cliffs and rocky outcrops s = snags and cavities			

Table 9. Federally Listed Wildlife Species

COMMON NAME	LATIN NAME	Occurrence in SJRD W&S Rivers			
		Bautista Creek	Fuller Mill Creek	N Fork San Jacinto River	Palm Canyon Creek
ENDANGERED SPECIES					
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	Y; CH	N	N	N
unarmored threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	N	N	N	N
arroyo toad	<i>Anaxyrus californicus</i>	Y; CH	N	N	N
mountain yellow-legged frog	<i>Rana muscosa</i>	N	Y; CH	Y; CH	N
California condor	<i>Gymnogyps californianus</i>	N	N	N	N
southwestern willow flycatcher	<i>Empidonax trailii extimus</i>	Y; CH	N	N	P
least Bell's vireo	<i>Vireo bellii pusillus</i>	Y	N	N	P
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	Y; CH	N	N	N
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	N	N	N	N
peninsular bighorn sheep	<i>Ovis Canadensis nelsoni</i>	N	N	N	P
THREATENED SPECIES					
Santa Ana sucker	<i>Catostomus santannae</i>	N	N	N	N
California red-legged frog	<i>Rana draytonii</i>	N	N	N	N
desert tortoise	<i>Gopherus agassizii</i>	N	N	N	N
coastal California gnatcatcher	<i>Polioptila californica californica</i>	P	N	N	N
western yellow-billed cuckoo	<i>Coccyzus americanus</i>	N	N	N	N
<p><u>*Occurrence Information:</u> N = Outside known distribution/range of the species. U = Occurrence of the species is unlikely based on habitat present. P = Occurrence of the species is possible; suitable habitat exists. L = Occurrence of the species is likely; suitable habitat exists and the species is known from nearby locations. Y = Species is known to occur. H = Part of the historical range but the species has been extirpated. CH = Critical Habitat is present.</p>		<p><u>**HABITAT TYPES/HABITAT COMPONENTS</u> a = aerial; usually seen in flight, often over several habitat types r = riparian (streamside thickets and woodlands) g = grasslands, fields, and agricultural areas m = marshes, meadows; both freshwater areas and moist meadows c = chaparral and coastal sage scrub wo = woodlands; pinyon-juniper, oaks</p>			
		<p>mc = mixed conifer forests; Jeffrey pine, ponderosa pine, big-cone douglas fir, coulter pine, sugar pine, white fir overstory d = desert; Joshua tree woodlands, creosote bush scrub, blackbrush scrub aq = aquatic; lakes, reservoirs, ponds, vernal pools/puddles u = urbanized areas</p>			

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Impacts of No-Action Alternative

Under the no-action alternative, the North Fork San Jacinto River, Fuller Mill Creek, and Bautista Creek would continue to support populations of and habitat for federally endangered species and Forest Service Region 5 Sensitive Species. Existing management direction such as the Endangered Species Act would continue to protect federally listed species such as the mountain yellow-legged frog, the arroyo toad, the southwestern willow flycatcher, and the San Bernardino kangaroo rat. For Forest Service Region 5 Sensitive Species, existing Forest Service policy 2670.32 would continue to direct management, which currently aims to avoid or minimize impacts to these species whose viability has been identified as a concern (USDA Forest Service 2005d). Furthermore, critical habitat for endangered species and other significant populations would continue to be managed under existing policies. Overall, the no-action alternative would have no impact on wildlife because species would continue to be protected by existing laws and policy.

Impacts of Proposed Action

Under the proposed action, in addition to current management direction, supplemental protections would be put in place to protect federally endangered species Forest Service Region 5 Sensitive Species, potential habitat for federally endangered species, and critical habitat for federally endangered species, including establishing a permanent river corridor boundary and user capacity thresholds. Establishing a permanent boundary would provide additional protection of the river corridor from development, which could prevent disturbance to wildlife in the vicinity. Similarly, establishing capacity thresholds would afford additional protections due to less impact from recreational use.

Management strategies under the proposed action would continue the ongoing protection of wildlife resources. These continued management strategies include project planning to consider conservation of suitable habitat components over the long term, including avoidance and/or minimization of additional land disturbance activities that could cause direct or indirect adverse effects to federally listed wildlife species (USDA Forest Service 2005c). The arroyo toad will continue to be protected by the rock crossing of Bautista Creek per the long-term consultation measures set out in the *Biological and Conference Opinions for Various Ongoing Activities on the San Bernardino National Forest with Effects to eight Riparian Species* (USDA Forest Service 2012). This document provides additional protection measures for all federally listed wildlife when implementing ongoing activities on the National Forest.

The proposed action would continue the ongoing protection of wildlife through the existing stipulation that Critical Biological land use zones be managed so that activities and discretionary uses must be either neutral or beneficial for the species and habitats for which the area was established. Project managers may accept short-term adverse impacts to threatened, endangered, and proposed species if such impacts will be compensated by the accrual of long-term benefits to habitat for threatened, endangered, and candidate species (USDA Forest Service 2005c).

The proposed action would implement administrative actions that would not result in any direct impacts on wildlife species within the river corridors. However, these administrative actions would strengthen protections for federally endangered species, Forest Service Region 5 Sensitive Species, potential/occupied habitat for federally endangered species, and critical habitat for federally endangered species.

Cumulative Impacts

Other past, present, or reasonably foreseeable actions that have or would contribute to the cumulative impacts on wildlife include the Mountain Yellow-legged Frog Reestablishment Categorical Exclusion and the Mountain Yellow-legged Frog Translocation Categorical Exclusion and Recovery Plan for Southern California Distinct Population Segment of the Mountain Yellow-Legged Frog projects. These projects would provide for the reestablishment of federally endangered mountain yellow-legged frog (USDA Forest Service 2019 and USFWS 2018) and would help restore Southern California populations of the mountain yellow-legged frog (2018). Due to the enhanced wildlife protections and efforts to re-establish certain species, these projects would have a beneficial impact on wildlife.

Under the no-action alternative, there would be no impact on wildlife. Although other past, present, and reasonably foreseeable actions may affect the area's wildlife, the no-action alternative would have no new impacts on wildlife and therefore would not contribute to the impacts of other actions. Consequently, there would be no cumulative impacts on wildlife under the no-action alternative.

The proposed action would strengthen wildlife protections due to the establishment of permanent river corridor boundaries, user capacity thresholds, and improved project planning considerations for threatened and endangered wildlife species. When considered with the actions identified above, the stronger protections afforded by the proposed action would contribute to the beneficial impact of the other actions; therefore, the overall cumulative impact on wildlife would be beneficial.

HERITAGE RESOURCES (HISTORIC AND CULTURAL)

Affected Environment

Heritage resources (historic and/or cultural) contribute to wild and scenic river designations for two rivers analyzed in this EA: Palm Canyon Creek and Bautista Creek. The existing conditions of heritage resources (historic and/or cultural) for each of these two rivers are described below.

Palm Canyon Creek is within the heart of Cahuilla territory. There are many Cahuilla heritage sites located along the entire expanse of the canyon, including village sites, seasonal camps, and numerous specialized activity areas including rock art, agave roasting pits, and milling features. The foremost occupation of Palm Canyon occurred within the last two thousand years. Archaeological evidence of early Cahuilla occupation and use of Palm Canyon, especially for the last two thousand years, is present in Palm Canyon Creek. This evidence reflects all aspects of traditional Cahuilla life and has exceptional cultural heritage value to the local Tribal community. For generations Cahuilla have maintained continual use of the area for spiritual connection and gathering traditional plants for food and medicine. Palm Canyon meets the criteria as highly significant Traditional Cultural Property.

Historic values for Bautista Creek have regional and national significance and are considered to be outstandingly remarkable. In 1774 and again in 1776, Juan Bautista de Anza travelled through the Bautista Creek Canyon in one of the earliest efforts to reach the San Francisco Bay area from Sonora, Mexico. De Anza made two trips through the canyon. This trail route is designated as a National Historic Trail, which is the Bautista Canyon Road corridor itself (not a trail) through this area. Bautista Creek also has many Native American sites of exceptional human-interest along the whole length of the canyon.

Most of the sites represent occupation or habitation sites while others represent specialized activities such as milling features for food processing. While few archaeological investigations have been undertaken, ethnohistoric Cahuilla village sites occur at the upper portion of the drainage. Bautista Creek Canyon meets the standards for a Traditional Cultural Property as highly significant.

Impacts of No-Action Alternative

Under the no-action alternative, there would be no change to the conditions or management of heritage resources at Bautista Creek and Palm Canyon Creek. Sites, art, and other features would continue to serve as important Native American resources and there would continue to be limited archaeological investigations undertaken. Known heritage sites would be afforded the same consideration and protection as those properties evaluated as eligible to the National Register of Historic Places (USDA Forest Service 2005c). The no-action alternative would continue to protect access to and the use of sensitive traditional tribal use areas. Human remains not under the jurisdiction of the County Coroner would be left undisturbed (unless there was an urgent reason for their disinterment) (USDA Forest Service 2005c). The Forest Service would continue to comply with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), which states that the “recovery, treatment, and repatriation of human remains, sacred objects, and objects of cultural patrimony” would be directed to appropriate tribes (USDA Forest Service 2005c). If ancestral human remains were “discovered either by intentional excavation or inadvertent discovery,” the Forest Service would consult with any culturally affiliated tribes to develop appropriate procedures for addressing this discovery (USDA Forest Service 2005c). There would be no impacts on heritage resources (historic and/or cultural) under the no-action alternative because existing laws and policies would continue to protect these resources.

Impacts of Proposed Action

Under the proposed action, there would be specific administrative management actions implemented to help protect and preserve cultural and historic heritage resources. Specifically, impacts would be the same as current management strategies, but would add additional management and protection for heritage resources, with a permanent boundary and user capacity thresholds. Establishing a permanent boundary would result in a beneficial impact because it would include additional protection of the river corridor from development, which could prevent damage to heritage sites and artifacts in the river corridor. Similarly, establishing capacity thresholds would have a beneficial impact on heritage resources because they would afford additional protections due to less impact from recreational use.

Cumulative Impacts

Other past, present, or reasonably foreseeable actions that have or would contribute to the cumulative impacts on heritage resources include the Anza Electric Permit Renewal Categorical Exclusion project, described above. As part of this project, design criteria will be incorporated to ensure that all resources are protected and any potential conflicts are avoided. Resources including cultural sites will be protected as directed in the Forest Plan (USDA Forest Service 2005a-c 2010) during operations and maintenance activities. While design criteria exist to protect these resources, there is a slight chance disturbance or damage to species may occur. For this reason, the project may have a minor adverse impact on heritage resources.

Under the no-action alternative, there would be no impact on heritage resources (historic and/or cultural). Although other past, present, and reasonably foreseeable actions may affect the area's heritage resources, the no-action alternative would have no new impacts and therefore would not contribute to the impacts of other actions. Consequently, there would be no cumulative impacts on wildlife under the no-action alternative.

Under the proposed action, implementing the comprehensive river management plan would contribute a beneficial increment to the cumulative impact on heritage resources due to the establishment of permanent corridor boundaries and user capacity thresholds. When considered with the actions identified above, the overall beneficial impact of the proposed action would contribute to a beneficial impact on heritage resources. Therefore, the overall cumulative impact of the proposed action would be beneficial.

OTHER DISCLOSURES

Civil Rights and Environmental Justice

See earlier discussion of the consultation and the involvement of Native American Tribes and the sections of the project analysis which discusses how a comprehensive river management plan would better protect heritage resources important to the Tribes. There have been no issues or concerns raised with adverse effects to Native American Tribes.

There are no known direct, indirect, or cumulative effects on Native Americans, minority groups, women, or civil rights.

Environmental justice means that, to the extent practical and permitted by law, all populations are provided the opportunity to comment before decisions are made and are allowed to share in the benefits of government programs and activities affecting human health and the environment. Executive Order 12898 on environmental justice requires Federal agencies to identify and address any disproportionately high and adverse human health or environmental effects on minority and low-income populations. The proposed action would have no disproportionately high or adverse effects to minority or disadvantaged groups qualifying under the environmental justice order. Scoping has raised no issues or concerns associated with the principles of environmental justice. The proposed action does not have disproportionately high and adverse human health effects, high or adverse environmental effects, substantial environmental hazards, or effects to differential patterns of consumption of natural resources. All interested parties will continue to be involved with commenting on the project and the decision-making process.

Congressionally Designated Areas

This analysis discusses why action is needed and the effects of the project on congressionally designated areas such as the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek Wild and Scenic Rivers. It would not be adversely affected by the proposed activities. No significant irreversible or irretrievable commitment of resources would occur under alternative 2 (proposed action) because its purpose is to protect and enhance the values of the area.

Prime Farm and Forest Lands and Wetlands

The Secretary of Agriculture issued Memorandum 1827 which is intended to protect prime farm lands and range lands. The project area does not contain any prime farmlands or rangelands. Prime forestland is not applicable to lands within the National Forest System. National Forest System lands would be managed with consideration of the impacts on private lands. There would be no direct, indirect, or cumulative adverse effects to these resources and thus are in compliance with the Farmland Protection Act and Departmental Regulation 9500-3, Land Use Policy.

Compliance with Other Polices, Plans, Jurisdictions

The alternatives are consistent with the goals, objectives, and direction contained in the Forest Plan and accompanying final environmental impact statement and record of decision. Implementation of alternative 1 (no action) or alternative 2 (proposed action) would be consistent with relevant Federal, State, and local

laws, regulations, and requirements designed for the protection of the environment, including the Clean Air and Clean Water Act. Actions meet or exceed State water and air quality standards.

REFERENCES

Interagency Wild and Scenic River Coordinating Council (IWSRCC)

- 2018 *Steps to Address User Capacities for Wild and Scenic Rivers*. February 2018.
- No Date “Introduction to IWSRCC WSRA Section 7 Examples V. 080408.” Accessed September 3, 2019. <https://www.rivers.gov/documents/section7/section7-introduction.pdf>.

USDA Forest Service

- 2005a Land Management Plan, Southern California National Forests, Angeles National Forest, Cleveland National Forest, Los Padres National Forest, San Bernardino National Forest.
- 2005b Land Management Plan, Part 2 San Bernardino National Forest Strategy. September 2005.
- 2005c Land Management Plan, Part 3 Design Criteria for the Southern California National Forests. September 2005.
- 2005d Forest Service Sensitive Species Summary. October 2005.
- 2010 Notice Amendment, San Bernardino National Forest Land Management Plan. September 2010.
- 2012 Biological and Conference Opinions for Various Ongoing Activities on the San Bernardino National Forest with Effects to Eight Riparian Species (FWS-SB/WRIV-08B0680-09F0227), San Bernardino National Forest, California December 6, 2012.
- 2013 Anza Electric Permit Reissuance Project Scoping Package. San Bernardino National Forest.
- 2019 Schedule of Proposed Actions (SOPA) 07/01/2019 to 09/30/2019. San Bernardino National Forest. July 2019.

US Fish and Wildlife Service (USFWS)

- 2018 *Recovery Plan for Southern California Distinct Population Segment of the Mountain Yellow-Legged Frog (Rana muscosa)*. Sacramento, CA: Region 8 USFWS.
- 2019 “Endangered Species Act.” Accessed October 11, 2019.
[https://www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/endangered-species-act.html#targetText=The%20Endangered%20Species%20Act%20\(ESA,threatened%20species%20and%20their%20habitats](https://www.fws.gov/international/laws-treaties-agreements/us-conservation-laws/endangered-species-act.html#targetText=The%20Endangered%20Species%20Act%20(ESA,threatened%20species%20and%20their%20habitats).

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DRAFT EA COMMENT ANALYSIS

The Draft EA was published in the Idyllwild Town Crier on February 20, 2020. Comments concerning the Draft EA were identified from participants' correspondence. Written correspondence received from the following individuals and organizations form the basis for addressing the comments.

All correspondence has been reviewed by the interdisciplinary team in order to address the comments. The following table lists the comments received and responses. The interdisciplinary team considered these comments while completing the Final EA.

Table 10. Draft EA Comments

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (THPO)	In consultation with culturally affiliated Tribes, monitor known heritage sites for damages. However, I'd like to see this applied to all designated rivers.	Language has been added to specify that this monitoring would be done in consultation with culturally affiliated Tribes. In addition, the Forest Plan contains an indicator of "Number of Heritage Resources Managed to Standard;" this existing monitoring activity applies to all river corridors.
Agua Caliente Band of Cahuilla Indians (THPO)	This reads as if the forest service is protecting access to use and visit cultural sites that are eligible for the NR. It needs to be rewritten to say what it means. I am assuming it is meant to protect the sites and limit access. The County coroner has no responsibility or role under NAGPRA. Are you talking about non-federal lands? How are they protected? FS compliance with NAGPRA needs to be included in this section.	The EA has been edited to clarify that the no-action alternative would protect the access to and use of sensitive traditional tribal use areas. The County Coroner language is included to address remains under their jurisdiction. Language explaining FS compliance with NAGPRA has been added.
Agua Caliente Band of Cahuilla Indians (THPO)	This section needs to specify how often the monitoring will occur and it must include collaboration with the culturally affiliated Tribes.	Language has been added to specify that this monitoring would be done in consultation with culturally affiliated Tribes.
Agua Caliente Band of Cahuilla Indians (THPO)	This language is insensitive and confusing- NAGPRA applies to FS lands, there doesn't seem to be a need for this statement- the CA health and Safety code should be referenced. You could replace with "The FS will comply with the NAGPRA, in consultation with culturally affiliated Tribes, on any discovery of ancestral human remains."	Language has been edited to explain that FS will comply with NAGPRA. The County Coroner language is included to address non-tribal remains under their jurisdiction.

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (THPO)	<p>This language is insensitive and confusing- NAGPRA applies to FS lands, there doesn't seem to be a need for this statement- the CA health and Safety code should be referenced.</p> <p>You could replace with "The FS will comply with the NAGPRA, in consultation with culturally affiliated Tribes, on any discovery of ancestral human remains."</p>	Language has been edited to explain that FS will comply with NAGPRA. The County Coroner language is included to address non-tribal remains under their jurisdiction.
Agua Caliente Band of Cahuilla Indians (THPO)	Regarding Tribal Consultation- We received very little consultation from the Forest Service. From our perspective consultation is not concluded- it is underway.	Tribal consultation involving the designation of the segment of Palm Canyon Creek is ongoing and will not end with the issuance of the final EA. Additional consultation with the Tribe will take place during the planning of any future site specific projects.
Agua Caliente Band of Cahuilla Indians (THPO)	Consultation is not concluded. In my letter dated March 18, 2020 I have several questions, comments, and requests which still need to be addressed. I request a meeting to discuss the items.	Tribal consultation involving the designation of the segment of Palm Canyon Creek is ongoing and will not end with the issuance of the final EA. Additional consultation with the Tribe will take place during the planning of any future site specific projects.
Agua Caliente Band of Cahuilla Indians (THPO)	<p>What design criteria will protect these sites?</p> <p>Any criteria created for heritage sites should be developed in consultation with the Tribe.</p>	The CRMP proposes administrative actions, including established boundaries, for managing the land and important resources within the corridor; design criteria for heritage sites are not included in the document. Tribal consultation would be additionally pursued at a project-specific level.
Agua Caliente Band of Cahuilla Indians (THPO)	Please explain what this means. What criteria and data was used to come up with these number?	A reference has been added to the EA, directing readers to the User Capacity Technical Memo that is appended to Appendix A of the EA, which further explains the criteria and data used to calculate user capacities.
Agua Caliente Band of Cahuilla Indians (THPO)	Did FS consult with the Tribe on these numbers? Do you know if it conflicts with existing management plans or guidance documents or allowances by the Tribe?	User capacity numbers were derived by the approaches and methods detailed in the User Capacity Technical Memo. Daily user capacities are for river corridors on the Forest and do not apply to tribal lands. Triggers would be in place to enact the appropriate management action should capacity reach certain thresholds far in advance of reaching the maximum capacity number.

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (THPO)	Each defined river contains biological and heritage/cultural resources that are important to Cahuilla people. What measures will be taken to protect these resources?	USFS is dedicated to protecting the unique resources in SBNF that are important to Cahuilla people. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions, including established boundaries, for managing the land and important resources within the corridor. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
Agua Caliente Band of Cahuilla Indians (THPO)	Palms are considered Cahuilla ancestors.	The EA and CRMP have been edited to acknowledge that Palms are considered Cahuilla ancestors in the Affected Environment section.
Agua Caliente Band of Cahuilla Indians (THPO)	Each defined river contains biological and heritage/cultural resources that are important to Cahuilla people. What measures will be taken to protect these resources?	USFS is dedicated to protecting the unique resources in SBNF that are important to Cahuilla people. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions, including established boundaries, for managing the land and important resources within the corridor. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
Agua Caliente Band of Cahuilla Indians (THPO)	Each defined river contains biological and heritage/cultural resources that are important to Cahuilla people. What measures will be taken to protect these resources?	USFS is dedicated to protecting the unique resources in SBNF that are important to Cahuilla people. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions, including established boundaries, for managing the land and important resources within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
Agua Caliente Band of Cahuilla Indians (THPO)	Mountain biking is destructive to cultural resources. Since Palm Canyon is being treated as a TCP can you restrict mountain biking through this area?	Restricting mountain biking is outside the scope of this project. The Forest Plan designates this area as a mountain biking route and signs are placed on trails to indicate where bikes are restricted.

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (THPO)	I provided edits for this section that have not made it in to this version. Please see next comment.	Comments received from THPO on 3/18/20 were received after the final Draft EA was released for public review (on 2/20/20), and therefore could not be incorporated into that version. Relevant edits have been made to EA; if edits were not made, an explanation is provided in this matrix.
Agua Caliente Band of Cahuilla Indians (THPO)	Change to "Palm Canyon Creek is within the heart of Cahuilla territory. There are many Cahuilla heritage sites located along the entire expanse of the canyon, including village sites, seasonal camps, and numerous specialized activity areas including rock art, agave roasting pits, and milling features. The foremost occupation of Palm Canyon occurred within the last two thousand years. Archaeological evidence of early Cahuilla occupation and use of Palm Canyon, especially for the last two thousand years, is present in Palm Canyon Creek. This evidence reflects all aspects of traditional Cahuilla life and has exceptional cultural heritage value to the local Tribal community. For generations Cahuilla have maintained continual use of the area for spiritual connection and gathering traditional plants for food and medicine. Palm Canyon meets the criteria as highly significant Traditional Cultural Property."	This language has been revised.
Agua Caliente Band of Cahuilla Indians (THPO)	All of these rivers are located in the heart of Cahuilla territory.	The Forest Service is dedicated to protecting the unique resources in SBNF that are important to Cahuilla people. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions, including established boundaries, for managing the land and important resources within the corridor.
Agua Caliente Band of Cahuilla Indians (THPO)	Change to "Under the proposed action, there would be specific management actions implemented to protect and preserve cultural and historic heritage resources. Specifically, impacts would be the same as current management strategies, but would add additional management and protection for heritage resources, such as a permanent boundary and user capacity thresholds. Establishing a permanent boundary would result in a beneficial impact because it would include additional protection of the river corridor from development, which could prevent damage to heritage sites and artifacts in the river corridor. Similarly, establishing capacity thresholds would have a beneficial impact on heritage resources because they would afford additional protections due to less impact from recreational use."	This language has been updated in the EA.

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (THPO)	relics- This word is culturally insensitive. This is a thriving community- the cultural material of their ancestors are not relics.	Language has been edited to use the word "artifacts" per other suggested revisions.
Agua Caliente Band of Cahuilla Indians (THPO)	Nowhere above explains in detail how it will provide better or more protections than are currently granted. Environment justice has not been included in the consultation with the THPO.	Elements of the CRMP would protect heritage resources by adding a layer of administrative protection to river corridors containing river-related cultural resources. In addition, consultation with the Tribe will be ongoing and will continue at the project level as projects are proposed in the corridors.
Agua Caliente Band of Cahuilla Indians (THPO)	Isn't it adjacent to the Agua Caliente reservation?	The paragraph referenced describes land ownership within the designated river corridor. As the Agua Caliente reservation lands are not in the corridor, they were not mentioned here so as to avoid confusion. Maps have been edited, however, to show the proximity of reservation lands to the corridor.
Agua Caliente Band of Cahuilla Indians (THPO)	In the table Palm Canyon was not scored on its scenery but here it says it the a nationally-significant palm oasis.	As indicated in Table 1, Scenery is an Outstandingly Remarkable Value for Palm Canyon Creek.
Agua Caliente Band of Cahuilla Indians (THPO)	Replace Native American with the word Cahuilla in this paragraph.	This language has been edited in the revised CRMP.
Agua Caliente Band of Cahuilla Indians (THPO)	Bautista Creek and the other designated river areas all have Cahuilla heritage sites and cultural value.	As indicated in Table 1 and described in the text of the CRMP, Cultural Resources is an Outstandingly Remarkable Value for Bautista Creek due to the Native American cultural sites, including Cahuilla village sites, in the corridor.
Agua Caliente Band of Cahuilla Indians (THPO)	There needs to be a cultural section added to N Fork with language to include tribes in identifying and protecting heritage sites. List all of the culturally affiliated Tribes.	Appropriate tribal consultation regarding projects in the North Fork San Jacinto river corridor would continue at a project-planning level. As heritage resources were not found to be an Outstandingly Remarkable Value for this river, however, a cultural section was not included in this document.
Agua Caliente Band of Cahuilla Indians (THPO)	There needs to be a cultural section added to Fuller Mill Creek with language to include tribes in identifying and protecting heritage sites. List all of the culturally affiliated Tribes.	Appropriate tribal consultation regarding projects in the Fuller Mill Creek river corridor would continue at a project-planning level. As heritage resources were not found to be an Outstandingly Remarkable Value for this river, however, a cultural section was not included in this document.
Agua Caliente Band of Cahuilla Indians (THPO)	Add Agua Caliente Tribal Historic Preservation Officer as a stakeholder listed in this section.	The Agua Caliente Tribal Historic Preservation Officer has been added as a stakeholder in this section.

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (THPO)	In regards to cultural resources this partnership needs to be established. List all of the culturally affiliated Tribes.	Federally recognized tribes on the SBNF have been added to this section.
Agua Caliente Band of Cahuilla Indians (THPO)	List all of the culturally affiliated tribes.	Federally recognized tribes on the SBNF have been added to this section.
Agua Caliente Band of Cahuilla Indians (THPO)	This same section needs to be added to N fork and Fuller Mill Creek above.	Appropriate tribal consultation regarding projects in the North Fork San Jacinto and Fuller Mill Creek river corridors would continue at a project-planning level. As heritage resources were not found to be an Outstandingly Remarkable Value for these rivers, however, cultural sections were not included in this document.
Agua Caliente Band of Cahuilla Indians (THPO)	Add all reservations to the map.	Reservations have been added to maps.
Agua Caliente Band of Cahuilla Indians (THPO)	Agua Caliente Indian Reservation (and Morongo Reservation) is missing from the maps.	The Agua Caliente and Morongo Reservations have been added to maps.
Agua Caliente Band of Cahuilla Indians (THPO)	It is difficult to discern the Santa Rosa and the Cahuilla Reservations on the maps. Please change to make the reservations more visible.	Maps have been edited.
Agua Caliente Band of Cahuilla Indians (THPO)	Reservation(s) missing from the maps.	Reservations have been added to maps.
Agua Caliente Band of Cahuilla Indians (THPO)	Mountain biking is destructive to cultural resources. Since Palm Canyon is being treated as a TCP can you restrict mountain biking through this area?	Mountain biking is a permitted use in the designated portion of the river corridor. Restricting mountain biking in the corridor is outside the scope of this project, as the Forest Plan designates this area as a mountain biking route. Signs are placed on trails to indicate where bikes are restricted on Tribal lands.
Agua Caliente Band of Cahuilla Indians (THPO)	Replace Native American with Cahuilla.	The term Native American as it appears here in the Resource Assessment refers to agency-wide ORV criteria at a broad, national level.

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (THPO)	This statement cannot be made without knowing what is there. Since it has not been surveyed it could contain significant resources.	The lack of a heritage/cultural ORV designation on North Fork San Jacinto does not indicate the river has no cultural resources; rather, it indicates that, through the Resource Assessment process, cultural values of this river was not found to be river-dependent and outstandingly remarkable.
Agua Caliente Band of Cahuilla Indians (THPO)	Replace "cultural groups" with Cahuilla.	The term Native American as it appears here in the Resource Assessment refers to agency-wide ORV criteria at a broad, national level.
Agua Caliente Band of Cahuilla Indians (THPO)	Replace Native American with Cahuilla.	This language has been edited.
Agua Caliente Band of Cahuilla Indians (THPO)	Each defined river contains biological and heritage/cultural resources that are important to Cahuilla people. What measures will be taken to protect these resources?	USFS is dedicated to protecting the unique resources in SBNF that are important to Cahuilla people. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions, including established boundaries, for managing the land and important resources within the corridor. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
Agua Caliente Band of Cahuilla Indians (THPO)	Palm Canyon and Batista were the only to have identified cultural value- What data was used? What leads the FS to believe the other rivers have no cultural resources?	The lack of a heritage/cultural ORV designation on North Fork San Jacinto and Fuller Mill Creek does not indicate the rivers have no cultural resources; rather, it indicates that, through the Resource Assessment process, cultural values of these rivers were not found to be river-dependent and outstandingly remarkable.
Agua Caliente Band of Cahuilla Indians (THPO)	The document does not sufficiently address responsibility to comply with the Native American Graves Protection and Repatriation Act, and instead references the county coroner in regards to discovery of human remains.	Language explaining USFS's compliance with NAGPRA has been added. Language referencing the County Coroner is included to address the discovery of any non-tribal human remains.
Agua Caliente Band of Cahuilla Indians (THPO)	Until this point in time we have not been furnished sufficient documents to provide meaningful comments.	USFS shared all relevant documentation available with the Tribe and THPO, and has closely reviewed the comments received to ensure these concerns have been addressed prior to finalizing the EA.

Commenter	Comment	Response to comment
Agua Caliente Band of Cahuilla Indians (Tribe)	Page 13 notes that Tribal consultation occurred in February 2020 however, the THPO still has significant concerns that have yet to be addressed. On the same page, mention is made that the USFS must enter into a cooperative management agreement with the Tribe but nothing more is said throughout the entire document. Please expand on the Tribe's role and relationship with the Forest Service.	Tribal consultation involving the designation of the segment of Palm Canyon Creek is ongoing and will not end with the issuance of the final EA. Additional consultation with the Tribe will take place during the planning of any future site specific projects within the congressionally designated area. The cooperative management agreement referenced within Public Law 111-11 and on page 13 of the draft EA is the Memorandum of Understanding (MOU) executed on November 25, 2013. This MOU expired on December 31, 2017. At the February 3, 2020 meeting with District Ranger Julie Hall it was determined that a new MOU could be developed identical to the 2013 MOU. A new MOU has been drafted, using the same language as the 2013 MOU, and has been submitted for further processing. It is anticipated the new MOU will be executed in July of 2020.
Agua Caliente Band of Cahuilla Indians (Tribe)	Figure 1 and other graphics don't show the Agua Caliente Indian Reservation. Please add our Reservation boundaries on all relevant Palm Canyon Creek maps.	Maps in the EA and CRMP have been revised to include the Agua Caliente Indian Reservation.
Agua Caliente Band of Cahuilla Indians (Tribe)	Figure 3 doesn't show Palm Canyon Trail continuing north onto our Reservation. Most hikers that traverse Palm Canyon continue on into the Indian Canyons where they finish their hike and exit. The CRMP makes no mention of this important connection. Please show the entirety of the Palm Canyon Trail north up through the Agua Caliente Reservation.	The CRMP analyzes recreational use of Forest Service land; as such, impacts on the Reservation are out of scope. Text has been added to the EA, however, to acknowledge hiking use of the trail outside the corridor.
Agua Caliente Band of Cahuilla Indians (Tribe)	Page 15, Table 3 lists a Recommended User Capacity at 1,947 visitors a day based on hiking and mountain bike usage. Please note that the Indian Canyons prohibits mountain bikes due to their impacts on trails. The Tribe does not support such a high User Capacity.	User capacity is not a recommendation but rather a maximum, and triggers and management actions are listed (Table 4) that will be implemented prior to this point, to avoid reaching these use levels. Language has been added to the plan acknowledging the bike prohibition in Indian Canyons and recommending continuing user education on this.
Anthony Moscatel	As a longtime local resident, I use this ORV trail and enjoy the current. I suffer from an injury and I choose to see the forest on my motorcycle. Please keep my use available or rebuild trail away from river or build bridges where needed.	Thank you for your comment.

Commenter	Comment	Response to comment
CalWild	<p>The final EA/CRMP should include an assessment of the potential impact of upstream water extraction activities (surface or ground) on all four of the streams, including the Pine Wood development on Fuller Mill Creek and the North Fork San Jacinto River, Anza Valley development upstream of Bautista Creek and the private inholding on the creek near the Alesandro Trailhead on Bautista Canyon Road, and development around Pinyon Flat, Pinyon Pines, and Pinyon Crest upstream of Palm Canyon Creek. The final EA/CRMP should also assess potential Forest Service water diversions for campgrounds, picnic areas, residential cabins, and facilities under special use permit.</p>	<p>A Water Quality/Free Flow Management Standard has been added in the CRMP for all four rivers, regarding surface water diversions and groundwater extractions. This standard was pulled from the SBNF Land Management Plan, Part 3. Since this standard is a current Forest Plan action, analysis is included in the EA under impacts from the no-action alternative on hydrology, which states that "Under the no-action alternative, existing federal guidelines, such as those in the Forest Plan and Section 7 of the Act, as well as state water quality standards, would continue to protect water quality in the four designated rivers." Activities on the private lands referenced (including Pinewood and Anza Valley developments) are outside Forest Service jurisdiction and not within the scope of the CRMP.</p>

Commenter	Comment	Response to comment
CalWild	<p>The DEA summarizes the protection of designated rivers in regard to new dams and diversions as “Prohibits dams and other federally assisted water resource projects that would affect river values...” This incorrectly combines two provisions in section 7. One provision specifically prohibits the Federal Energy Regulatory Commission (FERC) from licensing under the Federal Power Act “any dam, water conduit, reservoir, powerhouse, transmission line, or other project works” on a designated river, regardless of whether the project adversely affects river values.</p> <p>Another provision prohibits federal agencies from “authorization of any water resources project that would have a direct and adverse effect on the values for which the river was established.” Please note that the prohibition against FERC licensing is absolute – FERC cannot license any project on a designated river segment even if the project in question has no direct and adverse effect on river values.</p> <p>Sec. 7 also states that nothing shall “preclude licensing of, or assistance to, developments below or above a wild, scenic, or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation of a river...” This provision has become increasingly important as activities outside designated river corridors but within the watershed of the designated river have resulted in the degradation of water quality. An evaluation of state water quality assessments of National Wild and Scenic Rivers found that impaired water is a widespread concern throughout the National Wild and Scenic River System and more work is needed to develop viable strategies to address this problem.</p>	Chapter 1 of the EA has been revised to more accurately summarize the sections of the Act.

Commenter	Comment	Response to comment
CalWild	The summary of the Act on page 2 also over-simplifies another important protective provision by stating that the Act specifically "Protects outstanding natural, cultural, or recreational values." In fact, Sec. 10(a) of the Act actually states: "Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archaeological, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area." Under the full provision, enhancement is equally important to the protection of outstanding values. This is particularly crucial when outstanding values include threatened and endangered species that require recovery (which is the case for all four streams subject to the CRMP).	This section has been revised in the EA to capture additional detail and nuance from Section 10(a) of the Act.
CalWild	The page 2 summary also fails to document other important protective provisions of the Act, including: Section 8(a)-(b) – Withdraws public lands within authorized boundaries of designated rivers from "entry, sale, or other disposition."	This section has been revised in the EA to include this provision from Section 8 of the Act.
CalWild	The page 2 summary also fails to document other important protective provisions of the Act, including: Section 12(a) – Directs the Secretaries to develop "management policies, regulations, contracts, plan" that may be necessary to protect designated rivers.	This section has been revised in the EA to include this provision from Section 12 of the Act.
CalWild	The page 2 summary also fails to document other important protective provisions of the Act, including: Section 12(c) – Requires administering agencies to "cooperate with the Administrator, Environmental Protection Agency and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river."	This section has been revised in the EA to include this provision from Section 12 of the Act. Furthermore, USFS works with State agencies to address water and air quality concerns, as noted in the "Compliance with Other Policies, Plans, Jurisdictions" section of the EA.
CalWild	The page 2 summary also fails to document other important protective provisions of the Act, including: Section 13(a)-(g) – Retains state authority over hunting and fishing, water rights, and access to the beds of navigable streams.	The CRMP has been edited to clarify that management of the river corridors will include all applicable cooperation with listed agencies.

Commenter	Comment	Response to comment
CalWild	The final EA/CRMP should be revised to reflect and implement all the provisions essential to protecting and enhancing the designated river segments.	Relevant provisions were revised or added.
CalWild	We strongly recommend that the outstandingly remarkable ecological values of these streams be fully recognized in the CRMP, in addition to their existing wildlife and botany ORVs.	An Ecology value did not meet the required criteria to qualify as an ORV during the development of the Resource Assessment; however, specific botanical and wildlife species met the region-specific criteria for qualifying as an ORV. Therefore, USFS feels that ecology values on the Forest would indirectly benefit from individual species and river protections that are afforded by the adoption of the CRMP. Since the protection of the species listed under the ORV requires protection of the habitats in which they are found (and adjacent habitats that may indirectly affect occupied habitat), protection of the species necessarily leads to protection of the habitats and ecosystems where they occur. Additionally, the corridor for the North Fork of the San Jacinto River includes USFWS designated critical habitat for the mountain yellow-legged frog. Critical habitat is a higher level of protection than what is included in the proposed action. Protection of the critical habitat requires protection of the identified Primary Constituent Elements within the critical habitat. Furthermore, many of the plant and animal species included in the botany and wildlife ORVs are indicator species which means they are all sensitive to changes in their ecosystems, particularly hydrology and water quality.
CalWild	DEA Table 3 lists estimated current daily use levels and recommended daily user capacities for all four streams. The table provides no information concerning the provenance of the current visitor recreation levels. One has to read all the way through to the Final Technical Memo attached to the CRMP to discover that the memo is the source of the visitor data. At the minimum, Table 3 should cite the Final Technical Memo as the source of this data.	A reference has been added to the EA, directing readers to the User Capacity Technical Memo that is appended to Appendix A of the EA, which further explains the criteria and data used to calculate user capacities.
CalWild	Hourly picnic table occupancy at the Fuller Mill Creek Picnic Area is the indicator used to assess carrying capacity. However, the picnic area is adjacent to Riverside County's Lawler Park and is just a short distance away from the confluence of Fuller Mill and the North Fork San Jacinto River. Recreation occurs at all these sites and should be included in the carrying capacity assessment.	The User Capacity for Fuller Mill Creek applies to Forest Service lands; Lawler Park visitation was therefore not included in the assessment. Use at the confluence area was considered in the capacity approach. Informal management assessment of use at these areas suggests that baseline use levels are low.

Commenter	Comment	Response to comment
CalWild	<p>A popular destination associated with this use area is the confluence of Fuller Mill Creek and the North Fork San Jacinto River, which is just a short walk from the picnic area parking lot. There is a likely mingling of visitors between the picnic area and visitors at the nearby Riverside County's Lawler Lodge and Alpine Cabins. The DEA and the CRMP should take into account overall visitor use in this relatively small area, not only associated with the picnic, but also Lawler Lodge (which can accommodate up to 126 people) and visitors to the Fuller Mill/NF San Jacinto confluence.</p> <p>Given that there are other visitor destinations to Fuller Mill Creek that should be included in the carrying capacity assessment, we have to question whether it makes sense to establish a recommended daily user capacity of the creek that is more than five times the current levels. Particularly since the area's proximity to Highway 243 likely requires monitoring and enforcement by Forest Service personnel. Neither the DEA or CRMP address current and future staffing levels and how this plays into managing carrying capacity of the creek.</p> <p>Clarify when the Full Mill Picnic Area is open to public use. Expand the carrying capacity analysis to include all activities in the visitor node that straddles Highway 243 and includes the Fuller Mill Picnic Area, Lawler Lodge and Cabins, and the Fuller Mill/North Fork confluence.</p>	<p>The User Capacity for Fuller Mill Creek applies to Forest Service lands; Lawler Park visitation was therefore not included in the assessment. Use at the confluence area was considered in the capacity approach. Informal management assessment of use at these areas suggests that baseline use levels are low. The plan does not propose to increase use by a factor of 5; this number is not a recommendation but rather a maximum, and triggers and management actions are listed that will be implemented prior to this point.</p>
CalWild	<p>Visitor use of the North Fork associated with the Highway 243 crossing and the Fuller Mill parking area should be included in the carrying capacity assessment. The final EA/CRMP should also assess potential user impacts and carrying capacity issues associated with the Azalea GSA Camp, wilderness trails upstream, and the Webster Trail and OHV Trail 5S09 downstream.</p>	<p>Visitor use of the North Fork associated with the Highway 243 crossing, the Fuller Mill parking area, the Azalea GSA Camp, the wilderness trails upstream, and the Webster Trail and OHV Trail 5S09 were considered in the development of the user capacity methodology. These locations were all determined by Forest Service staff to be low use; as such, use of the Fuller Mill Picnic Area was determined to be the driving factor in use of the corridor.</p>

Commenter	Comment	Response to comment
CalWild	Another trail counter should be established in the northern end of Palm Canyon and the Palm Canyon Trail to ensure that all use on this access trail is included in the carrying capacity assessment. The EA should assess potential impacts of human use of the Palm Canyon Trail on endangered Peninsular bighorn sheep, which are directly associated with Palm Canyon's outstanding botanical value (palm oases) and proposed ecological value.	Trail counters were placed at appropriate locations to capture trail use. The plan does not propose to increase use; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions, including established boundaries, for managing the land and important resources within the corridor and does not in itself result in any projects or activities that would have impacts on Peninsular bighorn sheep. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CalWild	Vehicle counter(s) should be installed on Bautista Canyon Road in order to monitor user levels.	Placing a vehicle counter on this road would likely be ineffective for monitoring visitor use levels because most travel on this road is commuting use rather than river-related and recreational in nature, including travel to and from the Bautista Conservation Camp #36.
CalWild	The Monitoring Plan should include estimated personnel time and cost required to effectively monitor the Wild and Scenic Rivers on an annual basis.	Monitoring wild and scenic rivers is part of the broader Forest Recreation program and will be completed within the annual budgeting process as approved.
CalWild	The CRMP should explicitly and proactively propose cooperation with other agencies that play important roles in the management of the four Wild and Scenic Rivers.	The CRMP has been edited to clarify that management of the river corridors will include all applicable cooperation with listed agencies.
CalWild	The page 2 summary also fails to document other important protective provisions of the Act, including: Section 6(a)(1) – Authorizes the Interior and Agriculture Secretaries to “acquire lands and interests in land with the authorized boundaries” of designated rivers.	Land acquisition priorities in the river corridors will be guided by the 2005 Forest Plan's Land Acquisition Prioritization Guide. The Forest Service is continually acquiring high value properties as they are available for acquisition and funding is provided. The top priorities in the Forest Plan match outstandingly remarkable values in the river corridors, including critical habitat lands, land needed for the protection of significant historical or cultural resources, and land needed for the protection and management of administrative and Congressionally designated areas.

Commenter	Comment	Response to comment
CalWild	The page 2 summary also fails to document other important protective provisions of the Act, including: Section 9(a)-(b) –Authorizes the Secretaries to prescribe regulations to protect designated rivers from mining, limits mining to the use of surface and surface resources reasonably required to carry out prospecting or mining operations, and withdraws wild river segments from appropriation under the mining laws.	The WSR Act withdraws future mining and minerals leasing only from wild segments. Withdrawing scenic and recreational -classified segments from minerals extraction was not analyzed in the scope of this decision. Future projects related to minerals withdrawal would go through the environmental analysis process, as appropriate, before they are implemented.
CalWild	According to the San Bernardino National Forest web site, the Fuller Mill Creek Picnic Area remains closed to public access by Forest Order between March and October to protect the mountain yellow-legged frog. The Technical Memo states that the picnic area is open to the public from late spring to early fall on page 8 and then contradicts itself by noting that the site is closed between March and October to on page 9, and then reiterates the closure on page 11. Is the Fuller Mill Picnic Area open or closed from March-October? This confusion is a fairly serious error in the context of determining and managing Fuller Mill Creek's carrying capacity.	Access to Fuller Mill Creek itself is closed by an annual Forest Order during the season in which mountain yellow-legged frogs are typically active. The annual closure is a requirement of the Ongoing Activity Consultations with the Fish and Wildlife Service. The Fuller Mill Creek Picnic Area is not closed. Visitors are able to use the picnic tables and areas during this time, while avoiding the closure area (10' on either side of the creek) that surrounds the creek itself. Text has been reviewed to ensure this distinction is conveyed.
CalWild	To ensure protection of wild and scenic values, the EA/CRMP should identify, prioritize, and determine the cost of fee title acquisition from willing sellers or the establishment of scenic easements on private inholdings within and upstream of the protected segments.	Land acquisition priorities in the river corridors will be guided by the 2005 Forest Plan's Land Acquisition Prioritization Guide. The Forest Service is continually acquiring high value properties as they are available for acquisition and funding is provided. The top priorities in the Forest Plan match outstandingly remarkable values in the river corridors, including critical habitat lands, land needed for the protection of significant historical or cultural resources, and land needed for the protection and management of administrative and Congressionally designated areas.
CalWild	No information is provided in the DEA/CRMP about mining on any of the streams. The Wild and Scenic Rivers Act withdraws wild segments from any new mining claims. To ensure protection of water quality and outstanding values, the CRMP should propose a mineral withdrawal for all of the Wild and Scenic Rivers regardless of classification.	The WSR Act withdraws future mining and minerals leasing only from wild segments. Withdrawing scenic and recreational -classified segments from minerals extraction was not analyzed in the scope of this decision. This CRMP proposes administrative actions for managing the land within the corridor. Future projects related to minerals withdrawal would go through the environmental analysis process, as appropriate, before they are implemented.

Commenter	Comment	Response to comment
CalWild	<p>Monitoring actions should be expanded to including monitoring of:</p> <ul style="list-style-type: none"> • Visitor use not only in the Fuller Mill Picnic Area but the entire visitor node where Highway 243 crosses both the North Fork and Fuller Mill Creek, including visitor use associated with Lawler Lodge and Cabins and visitors to the Fuller Mill/North fork Confluence. • Visitor use associated with the Azalea GSA camp, upstream wilderness trails, and the Webster Trail and OHV Trail 5S09 in the lower segment of the North Fork. • Vehicle use along Bautista Canyon Road and the three motorized trails or routes that cross Bautista Creek (Hixon-Bautista Trail, Alesandro Trail, Cottonwood Truck Trail). • Visitor use of the north and south ends of the Palm Canyon Creek and the Palm Canyon Trail. 	<p>Visitor use associated with these areas were considered in the development of the user capacity methodology. These locations were all determined by Forest Service staff to be low use; as such, they have not been included in the monitoring plan. Various levels of monitoring are also requirements of several Ongoing Activity Consultations with the Fish and Wildlife Service.</p>
CBD/Sierra Club	<p>The above referenced document (hereinafter EA and/or Plan) fails to properly analyze the affected environment and potentially significant impacts of the proposed action.</p>	<p>Individual comments related to affected environment and impacts analysis are specifically addressed below.</p>
CBD/Sierra Club	<p>In particular, the EA fails to identify habitat for sensitive species, it fails to analyze impacts from ongoing cattle grazing, and uses arbitrary metrics and methodology for determining user capacity and measuring impacts of increased use - resulting in a Plan which will have direct, indirect and reasonably foreseeable cumulative impacts which have not been identified or mitigated to a level of insignificance.</p>	<p>The metrics and methodology used to determine user capacity levels were based on Forest Service precedent, review of relevant literature, recreation opportunity spectrum (ROS), and data collection and analysis.</p>
CBD/Sierra Club	<p>Here, the Forest Service has failed to adequately address how visitor use will impact the outstandingly remarkable values for these wild and scenic rivers or describe an actual level of visitor use that will not adversely impact those values.</p>	<p>The premise of capacity for each river explains how visitor use could impact outstandingly remarkable values. Daily user capacities for all corridors specify actual levels that will not impact those values.</p>
CBD/Sierra Club	<p>The Ninth Circuit addressed the user capacities issues in depth in a series of cases. As the Court explained regarding that comprehensive management plan (CMP):...We concluded that the VERP framework, as set out in the 2000 CMP, failed sufficiently to address user capacities because it did not adopt "quantitative measures sufficient to ensure its effectiveness as a current measure of user capacities."</p>	<p>Physical capacities and the number of encounters per hour were used to quantitatively determine user capacities.</p>

Commenter	Comment	Response to comment
CBD/Sierra Club	The EA is arbitrary and capricious in measuring and analyzing the impacts of its proposed User Capacity in Palm Canyon	The analysis is not arbitrary and capricious, as the EA provided a detailed methodology for analyzing user capacity. The analysis is also based on data collected in the field. Through the Visitor Capacity Analysis (VCA) process, thresholds are identified to determine the limits required to maintain desired conditions. In this manner, indicators and thresholds provide managers with information to determine if the outstandingly remarkable values, and opportunities they are managing, are actually being provided. The VCA estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	It is rather stunning that in contrast to the current use of 15 visitors per day, the plan identifies the User Capacity as 1,947 visitors per day, an increase of 130 fold.	The plan does not propose to increase use by a factor of 130; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed.
CBD/Sierra Club	The EA fails to make the case that increasing visitor use in the 8.1 mile segment of Palm Canyon from 15 to 1,947 people per day would cause no significant impact to wildlife or plants or wilderness values or not cause erosion.	The plan does not propose to increase use to 1,947 people/day; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no triggers or limits previously existed. The Visitor Capacity Analysis estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.

Commenter	Comment	Response to comment
CBD/Sierra Club	The EA fails to describe an actual level of visitor use that will not adversely impact the outstandingly remarkable values of this wild and scenic river.	The premise of capacity for each explains how visitor use will impact outstandingly remarkable values. Daily user capacities for all corridors specify actual levels that will not impact those values. Based on users who could access the resources while staying on the trail. Impacts to resources are based on users traveling off the trail.
CBD/Sierra Club	The theoretical User Capacity was calculated using a statistical model which only takes into account the number of encounters among users during an 8 hour day, positing that a particular level of encounter is the threshold above which users will start to create alterative "social trails" to avoid encounters, the only apparent metric being recreational impacts. We did not, however, see any analysis of what impacts such a gargantuan potential increase in use – which the plan maintains is acceptable, albeit requiring monitoring– could have on wildlife, plants, hydrology/erosion with impacts downstream, cultural resources, or other outstandingly remarkable values of this wild and scenic river.	Through the Visitor Capacity Analysis (VCA) process, thresholds are identified to determine the limits required to maintain desired conditions. In this manner, indicators and thresholds provide managers with information to determine if the resource values, and opportunities they are managing, are actually being provided. The VCA estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	It is counterintuitive that a 130-fold increase in use would not be likely to have substantial impacts. In fact, as outlined below, it is entirely likely that 1,947 people a day using this corridor would have significant and probably irreparable impacts to wildlife, sensitive plant life, and cultural and wilderness values.	The plan does not propose to increase use by a factor of 130; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The impact of intergroup encounters on botany ORV are noted as part of the basis for the indicator, threshold, and capacity. The Visitor Capacity Analysis (VCA) estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented.

Commenter	Comment	Response to comment
CBD/Sierra Club	Thus, it is wholly inappropriate to have the only threshold for determining use capacity be "level of encounter". Since the mandate is to protect biological, cultural, and scenic resources, an analysis of what such a dramatic increase in use by mountain bikes (or hikers or equestrians) would have on these resource values should be at the heart of the plan and the methodology for determining acceptable User Capacity.	The level of encounter is used because beyond a certain number of encounters, users will be more likely to go off the trail, leaving the trail surface that can sustain user traffic and thereby potentially impacting off-trail land and potentially botany resources, which have been identified as an ORV. The intent is to manage use to the hardened surfaces.
CBD/Sierra Club	Further, how do all those 1,947 people a day get to the trailhead at the top? Perchance by vehicle? Where do all those vehicles park? Is there any impact associated with that?	The impact of intergroup encounters on botany ORV are noted as part of the basis for the indicator, threshold, and capacity. Additionally, the vast majority of users are mountain bikers, and exit before the Reservation and aren't allowed there. Furthermore, the majority are dropped off at the top of the trailhead. Some bikers may shuttle a vehicle at the top to bottom. Forest Service management observations indicate that there are rarely more than 6 vehicles parked at the access to the Palm Canyon Trail.
CBD/Sierra Club	The EA did not consider the air quality/ access impacts including increased traffic and greenhouse gas production either.	The plan does not propose to increase traffic; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. Due to the drop-off nature of the trail use, increased traffic and GHG emissions are not expected to be a concern. Furthermore, as access to the trail is through non-Forest Service system roads, any potential increase in traffic is outside the scope of the analysis. As the CRMP would implement a user capacity monitoring plan, increase in trail users would be noted and adaptive management could be implemented to achieve Forest air quality goals.
CBD/Sierra Club	The Forest Service's website notes the following for Palm Canyon: "It is free of impoundments, is only accessible by trail and is in a primitive watershed with unpolluted waters. The varied and unspoiled terrain also provides a home for the endangered Peninsular bighorn sheep, the southwestern willow flycatcher and many sensitive songbirds." Yet the EA claims there are no outstanding wildlife at risk; this is not the case, as outlined below.	The EA does not make claims that there are no outstanding wildlife at risk in Palm Canyon. The EA has been edited to more clearly define wildlife resource occurrences in Palm Canyon. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented.

Commenter	Comment	Response to comment
CBD/Sierra Club	The EA neglects to identify bighorn sheep as a sensitive species utilizing Palm Canyon Creek; in fact, the wild and scenic segment is in or immediately adjacent to essential habitat as defined in the USFWS Recovery Plan for Bighorn Sheep in the Peninsular Ranges, California (2000) ("Recovery Plan"). Designated critical habitat for Peninsular bighorn sheep is located less than a mile away from the designated Wild section of Palm Canyon and the bighorn have been documented using Palm Canyon (CNDDDB 2020).	The Resource Assessment identified that bighorn sheep occur in Palm Canyon and suitable habitat for southwestern willow flycatcher and least Bell's vireo potentially occur. The EA has also been edited to more clearly define wildlife resources occurrences in Palm Canyon. Because flycatcher and vireo are not known to occur and bighorn sheep are not dependent on riparian habitat and/or the palm oases, Palm Canyon was not recognized as having Wildlife ORV as discussed in the Resource Assessment.
CBD/Sierra Club	The Recovery Plan (at 44, 87, 219 and elsewhere) memorializes the expert consensus that increased human activity adjacent to and within bighorn sheep habitat has great potential to adversely affect bighorn. It proposes trails restrictions (including non-motorized), as well as seasonal closures near water sources.	The EA does not anticipate increased human activity as a result of the CRMP; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The EA has been edited to more clearly define wildlife resource occurrences in Palm Canyon.
CBD/Sierra Club	The USFS Palm Canyon Creek management plan should reference the habitat for gray vireo and the CVMSHCP's objective for coordination with USFS regarding habitat management.	The Forest Service does not propose to manage habitat as part of the proposed action. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would impact gray vireo habitat. Recommended management actions (When triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented. Therefore, the CVMSHCP is not relevant to include in the EA.

Commenter	Comment	Response to comment
CBD/Sierra Club	Therefore, the management plan should address the potential impacts of a major increase in User Capacity on the gray vireo. The example of this species and many other species, including Peninsular bighorn sheep and mountain yellow-legged frog, underscore the fundamental problem of facilitating a dramatic increase in trail use based solely on a statistical model related to human-human encounters without any data and analysis of the potential adverse impacts of that increase in human use on sensitive species.	The EA has been edited to more clearly define occurrences of wildlife species in the Wild and Scenic River corridors. The purpose of the EA would be to adopt the CRMP. The plan does not propose to increase visitor use; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented. A statistical model related to human-human encounters was used as a proxy for impacting botany ORVs because these encounters cause people to be conflicted off the trail and thereby impact species via trail braiding and other habitat-impacting activities. This method for analyzing user capacity complies with the 9-step process developed by the IWSRCC for estimating user capacities.
CBD/Sierra Club	The California Natural Diversity Data Base (CNDDDB) identified numerous rare plant species locations in and around the Palm Canyon in addition to the palm oasis mentioned in the EA (at pg. 18). The unique palm oases and the Forest Service recognition that it is "an area of high ecological significance" (at pg. 18) alone requires careful analysis of allowing a 130 fold increase in use particularly because these palm oases will be desirable destinations.	The EA has been edited to more clearly define botany resource occurrences in Palm Canyon. The plan does not propose to increase use by a factor of 130; this number is not a recommendation but rather a maximum. User capacity methodology stated that botany values could be sensitive to impacts from visitor use on the Palm Canyon Trail if higher use levels lead to the creation of social trails. Careful analysis was done to develop triggers and management actions, which are listed in Table 4 of the EA and would be implemented prior to this point. For instance, one management action may be to limit use of the Palm Canyon Trail. The capacity methodology used is tied to the ORVs (in this case, botany), which is consistent with the methodology used on other rivers where the Forest Service was able to use developed sites.

Commenter	Comment	Response to comment
CBD/Sierra Club	Additional species that may occur within the boundaries of the designated wild corridor due to their occurrence in the headwaters include Parish's chaenactis (<i>Chaenactis parishii</i>), Cove's cassia (<i>Senna covesii</i>), San Jacinto mariposa-lily (<i>Calochortus palmeri</i> var. <i>munzii</i>), southern jewelflower (<i>Streptanthus campestris</i>), Ziegler's aster (<i>Dieteria canescens</i> var. <i>ziegleri</i>) and others. Prior to determining management strategies, an updated resource inventory including botanical resources is needed in order to craft appropriate management strategies.	The EA has been edited to more clearly define botany resource occurrences in Palm Canyon. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on botany. Specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	More than half of the Palm Canyon Creek segment is within Recommended Wilderness. The EA fails to examine the effect of 1,947 recreational users a day in this narrow corridor vis a vis the Creek's eligibility for Wilderness designation. To further exacerbate the problem, the Plan and EA contemplate that the bulk of this use would be mountain biking, which is in conflict with Wilderness. This issue needs to be addressed.	The plan does not propose to increase visitor use; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The trail is adjacent to, rather than in Recommended Wilderness, and is therefore not in conflict with management of the Wilderness Study Area.
CBD/Sierra Club	We remain stunned that in contrast to the current use of 20 visitors per day, the plan identifies the User Capacity as 120 visitors per day, a six-fold increase. It is unclear how the Recommended Daily User Capacity was determined.	The plan does not propose to increase use by a factor of 6; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The premise for determining the Recommended Daily User Capacity is as specified where it is estimated as the maximum number of visitor groups that can be accommodated within the current physical footprint of the Dark Canyon Campground. This 9-step process was developed by the IWSRCC for estimating user capacities. User capacities based on the physical capacities of recreation facilities have precedent in the Snake River Headwaters CRMP. Impacts noted are behavioral, not related to the amount of use. Global edit in EA: "Recommended Daily User Capacity" has been clarified and retitled "User Capacity" to reflect the point that the user capacity numbers are a maximum limit of use rather than any recommendation.

Commenter	Comment	Response to comment
CBD/Sierra Club	The EA fails to make the case that increasing visitor use in the 10.12 mile segment of the North Fork of the San Jacinto River from 20 to 120 people per day would cause no significant impact to sensitive wildlife including federally designated critical habitat, stream bank impacts and erosion and water quality impacts.	The plan does not propose to increase use to 120 people/day; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The Visitor Capacity Analysis estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	Because the North Fork of the San Jacinto River has varying levels of designations including wild, scenic and recreational, user capacity should also be addressed based on the different designations and must ensure protections for the outstandingly remarkable values which these designations protect.	WSR classifications reflect the existing level of development on river corridors and do not afford additional protections in and of themselves for specific ORVS. Daily user capacities are based on the premise that use is managed to the existing hardened footprint of recreation facilities.
CBD/Sierra Club	The EA fails to describe an actual level of visitor use that will not adversely impact the outstandingly remarkable values of this wild and scenic river.	Daily user capacities for all corridors specify actual levels that will not impact those values, based on the premise that use is managed to the existing hardened footprint of recreation facilities.
CBD/Sierra Club	The proposed triggers fall woefully short of requirements needed to protect the resources for which the Wild and Scenic status was designated. First, it is unclear how the triggers were rationalized. Secondly, how the monitoring days are determined is unclear. Lastly, "other management actions could be taken" fails to inform the reader of what those management actions are. Clear actionable triggers, based on science and the local resources, need to be identified.	Triggers are specified as early warning signs to prompt management actions when there are indications that the amount of use has increased substantively on a small minority of nights during the season, initially, and a moderate minority of nights as a second trigger. In other words, the triggers are specified to prompt action far in advance of use approaching the estimated user capacity. Specific management actions are specified in conjunction with each trigger and would go through the environmental analysis process, as appropriate, before they are implemented. A detailed monitoring plan is beyond the scope of the CRMP itself.

Commenter	Comment	Response to comment
CBD/Sierra Club	<p>The North Fork of the San Jacinto River is designated critical habitat for the Southern California Distinct Population Segment of the mountain yellow-legged frog, a critically endangered amphibian. This fact is not specifically mentioned in the EA. The designated area is key for the recovery of the species and to our knowledge, re-introductions of the frog into habitat has been successful in this area. We are also aware that “take” of this federally endangered species has occurred at Forest Service facilities when a frog was inadvertently captured by visitors at the Dark Canyon campground (USGS personal communication) and was subsequently released unharmed. However, this situation makes clear the need for more protections for the frogs. In order to support recovery efforts for this imperiled species, particularly during the worldwide amphibian extinction crisis, the Management Plan should have considered a further limitation on existing visitor access as a viable alternative instead of a six-fold increase.</p>	<p>The EA has been edited to enhance discussion of critical habitat in the North Fork of the San Jacinto River for the Southern California Distinct Population Segment of the mountain yellow-legged frog. The plan does not propose to increase use by a factor of 6; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. Maximum capacity is set at the capacity of the Dark Canyon Campground. If triggers are activated, USFS would make necessary changes to campground access (subject to further environmental analysis) to ensure use levels did not exceed capacity. USFS also conducted Ongoing Activity Consultations with the US Fish and Wildlife Service, which are ESA Section 7 consultations, over potential impacts to threatened & endangered plants and wildlife from ongoing activities (e.g., trail maintenance, recreation management activities, campground use). Through this process, USFWS issued incidental take statements, which allow a specified level of effect (covered under the ESA) for ongoing activities on the Forest. As a condition of these consultations, USFS monitors impacts to habitats and implements other, numerous protective measures. This information has been added to the EA.</p>
CBD/Sierra Club	<p>Particularly because parts of the critical habitat for the mountain yellow-legged frog is within the “scenic” sections of the North Fork of the San Jacinto River, the management plan must include additional, implementable safeguards to protect the frog in all of its life stages in these areas.</p>	<p>WSR classifications reflect the existing level of development on river corridors and do not afford additional protections in and of themselves for specific ORVS. As discussed in the proposed action, applicable laws such as the ESA will still govern the management of species and their habitats. This policy is already being followed, as it is required by law. Additionally, USFS has substantive safeguards in place through its Ongoing Activity Consultations with the US Fish and Wildlife Service, which are ESA Section 7 consultations over impacts to threatened & endangered plants and wildlife from ongoing activities (e.g., trail maintenance, recreation management activities). This information has been added to the EA.</p>

Commenter	Comment	Response to comment
CBD/Sierra Club	Other management prescriptions and triggers need to be included to protect habitat for the genetically isolated population of California spotted owls and the southern rubber boa that occur along the North Fork of the San Jacinto River.	As Forest Service Region 5 Sensitive Species, under the proposed action, the southern rubber boa and habitat for the California spotted owl would continue to be protected under applicable laws, regulations, and policies. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	Because of the likely extirpation of the San Bernardino flying squirrel in the San Jacinto Mountains and their decline in the San Bernardino Mountains, management safeguards need to be included for future recovery efforts for this iconic southern California mammal.	As a Forest Service Region 5 Sensitive Species, under the proposed action, the San Bernardino flying squirrel would continue to be protected under applicable laws, regulations, and policies. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	As the effects of climate change continue to progress and southern California becomes warmer and drier and plant communities continue their march upslope, habitat will likely increase for endangered species including southwestern willow flycatcher, least Bell's vireo and other sensitive songbirds, so habitat safeguards must be included during the nesting/fledging season. The EA fails to address analysis of impacts to these species.	As discussed in the EA under the proposed action, applicable laws such as the ESA will still govern the management of listed species. Protections for Forest Service Sensitive Species will also remain in place. The purpose of the EA would be to adopt the CRMP. The CRMP provides broad guidance on how to manage the land within the corridor and does not in itself result in any projects or activities that would have specific, direct effects on the ORVs. The CRMP is a programmatic NEPA document and analysis is commensurate with that level of action.
CBD/Sierra Club	We remain stunned that in contrast to the current use of 42 visitors per day, the plan identifies the User Capacity as 229 visitors per day, an over five-fold increase. It is unclear how the Recommended Daily User Capacity was determined for Fuller Mill Creek.	The plan does not propose to increase use by a factor of 5; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The premise for determining the Recommended Daily User Capacity is specified in Appendix A of the CRMP. This 9-step process was developed by the IWSRCC for estimating user capacities. T

Commenter	Comment	Response to comment
CBD/Sierra Club	The EA fails to make the case that increasing visitor use in the 3.9 mile segment of the Fuller Mill Creek from 42 to 229 people per day would cause no significant impact to sensitive wildlife including federally designated critical habitat, stream bank impacts and erosion and water quality impacts.	The plan does not propose to increase use to 229 people/day; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The Visitor Capacity Analysis estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	Because Fuller Mill Creek has two different designations - scenic and recreational, user capacity needs to address based on the different designations and must ensure protections for the outstandingly remarkable values which these designations protect.	Fuller Mill Creek has two different classifications; classifications are based on the level of development in the corridor rather than on use levels. User capacity determinations are not based on classifications. The methodology for determining user capacity on Fuller Mill Creek is appropriate for estimating the maximum capacity if facilities are used to the extent of their existing capacity.
CBD/Sierra Club	The EA fails to describe an actual level of visitor use that will not adversely impact the outstandingly remarkable values of this wild and scenic river.	Daily user capacities specify actual levels that will not impact the Outstandingly Remarkable Values of Fuller Mill Creek
CBD/Sierra Club	As with the North Fork of the San Jacinto River, the proposed triggers fall woefully short of requirements needed to protect the resources for which the Wild and Scenic status was designated. First, it is unclear how the triggers were rationalized. Secondly, how the monitoring days are determined is unclear. Lastly, "other management actions could be taken" fails to inform the reader of what those management actions are. Clear, actionable triggers for action, based on science and the local resources, need to be identified.	Triggers are specified as early warning signs to prompt consideration of management actions when there are indications that the amount of use has increased substantively on a small minority of nights during the season, initially, and a moderate minority of nights as a second trigger. In other words, the triggers are specified to prompt action far in advance of use approaching the estimated user capacity. Specific management actions are specified in conjunction with each trigger. Recommended management actions would go through the environmental analysis process, as appropriate, before they are implemented. A detailed monitoring plan is beyond the scope of the CRMP itself.

Commenter	Comment	Response to comment
CBD/Sierra Club	The Fuller Mill Creek is also designated critical habitat for the Southern California DPS of the mountain yellow-legged frog. Again, this fact is not specifically mentioned in the EA.	The Wildlife Affected Environment section of the EA discusses the status of the mountain yellow-legged frog as a federally endangered species. The EA has been updated to specifically mention here as well the status as designated critical habitat for the Southern California DPS.
CBD/Sierra Club	The designated area is also key for the recovery of the species and successful re-introductions has occurred in this creek. Like the North Fork of the San Jacinto River, in order to support recovery efforts for this imperiled species, particularly during the worldwide amphibian extinction crisis, the Management Plan should have considered a further limitation on existing visitor access as a viable alternative instead of a greater than five-fold increase.	The "greater than five-fold increase" is not a recommended increase of visitor use. It is merely the allowable capacity.
CBD/Sierra Club	Particularly because most of the critical habitat for the frog is within the "scenic" sections of the Fuller Mill Creek, the management plan must include additional, implementable safeguards to protect the frog in all of its life stages in these areas.	WSR classifications reflect the existing level of development on river corridors and do not afford additional protections in and of themselves for specific ORVS. As discussed in the EA, under the proposed action, applicable laws such as the ESA will still govern the management of species. This policy is already being followed, as it is required by law. Furthermore, this creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk. Additionally, USFS has substantive safeguards in place through its Ongoing Activity Consultations with the US Fish and Wildlife Service, which are formal ESA Section 7 consultations over impacts to threatened & endangered plants and wildlife from ongoing activities (e.g., trail maintenance, recreation management activities). This information has been added to the EA.

Commenter	Comment	Response to comment
CBD/Sierra Club	Again, like the North Fork of the San Jacinto River, other management prescriptions and triggers need to be included to protect habitat for the genetically isolated population of California spotted owls, the southern rubber boa, the San Bernardino flying squirrel, the southwestern willow flycatcher, least Bell's vireo and other sensitive songbirds. The EA fails to address analysis of impacts to these species.	As discussed in the EA, under the proposed action, applicable laws such as the ESA will still govern the management of listed species. Protections for Forest Service Sensitive Species will also remain in place. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented. The CRMP is a programmatic NEPA document and analysis is commensurate with that level of action.
CBD/Sierra Club	We remain stunned that in contrast to the current use of 5 vehicles per day, the plan identifies the User Capacity as 1,727 vehicles per day, an over 345-fold increase in use. It is unclear how the Recommended Daily User Capacity was determined for Bautista Creek.	The methodology for determining user capacity is described in the "User Capacity Analysis for San Bernardino National Forest WSR Corridors" in the CRMP appendix, which has been further clarified in the body of the EA. The plan does not propose to increase use by a factor of 345; this number is not a recommendation but rather a maximum, and triggers and management actions are listed that will be implemented prior to this point.
CBD/Sierra Club	The EA fails to make the case that increasing vehicle use in the 9.8 mile segment of the Bautista Creek from 5 to 1,727 vehicles per day would cause no significant impact to sensitive wildlife including federally listed species and federally designated critical habitat, stream bank impacts and erosion and water quality impacts. Scientific data have long pointed to the impacts of off road activities on soils, erosion and water quality. These types of impacts need to be thoroughly analyzed and addressed when evaluating user capacity limits and impacts to habitat, water quality, and soils erosion.	Impact of intergroup encounters on botany ORV are noted as part of the basis for the indicator, threshold, and capacity. The use in this corridor is on a County owned and maintained road. Use is managed within the existing recreation infrastructure, in this case, the hardened footprint of the County road.
CBD/Sierra Club	The plan must ensure protections for the outstandingly remarkable values which these designations protect. The EA fails to describe an actual level of visitor use that will not adversely impact the outstandingly remarkable values of this wild and scenic river.	Daily user capacities for all corridors specify actual levels that will not impact those values, based on the premise that use is managed to the existing hardened footprint of recreation infrastructure.

Commenter	Comment	Response to comment
CBD/Sierra Club	<p>The proposed triggers fall woefully short of requirements needed to protect the resources for which the Recreational status was designated. First, it is unclear how the triggers were rationalized. Secondly, the definition of an “intergroup encounter” is unclear yet is the basis for action. Lastly, the Management Plan should consider “getting ahead of the curve” and start to institute a mandatory daily permit system in order to facilitate distribution of information and monitor access.</p>	<p>Triggers are specified as early warning signs to prompt consideration of management actions when there are indications that the amount of use has increased substantively on a small minority of nights during the season, initially, and a moderate minority of nights as a second trigger. In other words, the triggers are specified to prompt action far in advance of use approaching the estimated user capacity. Specific management actions are specified in conjunction with each trigger. Recommended management actions would go through the environmental analysis process, as appropriate, before they are implemented. A detailed monitoring plan is beyond the scope of the CRMP itself.</p>
CBD/Sierra Club	<p>The EA notes further that “Bautista Creek possesses one of the largest number of endangered wildlife species of any location in the National Forest.” (at pg.27). While we recognize that the Anza Trail is designated as a National Historic Trail, the highest priority needs to be compliance with the Endangered Species Act in protection of the critically endangered species.</p>	<p>As discussed in the EA, under the proposed action, applicable laws such as the ESA will still govern the management of species. This policy is already being followed, as it is required by law. Additionally, USFS has substantive safeguards in place through its Ongoing Activity Consultations with the US Fish and Wildlife Service, which are ESA Section 7 consultations over impacts to threatened & endangered plants and wildlife from ongoing activities (e.g., trail maintenance, recreation management activities), which covers Bautista Canyon. This information has been added to the EA.</p>
CBD/Sierra Club	<p>While the EA mentions the designated critical habitat, it fails to identify or analyze downstream impacts to designated critical habitat for the critically endangered San Bernardino kangaroo rat may also be affected by recreational activities within the Forest Service boundaries.</p>	<p>The purpose of the EA is to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Recommended management actions (When triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.</p>

Commenter	Comment	Response to comment
CBD/Sierra Club	The EA also states that “Under the proposed action, in addition to current management direction, improved, supplemental protections would be put in place to protect federally endangered species, Forest Service Region 5 Sensitive Species, potential habitat for federally endangered species, including establishing a permanent river corridor boundary and user capacity thresholds” (at pg. 27-28). This statement is not supported by any facts. Vastly increasing the number of vehicles using the area most certainly does not “improve” protections and in fact is most likely to degrade the habitat. The EA needs to analyze the impacts of the proposed actions.	Supplemental protections for Wildlife on Bautista Creek are listed in the CRMP (Appendix A of the EA), much of which are pulled from the existing 2005 SBNF Land Management Plan. Descriptions of protections afforded by a permanent river boundary and user capacity thresholds are detailed in the EA. Furthermore, the plan does not propose to increase the number of vehicles; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions.
CBD/Sierra Club	The EA fails to evaluate the increase in greenhouse gases that would result from increasing user capacity, particularly for the Bautista Creek where more than 345 times the current number of users would be allowed.	The plan does not propose to increase use by a factor of 345; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management on Bautista Creek (detailed in the EA) to maintain desired conditions.
CBD/Sierra Club	The impact analysis for water (at pg. 20) fails to actually analyze impacts. Instead it relies on the misguided analysis that despite vastly increasing the user capacity over the existing use the “capacity thresholds would have a beneficial impact on water quality because they would afford additional protections due to less impact from recreational use”. That statement is not supported by data in the EA.	The EA does not propose an increase in users; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The Visitor Capacity Analysis estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impact water quality. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.

Commenter	Comment	Response to comment
CBD/Sierra Club	As discussed above, the existing use in all cases is vastly below the proposed user capacity levels. The EA must quantitatively analyze impacts to water quality from the proposed increase in users.	The EA does not propose an increase in users; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The Visitor Capacity Analysis estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impact water quality. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	The impact analysis for wildlife (at pg. 28) fails to actually analyze impacts. Instead it relies on the misguided analysis that despite vastly increasing the user capacity over the existing use "there would be an overall beneficial impact on wildlife due to the establishment of permanent river corridor boundaries, user capacity thresholds, and improved project planning ". That statement is not supported by data in the EA.	The EA does not propose an increase in users; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The Visitor Capacity Analysis estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.

Commenter	Comment	Response to comment
CBD/Sierra Club	As discussed above, the existing use in all cases is vastly below the proposed user capacity levels. Here, it is unclear what improvements in project planning would occur. The EA must quantitatively analyze impacts to wildlife from the proposed increase in users and must clearly identify what additional project planning improvements for wildlife are being adopted.	The EA does not propose an increase in users; rather it sets a threshold, triggers, adaptive management actions, and limits to use where no thresholds or limits previously existed. The Visitor Capacity Analysis estimates the maximum level of use the area can sustain. Monitoring is part of the implementation plan to assess the effects of future use and provide triggers for adaptive management to maintain desired conditions. Project planning improvements for wildlife are discussed in the EA. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would have impacts on wildlife. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented.
CBD/Sierra Club	As described above, the Management Plan fails to provide for the protection of the river values as required by the Wild and Scenic River Act, specifically it fails "to protect and enhance the values which caused it to be included in said system" and fails to give "primary emphasis" "to protecting its esthetic, scenic, historic, archeologic, and scientific features." 16 U.S.C. § 1281(a).	The purpose of the EA is to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented. The CRMP is a programmatic NEPA document and analysis is commensurate with that level of action.
CBD/Sierra Club	The plan also fails to adequately or accurately "address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act." 16 USCS § 1274(d)(1).	The Comprehensive River Management Plan and the User Capacity Appendix address all required elements of the Wild and Scenic Rivers Act. The purpose of the EA would be to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented. The CRMP is a programmatic NEPA document and analysis is commensurate with that level of action.
CBD/Sierra Club	Nor does the plan adequately address protection of the river area's "outstandingly remarkable values." 16 U.S.C. § 1274(d)(1); 16 U.S.C. § 1271.	The Comprehensive River Management Plan and the User Capacity Appendix address protection of each river's Outstandingly Remarkable Values in appendix A of the EA.

Commenter	Comment	Response to comment
CBD/Sierra Club	The shortcomings outlined above show the plan's failure to address wildlife, water quality and other scientific values and failure to describe an actual level of visitor use that will not adversely impact the outstandingly remarkable values of these wild and scenic rivers.	Daily user capacities for all corridors were determined through a rigorous scientific methodology; these capacities specify the actual levels of use that, even if reached, will not impact the Outstandingly Remarkable Values of the wild and scenic rivers.
CBD/Sierra Club	Based on the fact that the proposed plan fails to address protection of all of the values of these wild, scenic and recreational rivers and the EA fails to adequately analyze impacts to resources from the proposed actions that vastly increase user capacity thresholds over actual use, the proposed plan and EA need to be revised and recirculated to address these short-comings.	The purpose of the EA is to adopt the CRMP. The CRMP proposes administrative actions for managing the land within the corridor. Recommended management actions (when triggers are exceeded) and specific projects would go through the environmental analysis process, as appropriate, before they are implemented. The CRMP is a programmatic NEPA document and analysis is commensurate with that level of action. Furthermore, the EA does not recommend or facilitate a dramatic increase in use. Rather, it implements a maximum capacity of use for the corridor, along with suggested management action triggers.
CBD/Sierra Club	The revised plan and EA also need to provide an objective methodology for analyzing User Capacity address the actual level of visitor use that will not adversely impact the outstandingly remarkable values of these wild, scenic and recreational rivers and provide for specific measurable limits on use.	The metrics and methodology used to determine user capacity levels were based on Forest Service precedent, review of relevant literature, recreation opportunity spectrum (ROS), and data collection and analysis.
CBD/Sierra Club	In addition a more robust suite of alternatives needs to be included.	The purpose of the draft EA is to adopt a management plan for these four Wild and Scenic Rivers on the San Bernardino National Forest. Once adopted, and when layered upon existing Forest management direction, the management standards and guidelines listed in the proposed CRMP will best protect the values of these rivers. Another alternative for the plan was considered but dismissed, as detailed in the EA.

Commenter	Comment	Response to comment
CBD/Sierra Club	<p>The EA entirely neglects potentially significant impacts to Peninsular bighorn from the Plan's proposition to increase recreational human usage 130 times. Nor has it analyzed potential adverse impacts from continuance of cattle grazing on Peninsular bighorn, or to water pollution and visitor enjoyment of the stream.</p>	<p>The plan does not propose to increase use by a factor of 130; the user capacity is not a recommendation but rather a maximum, and triggers and management actions are listed that will be implemented prior to this point. In accordance with permit requirements and in compliance with a Biological Opinion from USFWS, cattle grazing within mapped bighorn sheep habitat is prohibited. Impacts from the continuance of cattle grazing are not analyzed because they are outside the scope of the project. The CRMP proposes administrative actions for managing the land within the corridor and does not in itself result in any projects or activities that would impact Peninsular bighorn sheep.</p>
Chris Austin	<p>I am a 20 year Idyllwild resident, and have enjoyed riding my street legal dirtbike on the many forest service roads that are adjacent to the local waterways. Bautista Canyon, and the north fork of the San Jacinto, have been the backdrop for many a wonderful day riding. Please keep in mind, when doing your area assessment, that responsible motorized recreation in the area is a major part of why we love this area. As a local resident, I would be happy to volunteer my time to help with a cleanup day, or educational tour of the area, or any other volunteer service you may have a need for.</p>	<p>Thank you for your comment.</p>
Pam Nelson	<p>I recently saw an article about the Draft management plan for Wild and Scenic Rivers that includes the North Fork of the San Jacinto River, Fuller Mill Creek, Palm Canyon Creek and Bautista creek. I am in full agreement with this proposal. Anything we can do to protect our local habitat and particularly wetlands and riparian system is extremely important to our region. Thank you for your efforts on this and please accept my positive comment.</p>	<p>Thank you for your comment.</p>

APPENDIX A: COMPREHENSIVE RIVER MANAGEMENT PLAN

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United States Department of Agriculture

San Bernardino National Forest

Wild and Scenic Rivers Comprehensive River Management Plan



North Fork San Jacinto River



Bautista Creek



Fuller Mill Creek



Palm Canyon Creek



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Contents

Contents	i
Background	1
River Corridor Locations and Boundaries	2
North Fork San Jacinto River	2
Fuller Mill Creek	2
Palm Canyon Creek	2
Bautista Creek.....	2
Wild and Scenic River Corridor Classifications	7
North Fork San Jacinto River	7
Fuller Mill Creek	8
Palm Canyon Creek	8
Bautista Creek.....	8
Regional River Setting	8
North Fork San Jacinto River and Fuller Mill Creek.....	8
Palm Canyon Creek	9
Bautista Creek.....	10
Land Uses and Access in River Corridors	10
North Fork San Jacinto River	13
Fuller Mill Creek	13
Palm Canyon Creek	13
Bautista Creek.....	14
Special Uses in River Corridors.....	14
North Fork San Jacinto River	14
Fuller Mill Creek	14
Palm Canyon Creek	14
Bautista Creek.....	14
Wild and Scenic River Emphasis and Values.....	15
Wild and Scenic River Management Area Emphasis	15
Free-Flowing Condition and Water Quality	15
North Fork San Jacinto River	15
Fuller Mill Creek	15
Palm Canyon Creek	15
Bautista Creek.....	16
Outstandingly Remarkable Values.....	16
North Fork San Jacinto River	16
Fuller Mill Creek	17
Palm Canyon Creek	17
Bautista Creek.....	19
Planning Context: Laws, Regulations, Directives, and the Forest Plan.....	20
Wild and Scenic Rivers Act	20
2009 Omnibus Public Land Management Act (Public Law 111-11).....	20
Forest Plan and Forest Plan Amendment.....	21
Forest Service Manual—Comprehensive River Management Plan.....	21

Management Direction.....	21
Desired Conditions for All Rivers by Classification.....	21
Wild Segments.....	22
Scenic Segments.....	22
Recreational Segments.....	22
Water Quality / Free Flow.....	22
Desired Conditions for Specific Rivers.....	22
North Fork San Jacinto River.....	23
Fuller Mill Creek.....	23
Palm Canyon Creek.....	23
Bautista Creek.....	23
Management Standards and Guidelines.....	24
North Fork San Jacinto River.....	24
Fuller Mill Creek.....	26
Palm Canyon Creek.....	26
Bautista Creek.....	31
Monitoring Plan.....	33
References.....	34
Appendix A: User Capacity Analysis for San Bernardino National Forest Wild and Scenic River Corridors.....	A-1
Appendix B: Resource Assessment.....	B-1

List of Tables

Table 1. Outstandingly Remarkable Values for North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek Wild and Scenic Rivers.....	1
Table 2. Classification of San Bernardino National Forest Rivers.....	7
Table 3. Possible Monitoring Items and their Locations in the Wild and Scenic River and Corridor.....	33

List of Figures

Figure 1. Project Vicinity.....	3
Figure 2. North Fork San Jacinto River and Fuller Mill Creek Segment Classification.....	4
Figure 3. Palm Canyon Creek Segment Classification.....	5
Figure 4. Bautista Creek Segment Classification.....	6
Figure 5. Land Use Zones.....	11
Figure 6. Scenic Integrity Objectives Map.....	29

Background

This comprehensive river management plan (the management plan) establishes programmatic management direction for four Wild and Scenic Rivers (WSRs) on the San Jacinto Ranger District of the San Bernardino National Forest (the Forest). It has been developed to implement the direction of the Wild and Scenic Rivers Act of 1968 as amended in the 2009 Omnibus Public Land Management Act (2009 Omnibus Act). The 2009 Omnibus Act added 10.2 miles of the North Fork San Jacinto River, 3.5 miles of Fuller Mill Creek, 9.8 miles of Bautista Creek, and 8.1 miles of Palm Canyon Creek to the National Wild and Scenic Rivers System. The Wild and Scenic Rivers Act established a system for preserving outstanding free-flowing rivers. Section 1(b) of the act directs that:

“certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreations, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations” (Public Law 90-542, 1968).

The Wild and Scenic Rivers Act requires the Forest Service to develop a comprehensive wild and scenic river management plan (CRMP) for all rivers added to the National Wild and Scenic River System, in order to protect and enhance their outstandingly remarkable values as well as free-flowing condition and water quality. Each of the four rivers discussed in this management plan was designated as a Wild and Scenic River under the 2009 Omnibus Act; the rivers and their boundaries are shown in Figure 1, below. The outstandingly remarkable values for each river are identified in Table 1, below, and are further discussed in the Wild and Scenic River Emphasis and Values section.

As established in the 2009 Omnibus Act, the entire designated stretch of Bautista Creek is classified as a recreation river, and the entire designated stretch of Palm Canyon Creek is classified as a wild river. Portions of the designated stretch of the North Fork San Jacinto River is classified as a wild river, with smaller stretches classified as scenic and recreational. Fuller Mill Creek is classified as a scenic river with a smaller stretch classified as a recreation river. Further discussion of each river’s classifications is detailed in the Classification section.

This management plan will guide all development, management, and restoration activities in the four wild and scenic river corridors. It includes descriptions of the designated river corridors, desired conditions, standards and guidelines, and a monitoring plan.

Table 1. Outstandingly Remarkable Values for North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek Wild and Scenic Rivers

	North Fork San Jacinto River	Fuller Mill Creek	Palm Canyon Creek	Bautista Creek
Scenery	X	—	X	—
Wildlife	X	X	—	X
Botany	—	—	X	X
Heritage Resources (Historic)	—	—	—	X
Heritage Resources (Cultural)	—	—	X	X

River Corridor Locations and Boundaries

The following designated rivers are all in the State of California, Riverside County, San Bernardino National Forest. The final boundaries of each river approximate a 1/4-mile distance on each side of the river, which is referred to as the river corridor.

North Fork San Jacinto River

The North Fork San Jacinto River has headwaters at two major locations, both at 10,000 feet in Mt. San Jacinto State Park (the State Park). One fork is located in Little Round Valley just west of San Jacinto Peak at Township (T)4S, Range (R)3E, Section (Sec)20, using the San Bernardino Baseline Meridian (SBBM). The other fork is located at Deer Springs on Marion Mountain at T4S, R3E, Sec 29, SBBM. Mileage is computed from the Little Round Valley headwater. The river first flows westerly through the State Park. The river then leaves State lands, flowing through the Forest into Section 24, crossing National Forest System Road 4S02. From there it enters the Lawler Park private land parcel in Section 26, then joining Fuller Mill Creek (described below). It then re-enters the Forest, flowing west and southwest. The North Fork San Jacinto River enters another parcel of private land at Section 17, finally joining the South Fork of the San Jacinto River near State Highway 74 at 2,200 feet at T5S, R2E, Sec 18, SBBM. Many tributary creeks feed into this river. See figure 2, below, for a map of the North Fork San Jacinto River.

Fuller Mill Creek

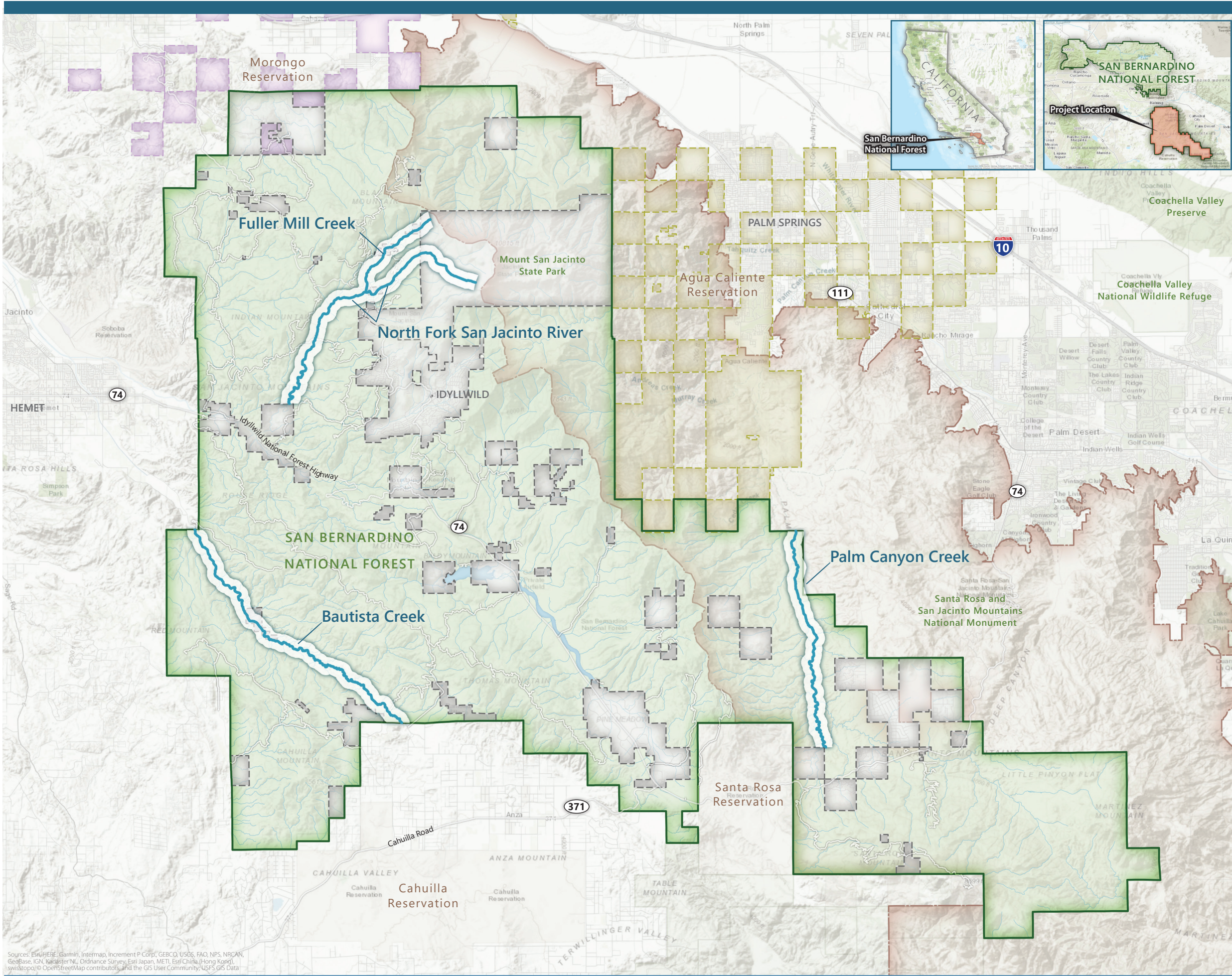
Fuller Mill Creek headwaters is located at 7,800 feet on the southwestern flank of Fuller Ridge in the Mount San Jacinto State Park at T4S, R3E, Sec 18, SBBM. The creek first flows southwesterly through the State Park. The creek then leaves State lands, flowing through the Pinewood parcel of private land in Section 13. From there it enters the Forest, flowing southwest and south. From there it flows under State Highway 243, skirts the Lawler Park parcel of private land, and then joins the North Fork San Jacinto River (described above) at 5,100 feet at T4S, R2E, Sec 26, SBBM. See figure 2 for a map of Fuller Mill Creek.

Palm Canyon Creek

Palm Canyon Creek is an intermittent creek with many minor headwaters in the Vandeventer Flat area of the Santa Rosa Indian Reservation (the Reservation) at 4,800 feet at T7S, R4E, Sec 25, SBBM. The creek first flows north to northeast through the Reservation, crossing under California State Highway 74. It then leaves Reservation lands, flowing through a parcel of private land in Section 7. After that, it travels through the Forest within the Santa Rosa and San Jacinto Mountains National Monument, eventually entering Bureau of Land Management (BLM) lands at 2,000 feet at T6S, R4E, Sec 1, SBBM. See figure 3 for a map of Palm Canyon Creek.

Bautista Creek

Bautista Creek has its headwaters at 4,600 feet on the southwest flank of a ridge between Horse Creek Canyon and Bautista Canyon at T6S, R3E, Sec 31, SBBM. The creek first flows southeasterly through the National Forest. The creek then leaves the Forest, flowing through private land. From there it re-enters the Forest, flowing northwest through Bautista Canyon. Then it enters State of California lands in Section 20. Bautista Creek re-enters the Forest in Section 18, reaching the forest boundary again at 2,300 feet at T6S, R1E, Sec 2, SBBM. See figure 4 for a map of Bautista Creek.



San Bernardino National Forest
 San Jacinto Ranger District
 Riverside County, California



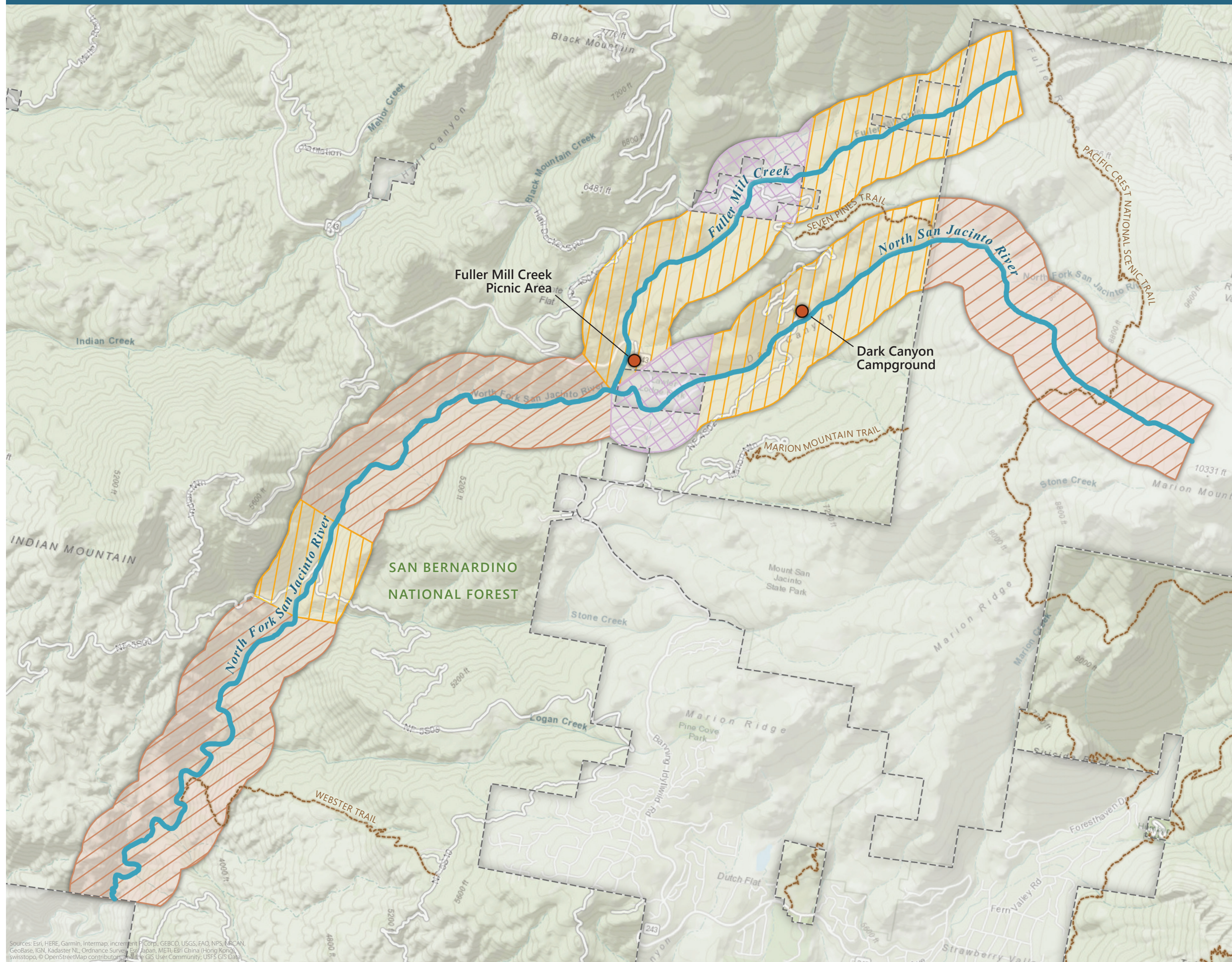
- San Bernardino National Forest (US Forest Service)
- Santa Rosa and San Jacinto Mountains National Monument
- Morongo Reservation
- Agua Caliente Reservation
- Non Forest Service Land
- Wild and Scenic River



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, © OpenStreetMap contributors, and the GIS User Community; USFS GIS Data

**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 1
 Project Vicinity



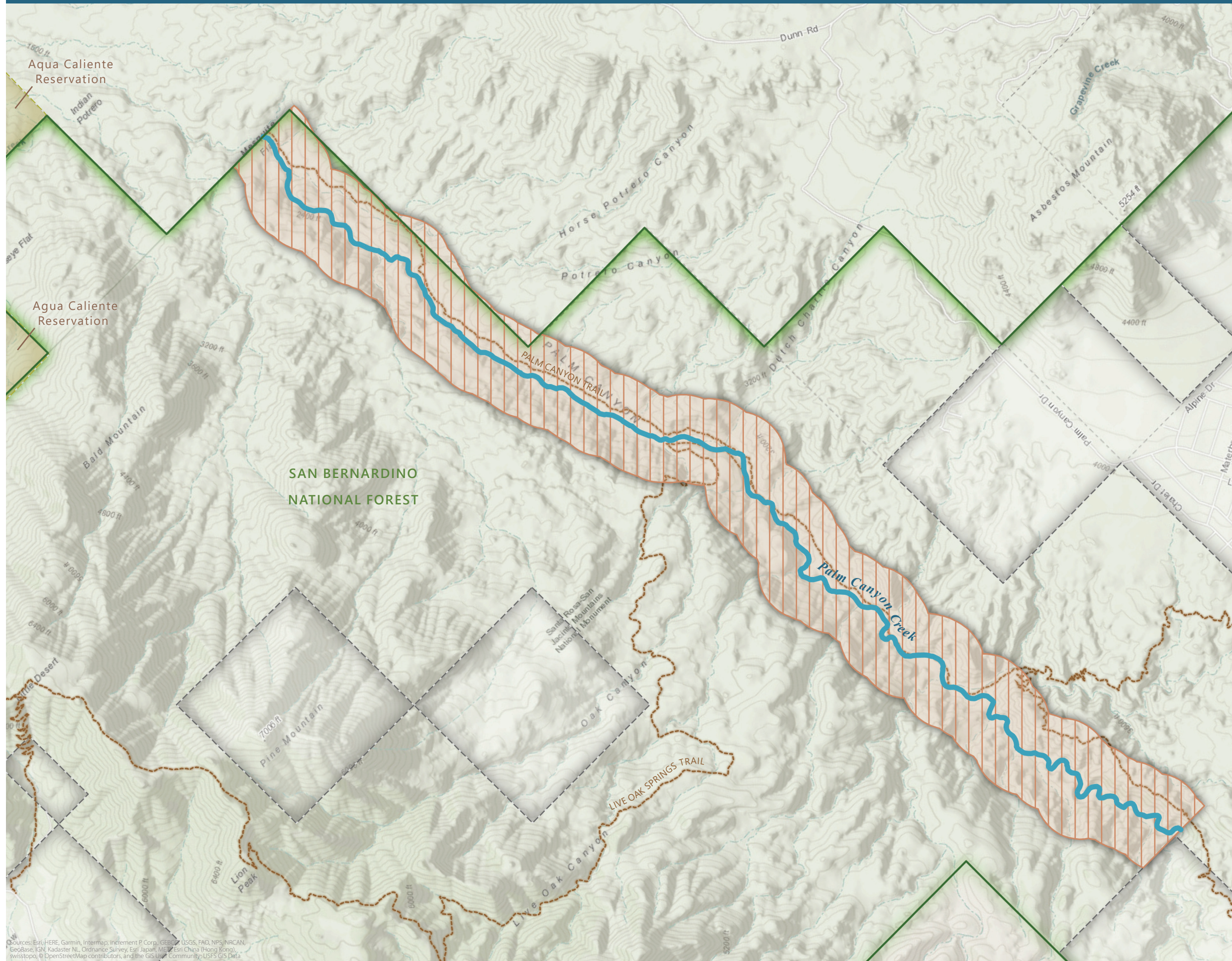
- San Bernardino National Forest (US Forest Service)
- Santa Rosa and San Jacinto Mountains National Monument
- Non Forest Service Land
- Wild and Scenic River
- Trails
- Recreational River
- Scenic River
- Wild River



**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 2
**North Fork San Jacinto River
 and Fuller Mill Creek
 Segment Classification**

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community; USFS GIS Data



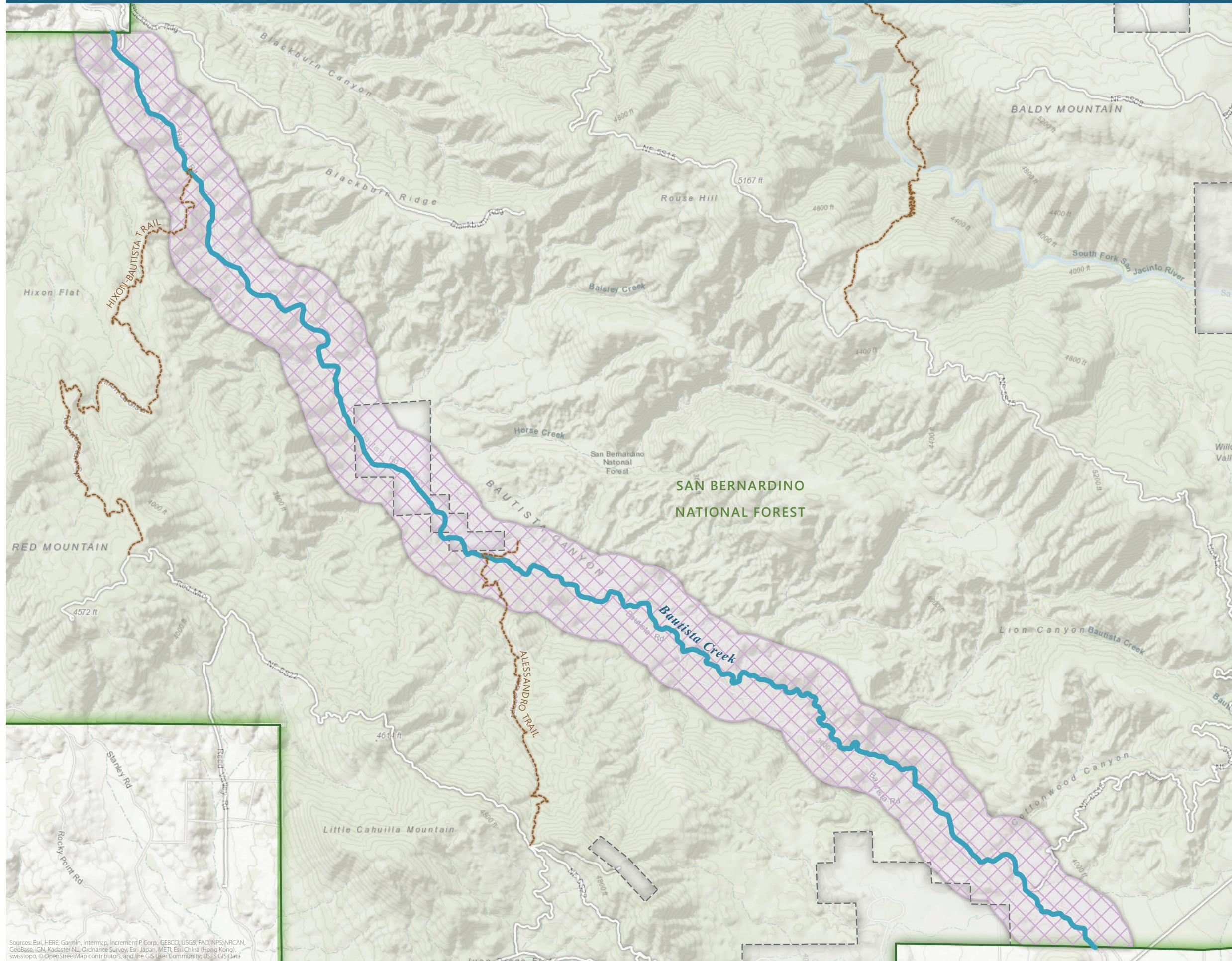
- San Bernardino National Forest (US Forest Service)
- Santa Rosa and San Jacinto Mountains National Monument
- Agua Caliente Reservation
- Non Forest Service Land
- Wild and Scenic River
- Trails
- Recreational River
- Scenic River
- Wild River



**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 3
**Palm Canyon Creek
 Segment Classification**

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community, USFS GIS Data



- San Bernardino National Forest (US Forest Service)
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- Non Forest Service Land
- Wild and Scenic River
- Trails
- Recreational River
- Scenic River
- Wild River



**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 4
**Bautista Creek
 Segment Classification**

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community, USGS GIS Data

Wild and Scenic River Corridor Classifications

The Wild and Scenic Rivers Act states rivers should be classified, designated, and administered as wild, scenic, or recreational. Wild rivers are “those rivers or sections of river that are free of impoundments and generally inaccessible except by trail, which watershed or shorelines essentially primitive and water unpolluted.” Scenic rivers are “those rivers or sections of rivers that are free of impoundments, with shorelines or watershed still largely primitive and shorelines largely undeveloped, but accessible in places by road.” Recreational rivers are “those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past” Table 2, below, conveys the mileage of classified sections for each river.

Table 2. Classification of San Bernardino National Forest Rivers

	North Fork San Jacinto River	Fuller Mill Creek	Palm Canyon Creek	Bautista Creek
Mileage of Classified WILD Sections	7.2	—	8.1	—
Mileage of Classified SCENIC Sections	2.2	2.6	—	—
Mileage of Classified RECREATION Sections	0.7	0.9	—	9.8
Total designated mileage	10.1	3.5	8.1	9.8

The four wild and scenic rivers of this management plan were classified as wild, scenic, recreational, or a combination thereof, based on an eligibility study approved in the 2005 Land Management Plan (2005 Forest Plan) and designated in the 2010 Land Management Plan Amendment (2010 Forest Plan Amendment). Results of the eligibility study are summarized in the final environmental impact statement for the 2005 Forest Plan (USDA Forest Service 2005e). The three classes (wild, scenic, or recreational) represent a development scale and serve as a framework for future management; they are not synonymous with the river’s outstandingly remarkable values. Designating river segments in classifications neither prohibits development nor gives the Federal government control over private property. Classification of each river or segment of river are described below.

North Fork San Jacinto River

A total of 10.1 miles of the North Fork San Jacinto River is designated as a wild, scenic, or recreational river (see figure 2). Three segments of the river are designated as a wild river including: 1) the 2.12-mile segment from the source of the river at Deer Springs in Mt. San Jacinto State Park to the State Park boundary, 2) the 2.15-mile segment from the river’s confluence with Fuller Mill Creek to a quarter mile upstream of the 5S09 road crossing, and 3) the 2.91-mile segment from the Stone Creek confluence to the northern boundary of T5S, R2E, Sec 17, SBBM.

Two segments are designated as scenic including: 1) the 1.66-mile segment from the Mt. San Jacinto State Park boundary to the Lawler Park boundary and 2) the 0.6-mile segment from a quarter mile upstream of the 5S09 road crossing to the river’s confluence with Stone Creek.

One segment is designated as recreational: the 0.68-mile segment from the Lawler Park boundary to the confluence with Fuller Mill Creek. This segment is readily accessible by road and trail and has some recreation improvements along its shore (e.g., developed recreation sites and cabins).

Fuller Mill Creek

The entire 3.5-mile length of Fuller Mill Creek is designated as either a scenic or recreational river (see figure 2). There are two scenic river segments, including: 1) a 1.2-mile segment from the source of the creek to the Pinewood property and 2) a 1.4-mile segment from the Pinewood property boundary to its confluence with the North Fork San Jacinto River. The one recreational river segment consists of a 0.9-mile segment in the Pinewood property boundary.

Palm Canyon Creek

The 8.1-mile segment of Palm Canyon within the San Bernardino National Forest boundary is designated as a wild river (see figure 3).

Bautista Creek

The 9.8-mile segment of Bautista Creek within the San Bernardino National Forest boundary is designated as a recreational river (see figure 4).

Regional River Setting

This section describes the regional context of the river corridors. The Forest has been divided into a series of geographical units called “Places.” Each Place has its own landscape character. Landscape character has been described as an overall visual and cultural impression of landscape attributes, the physical appearance and cultural context of a landscape that gives it an identity and “sense of place” (USDA Forest Service 2005c). These Places are used below to help describe the landscape setting of the river corridors.

The climate in the San Bernardino National Forest region is characterized by long, dry summers and short, wet winters. It is cyclic in nature, with consecutive years of low rainfall and extended droughts, as well as years with high rainfall and associated flooding. Average annual precipitation in the region varies dramatically with latitude, longitude, and elevation, ranging from 2 to 3 inches in the eastern deserts, to 40 to 42 inches in the coastal redwoods, and to 60 inches or more on the higher mountain peaks, usually in the form of snow.

Areas of the region that are most undeveloped or relatively natural, including the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek, are represented by land use zones where recreational use is relatively low (see appendix A, User Capacity Appendix). Many animals and plants benefit from the isolation from the direct and indirect effects of humans and national forest management or permitted activities. Descriptions of each river’s specific regional setting are below.

North Fork San Jacinto River and Fuller Mill Creek

Both the North Fork San Jacinto River and Fuller Mill Creek are located in Idyllwild Place in the Forest. The Idyllwild Place is in the higher elevations of the San Jacinto Mountains and is characterized by steep canyons and jagged rocks. Elevations range from 2,000 feet to 10,804 feet at the top of San Jacinto peak.

The San Jacinto Wilderness has long been a popular destination for visitors. The Santa Rosa and San Jacinto Mountains National Monument borders the eastern boundary. Because of its proximity to Palm Springs, this area continues to receive a large number of international visitors. The Hall Canyon Research Natural Area, dedicated to the study of mixed conifer forest, and the Black Mountain Scenic Area are located here, as is Mt. San Jacinto State Park. Many private inholdings are also located within or adjacent to National Forest lands in this area.

The mountain climate ranges from hot to temperate at the lower elevations and cold at the highest elevations. Surface water is scarce in the summer months, except for scattered springs and the perennial streams of the North Fork San Jacinto River and Fuller Mill Creek. Lake Fulmor, a small man-made lake, is located here. Annual precipitation ranges from 16 to 30 inches, with snow falling mostly at the highest elevations.

California State Highway 243 (entering the Forest from the north at Banning) runs southeast as the Palms to Pines Scenic Byway. This is a highly traveled scenic route where people can spend the day driving for pleasure. Visitor access to National Forest land within this area is good, although some Forest areas near the community of Idyllwild are lacking rights-of-way due to the large number of private in-holdings.

Palm Canyon Creek

Palm Canyon Creek is located in Santa Rosa and San Jacinto Mountains National Monument Place. The Santa Rosa and San Jacinto Mountains National Monument runs northwest to southeast along the edge of the Coachella Valley, providing a dramatic and picturesque backdrop for the desert communities of Palm Springs, Rancho Mirage, Cathedral City, Palm Desert, Indian Wells, Indio, Thousand Palms, Desert Hot Springs and La Quinta. The San Jacinto Mountains rise sharply from the valley floor, with steep canyons sweeping upward to jagged peaks, massive boulders, and mountain meadows. Elevations range from 2,000 feet near the desert floor to 10,834 feet at the top of San Jacinto Peak. This dramatic escarpment is one of the steepest in North America. The area was congressionally designated as a National Monument on October 24, 2000 to preserve the nationally significant biological, cultural, recreational, geological, educational and scenic values found within the Santa Rose and San Jacinto Mountains.

With only four inches of rainfall each year at lower elevations, little surface water is available except for occasional springs, which surface at the mouths of canyons. The springs are a unique oasis in this desert environment, supporting a wide variety of plants and animals, and providing a water source for millennia. Vegetation ranges from cactus, creosote, chamise, and red shank along desert slopes, to stands of ponderosa pine, mixed conifer, Jeffrey pine, and lodgepole pine at the higher elevations. Canyon live oak is found deep in the canyons along the western boundary, while Parry pinyon and California juniper are present at higher elevations on desert slopes. Portions of the active Wellman Grazing Allotment are located here.

The extended drought and associated bug kill have resulted in substantial pinyon pine mortality. Tamarisk (a nonnative invasive species) is encroaching in Palm Canyon and in the Santa Rosa Wilderness. Colonization by annual weeds along roadways is degrading the adjacent desert scrub communities.

The area remains sparsely populated, but high numbers of visitors travel the Palms to Pines Scenic Byway from Palm Desert past Pinyon Flats and north to Banning. Opportunities for remote recreation are available in the San Jacinto and Santa Rosa Wildernesses, which are located in this area. The San Jacinto

Wilderness offers opportunities for rock climbing, hiking, backpacking, or riding horses. Visitors can also ride the famous Palm Springs Aerial Tramway from the desert floor to the alpine forest of Mt. San Jacinto State Park. Mountain biking opportunities exist outside the wilderness boundaries. The Pacific Crest National Scenic Trail traverses the crest of the San Jacinto Mountains. Within the Monument, camping opportunities are available at the Ribbonwood Equestrian and Pinyon Flat developed campgrounds.

Bautista Creek

Bautista Creek is located in Anza Place in the Forest. Anza Place is located within the San Jacinto foothills, stretching from the valley communities of Hemet and San Jacinto to Cahuilla Mountain and the southwestern slope of Thomas Mountain. To the south lies the community of Anza, named after the Spanish explorer Juan Bautista De Anza, who led an overland expedition in this area in the 1770s. The Cahuilla Mountain Research Natural Area located here is dedicated to the study of Coulter pine and black oak.

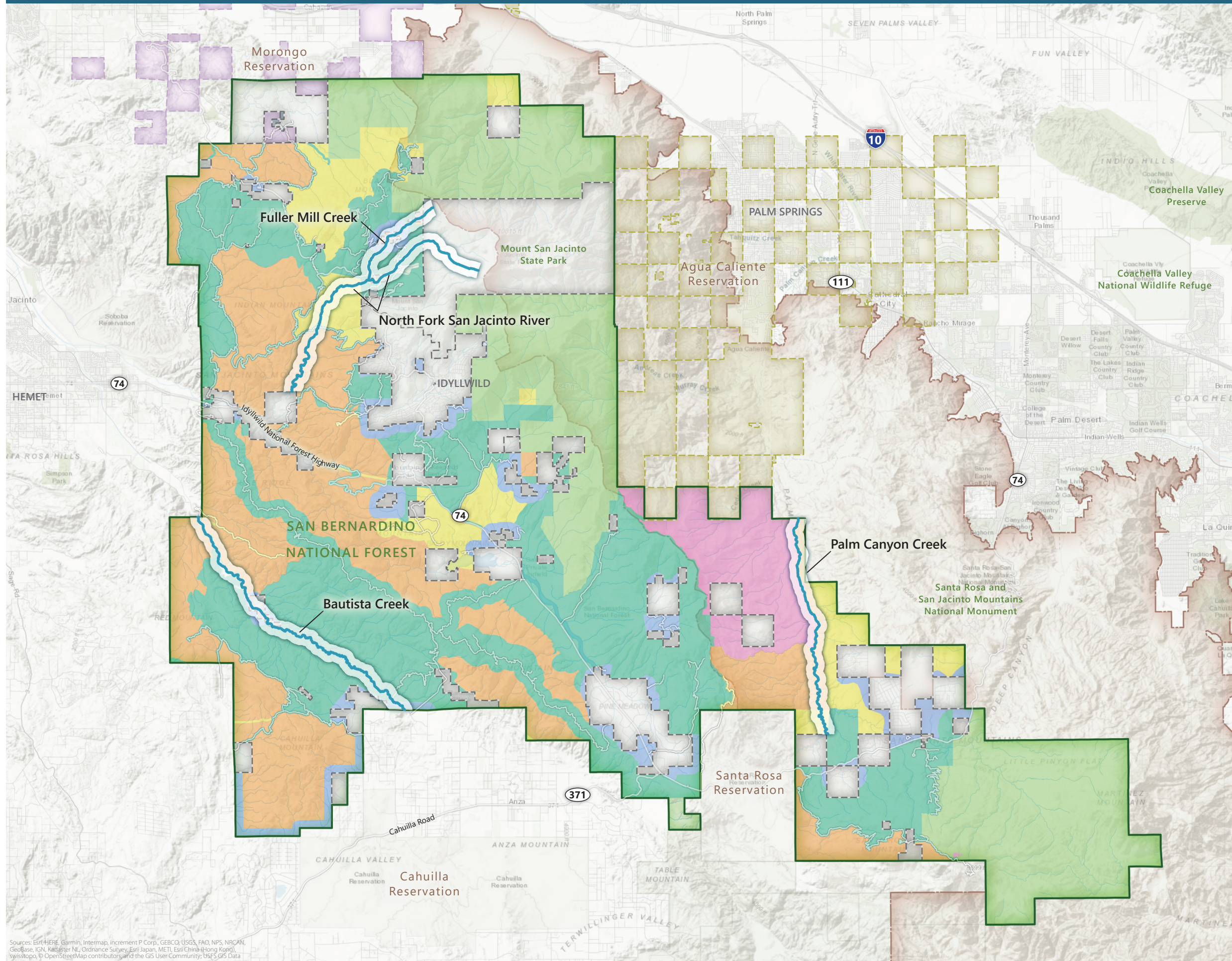
The climate is temperate, with sub-humid to hot summers at the lower elevations of 1,500 feet; giving way to cooler temperatures in the higher elevations. Most of this land is semi-arid with no lakes or man-made reservoirs, and all streams are dry in the summer except for springs fed from the higher mountains. Annual precipitation ranges from 10 to 30 inches per year, mostly in the form of rain. Steep mountains characterize the land, with narrow to rounded ridges and narrow canyons.

Much of the landscape is dense chaparral on the slopes, with a riparian corridor along the Bautista Canyon bottom that contains diverse species of trees, shrubs, forbs, sedges, rushes, and grasses. Wildland fire threat is ever-present here, along with the cycle of erosion and flood.

Land in Anza Place is sparsely populated, with most of the population located in the adjacent communities of Hemet, San Jacinto, and the Anza Valley. Because of the limited access, the area is not a high-use recreation area. A designated Off-highway Vehicle (OHV) route system is present and remote camping is available in the region.

Land Uses and Access in River Corridors

The following section describes land uses in and access to the river corridors. The land uses are described using the land use zones that were identified in the 2005 LMP. These land use zones are used to help demonstrate management intent and to indicate the anticipated level of public land use in any area (Place) of the national forest. Examples of zones include backcountry non-motorized or critical biological. Full descriptions of each zone type can be found in the 2005 LMP (USDA Forest Service 2005a), and are depicted in figure 5, below.



- San Bernardino National Forest (US Forest Service)
 - Santa Rosa and San Jacinto Mountains National Monument
 - Morongo Reservation
 - Agua Caliente Reservation
 - Non Forest Service Land
 - Wild and Scenic River
- USFS Land Use Zones**
- Developed Area Interface
 - Back Country Motorized Use Restricted
 - Back Country
 - Back Country Non-Motorized
 - Recommended Wilderness
 - Existing Wilderness



**Wild and Scenic Rivers
 Comprehensive River Management Plan**

FIGURE 5
 Land Use Zones

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, © OpenStreetMap contributors, and the GIS User Community; USFS GIS Data

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North Fork San Jacinto River

Land ownership in the North Fork San Jacinto River designated river corridor consists of Mt. San Jacinto State Park; Lawler Park and other private land; and National Forest lands. National Forest lands comprise 75 percent (approximately 2,230 acres) of the wild and scenic river corridor, and state lands make up the other 25 percent. Within the National Forest lands, the North Fork San Jacinto River flows through a combination of back country (including motorized use restricted and non-motorized use) and critical biological land use zones.

There are 3.4 miles of roads in the corridor. The Seven Pines Trail, San Jacinto Ridge Truck Trail, and State Highway 243 are the primary infrastructure features crossing the corridor. State Highway 243 crosses the river and the Pacific Crest National Scenic Trail and Seven Pines Trail cross the upper river. There is also one campground in the corridor, Dark Canyon Campground, located on the northern section of the river.

The river has some recreation improvements along its shore from the State Park boundary downstream to Highway 243, including a picnic area and fishing access location. Downstream of Highway 243 to the junction with Road 5S09, the river corridor lies within a backcountry motorized use restricted land use zone. The upper 2.3 miles of the North Fork San Jacinto River is in Mt. San Jacinto State Park Wilderness.

Fuller Mill Creek

Land ownership in the Fuller Mill Creek designated river corridor consists of Mt. San Jacinto State Park, private land, and National Forest lands. National Forest lands comprise 71 percent (approximately 736 acres) of the wild and scenic river corridor; state lands make up 28 percent, and private lands make up the other 1 percent. Within the National Forest lands, Fuller Mill Creek flows through a combination of back country, developed area interface, critical biological, and existing wilderness land use zones.

There are 1.6 miles of roads in the corridor. The Pacific Crest Trail, State Highway 243, and a forest road are the primary infrastructure features crossing the corridor. Within the corridor, there is the Fuller Mill Creek Picnic area, near the confluence of Fuller Mill Creek and North Fork San Jacinto River, as well as a gated community, Pinewood. The picnic area is also a fishing access location (USDA Forest Service 2017). The upper 0.4-mile segment is in the Mt. San Jacinto State Park Wilderness.

Palm Canyon Creek

Land ownership in the Palm Canyon Creek designated river corridor consists of the Santa Rosa and San Jacinto Mountains National Monument (BLM lands) and National Forest lands. National Forest lands comprise 98 percent (approximately 2,384 acres) of the wild and scenic river corridor; BLM lands make up the other 2 percent. Within National Forest lands, Palm Canyon Creek flows through a combination of back country (including motorized use restricted and non-motorized use) and recommended wilderness land use zones.

Infrastructure in the corridor consists of the Palm Canyon Trail, as well as the Pinyon and Omstott Trails. Palm Canyon Creek is accessible by road from Highway 74 and South Palm Canyon Drive. It is also accessible by the Palm Canyon Trail (4E01), which parallels most of the length of the creek, and which is where most of the recreation in this area takes place.

Bautista Creek

Land ownership in the designated river corridor consists of State lands, private land, and National Forest lands. National Forest lands comprise 93 percent (approximately 3,001 acres) of the wild and scenic river corridor and state lands make up the other 7 percent. Within the National Forest lands, Bautista Creek flows through a combination of back country (including non-motorized use), critical biological, existing wilderness, and developed area interface land use zones.

Bautista Creek is accessible via road, including Bautista Canyon Road, and by trail, including the Hixon-Bautista Trail (2E43), Alessandro Trail (2E44), and on Cottonwood Truck Trail (6S16). Bautista Creek has little recreation use along the creek; most recreation use is along the trails, including a popular area for recreational shooting on the Cottonwood Truck Trail. The Juan Bautista de Anza National Historic Trail, managed by the National Park Service, passes through Bautista Canyon and there is an interpretive panel on California state lands within the creek corridor.

Special Use Permits and Other Uses in River Corridors

The section below describes the special uses present in the river corridors. Special Use Authorizations are legal documents such as a permits or easements which allow occupancy, use, rights, or privileges of National Forest land. Special use authorizations are granted for a specific use of the land for a specific period of time.

North Fork San Jacinto River

The Azalea Trails Girl Scout Camp is located within 0.1 mile of the North Fork San Jacinto River and operates under a special use permit. In operation since the 1940s, this camp is used by young campers and camp staff during the summer. There are several structures in the camp, including a clubhouse, sleeping quarters building, restrooms, volleyball court, horse corral, access road, and water system.

Fuller Mill Creek

There are currently two Recreation Resident cabins, which are privately owned cabins whose owners receive a special use permit to occupy forest land (USDA Forest Service 2012). Both of these cabins are expected to be demolished in the future and the surrounding area will be rehabilitated accordingly.

Palm Canyon Creek

The Wellman Grazing Allotment, a cattle allotment, is located near Palm Canyon Creek and is the only Forest Service grazing allotment within the Santa Rosa and San Jacinto Mountains National Monument. It has been grazed by Wellman-owned cattle since the 1860s. The first grazing permit held in part by the Wellman family was in 1907, shortly after the grazing permit system was initiated.

Bautista Creek

The Anza Electric Cooperative, Inc. (AEC) operates existing power lines and associated facilities within the vicinity of Bautista Creek under a special use permit. The special use permit also allows the use of existing non-system roads and trails for access to the facilities on National Forest lands. Some of these roads and trails were created and are maintained by AEC to access to their facilities. These roads and

trails would be removed if no longer needed by AEC for permitted activities. Activities related to operation and maintenance of AEC power lines and facilities include tree trimming, tree removal, line inspections, right-of-way maintenance, line maintenance, pole brushing, pole inspections, pole replacement or upgrades, wire replacement or upgrades, cable in conduit replacement or upgrade, cable in-ground replacement or repair, equipment replacement or repair, and access road maintenance and repair. Design features and mitigation measures are in place and documented in the special use permit to avoid or minimize impacts of the special use on listed species that occur in the area.

Since the area is open to mineral entry, there are several mining claims for gem stones, such as tourmaline, as well as gold panning in the creek. Currently, only a few of the claims are active with prospecting or minor hand tool operations and none currently require a Plan of Operations.

Wild and Scenic River Emphasis and Values

Wild and Scenic River Management Area Emphasis

Management emphasis in the designated wild and scenic river corridor is to protect and preserve the free-flowing conditions, water quality, and outstandingly remarkable values. The Wild and Scenic Rivers Act specifies that designated rivers, and the outstandingly remarkable values they possess, will be “protected for the benefit and enjoyment of the present and future generations.”

Within the 2005 Forest Plan and the 2010 Forest Plan Amendment, management direction was specifically developed to preserve the free-flowing condition and water quality and to protect the outstandingly remarkable values for which the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek were congressionally designated. Management activities that are inconsistent with these objectives will not be permitted.

Free-Flowing Condition and Water Quality

North Fork San Jacinto River

The North Fork San Jacinto River is free flowing from its headwaters to a diversion on private land in Section 17, a distance of 11.4 miles. The creek flows intermittently for some of its length during the mid to late summer and fall. The North Fork San Jacinto River is in a primitive watershed with unpolluted waters.

Fuller Mill Creek

Fuller Mill Creek is free flowing from its headwaters to the intersection with the North Fork San Jacinto River, a distance of 3.4 miles. The creek flows intermittently for some of its length during the mid to late summer and fall. Fuller Mill Creek is in a primitive watershed with unpolluted waters.

Palm Canyon Creek

Palm Canyon Creek is free flowing from its headwaters to the Forest boundary, a distance of 13.1 miles. It is a tributary for the Whitewater River, which is the primary drainage for the Coachella Valley. The creek flows intermittently for all of its length during late spring to early winter and is a naturally braided channel.

Bautista Creek

Bautista Creek is free flowing from its headwaters to the intersection with the Forest boundary, a distance of 13.4 miles. The creek flows intermittently for some of its length during the mid to late summer and fall. Bautista Creek has less than pristine water quality.

Outstandingly Remarkable Values

The Wild and Scenic Rivers Act requires that each river possess one or more outstandingly remarkable values to qualify for designation. The identified outstandingly remarkable values for each river are described below. In order to be assessed as outstandingly remarkable, a river-related value must be a unique, rare, or exemplary feature that is significant at a comparative regional or national scale. While the spectrum of resources that may be considered is broad, all values should be directly river-related. A resource assessment was started in 2005 during the Land Management Planning (LMP) process, to evaluate river eligibility and determine which resources within the designated corridor qualify as an outstandingly remarkable value. Results of the eligibility study are summarized in the final environmental impact statement for the 2005 Forest Plan, appendix E (USDA Forest Service 2005e).

This assessment was revisited and completed in November 2017 to support development of this comprehensive river management plan. The River Management Society (RMS) held a workshop on the Forest from October 31, 2017 to November 2, 2017 for the purpose of developing CRMPs for the four WSRs on the San Bernardino National Forest. During that workshop, the resource experts on the CRMP team, along with representatives from the Forest Service and RMS, reviewed each outstandingly remarkable value for each river, along with all potential ORVs reviewed during plan revision; the team did not make changes to the original ORVs. The finalized resource assessment is included in this document in appendix B.

North Fork San Jacinto River

Scenery

The North Fork San Jacinto River is located in the San Jacinto Mountains and is characterized by steep, rugged, river cut canyons. The scenery is diverse, particularly as the elevation changes. Spectacular views of montane meadow with colorful seasonal wildflowers and southern California subalpine forest occur at the highest elevations. As the elevation decreases, mixed conifer and bigcone Douglas fir forest come into view. Oak woodlands, chaparral, and grasslands blanket the slopes at the lower elevations. Riparian woodland consisting of white alder, cottonwood, and various willow species is present throughout the river corridor. Some of the landscape along the river has been influenced and altered by development, with roads, cabins, and recreation infrastructure present. Seasonal variations in the scenery are very apparent, especially in the fall as the wetland tree species turn golden before shedding their leaves. This landscape is a remarkable life-zone journey of the San Jacinto Mountains and possesses regionally outstandingly remarkable visual values.

Wildlife

The North Fork San Jacinto River is historic habitat for and presently occupied by a population of mountain yellow-legged frog (listed as a federally endangered species). The river is also designated

critical habitat for the Southern California Distinct Population of the mountain yellow-legged frog, with is a key area for the recovery of this endangered species. The river also supports habitat for a genetically isolated population of California spotted owl (listed as a Forest Service Region 5 Sensitive Species). Potential habitat for southwestern willow flycatcher (listed as a federally endangered species) is also present. The area also contains the best remaining habitat for the southern rubber boa and historic habitat for the San Bernardino flying squirrel in the San Jacinto Mountains. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

The wildlife values along the North Fork San Jacinto River are recognized as being outstandingly remarkable based on the following: 1) the presence of historic and suitable habitat for mountain yellow-legged frog, 2) recognition of the value of this habitat based on the highly endangered status of the mountain yellow legged frog and, 3) the diversity of Forest Service Region 5 Sensitive Species present in the area, including the California spotted owl, southern rubber boa, and San Bernardino flying squirrel.

Fuller Mill Creek

Wildlife

Fuller Mill Creek is home to a population of mountain yellow-legged frog (listed as a federally endangered species). The creek supports one of the last remaining populations of this federally endangered species in southern California. This species is highly imperiled. The creek is also designated critical habitat for the Southern California Distinct Population segment of the mountain yellow-legged frog, which is a key area for the recovery of this endangered species. The California spotted owl and the southern rubber boa (listed as Forest Service Region 5 Sensitive Species) are also present along Fuller Mill Creek. There is potential for the San Bernardino flying squirrel (listed as a Forest Service Region 5 Sensitive Species) to occur. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

The wildlife values along Fuller Mill Creek are recognized as being outstandingly remarkable based on the following: 1) the presence of occupied habitat for mountain yellow-legged frog and recognition of the value of this habitat for species recovery, 2) recognition of the significance of this occurrence; it is one of only several occurrences in southern California, and 3) presence of other Forest Service Region 5 Sensitive Species including the California spotted owl and San Bernardino flying squirrel.

Palm Canyon Creek

Scenery

Palm Canyon Creek, located in the lower eastern slope of the San Jacinto Mountains, is characterized by steep slopes and narrow ridges with deep, rugged canyons. The high desert mountains support pinyon-juniper vegetation communities. Chaparral blankets the hills and Colorado Desert vegetation covers the desert floor at lower elevations. The unique presence of California's only native palm, the California fan palm, gives this canyon its name. The creek is a nationally-significant palm oasis. The largest stand within the small groves that make up the oasis is about 30 palms (USDA Forest Service 2010). The creek bed in Palm Canyon is almost always dry, flowing underground for much of the year. A few short reaches

have modest seasonal surface flow, providing haven for small oases. Some of the landscape here has been influenced and altered by development, especially in the Santa Rosa Indian Reservation, with roads and cabins present. Seasonal variations are not readily apparent, except within the riparian corridor when the willows turn golden before dropping their leaves in the fall. The scenery here is regionally spectacular, with deep, rugged canyons, thick riparian vegetation, and palm oases. Winter and early spring storms bring ephemeral waterfalls. This high-desert landscape possesses regionally outstandingly visual values.

Botany

Palm Canyon supports the largest California fan palm oasis in the United States. California fan palms are relics from millions of years ago when the area that is now desert was wetter and occupied by a tropical forest. Palms are also a culturally significant species because they are considered ancestors by the Cahuilla Indians. Today these native North American trees occur only in locations with a high water table. Permanent streams within steep canyons or large springs provide habitat for the largest groves. Smaller groves grow where seeps or moist canyon sides provide moisture even where surface water is intermittent. The Palm Canyon oases are adjacent to underground faults that bring water to the surface. The abundance of these palms is nationally significant and unique. California fan palms, reaching a maximum of 82 feet, are the dominant feature in the overstory of the creek. The oasis community is long-lived with individual trees reaching the age of 150-200 years. Reproduction occurs only from mature trees and only after extremely wet winters. Fire is an integral part of the ecology of the palm oases. Fire removes the understory shrubs allowing more water for the fire-tolerant palms and also results in a flush of palm growth as small palms are released from shade. Where fire is allowed to occur, there is a combination of mature trees in the canopy and smaller palms in the understory.

The palm oases within Palm Canyon are recognized as having outstandingly remarkable habitat value due to the following: 1) a location that supports the largest California fan palm oasis in the United States, 2) the abundance of these native palms, relics from millions of years ago that are nationally significant and unique, and 3) the location is recognized as an area of high ecological significance within the four southern California National Forests.

Heritage Resources (Cultural)

The creek is located in the heart of historic Cahuilla territory and has been a resource for the Cahuilla for over two millennia. There are many Cahuilla sites along the entire portion of the canyon, including village sites, seasonal camps, and numerous specialized activity areas including rock art, agave roasting pits, and milling features. Evidence exists in the Canyon which reflects all aspects of Cahuilla life and has exceptional human-interest value to the local Cahuilla and Tribal community. Palm Canyon holds special significance to the Agua Caliente Band of Cahuilla Indians, the original inhabitants of the area, who continue to care for and protect Palm Canyon. The waters of Palm Canyon Creek have sustained the Cahuilla Indians agriculturally, economically, culturally, and spiritually during the entirety of this long period, as they still do today. The Canyon meets the standards for a Traditional Cultural Property as highly significant and has outstandingly remarkable cultural values.

Bautista Creek

Wildlife

Bautista Creek possesses one of the largest number of endangered wildlife species of any location in the forest. The Creek is home to populations of arroyo toad, nesting occurrences of the southwestern willow flycatcher, and the San Bernardino kangaroo rat, all federally endangered wildlife species. The U.S. Fish and Wildlife Service designated this area as critical habitat for the Quino checkerspot butterfly, a federally endangered insect. Forest Service Region 5 Sensitive Species present include the Southern California legless lizard, three-lined boa, two-striped garter snake, and San Diego ringneck snake. The greenest tiger beetle, a rare invertebrate, was collected in the 1970s along the creek and may still occur. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

Bautista Creek is considered to have outstandingly remarkable wildlife values based on the following: 1) the presence of populations of arroyo toad, San Bernardino kangaroo rat, and nesting occurrences of the southwestern willow flycatcher, all federally endangered species; 2) the U.S. Fish and Wildlife Service designated Bautista Creek as Critical Habitat for the Quino checkerspot butterfly, a federally endangered insect; 3) the presence of fourteen Forest Service Region 5 Sensitive Species; 4) recognition of this stream as an area of high ecological significance within the four southern California National Forests in the Southern California Mountain and Foothill Assessment; and 5) recognition that Bautista Creek supports one of the largest number of endangered wildlife species of any location on the forest.

Botany

Bautista Creek provides occupied habitat for the slender-horned spine-flower, a federally endangered plant species. These annual plants occur on alluvial benches in or adjacent to the stream channel. Habitat is created by deposition of sediments carried by the stream. The habitat is dependent on proper functioning condition of the creek; therefore, downstream habitat is affected by hydrologic alterations upstream. Proper management of water and watersheds provides the most significant benefit because the plant habitat is tied to hydrology and fluvial geomorphology and also because many of the remaining occurrences of the spine-flower occur downstream off of National Forest lands.

Bautista Creek possesses outstandingly remarkable botanical values based on the occupied habitat of the slender-horned spineflower. Regional and national significance of this occurrence is based on the following: 1) the population occurs in one of only two locations in the four southern California National Forests, 2) this population is the only known population on the forest, 3) there is a large number of individuals within this population (approximately 2,000), and 4) there is a large quantity of occupied habitat of this population (occurs over a two mile stretch of creek).

Heritage Resources (Historic)

Historic values for Bautista Creek have regional and national significance and are considered to be outstandingly remarkable. In 1774 and again in 1776, Juan Bautista de Anza travelled through the Bautista Creek Canyon in one of the earliest efforts to reach the San Francisco Bay area from Sonora, Mexico. De Anza made two trips through the canyon. This trail route is designated as a National Historic Trail, which is the Bautista Canyon Road corridor itself (not a trail) through this area.

Heritage Resources (Cultural)

Bautista Creek has many Native American sites of exceptional human-interest along the whole length of the canyon. Most of the sites represent occupation or habitation sites while others represent specialized activities such as milling features for food processing. While few archaeological investigations have been undertaken, ethnohistoric Cahuilla village sites occur at the upper portion of the drainage. The canyon meets the standards for a Traditional Cultural Property as highly significant. It possesses outstandingly remarkable values.

Planning Context: Laws, Regulations, Directives, and the Forest Plan

Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act of 1968 preserves selected rivers and their immediate environments in free-flowing conditions to protect them for the benefit and enjoyment of present and future generations. These rivers may possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or similar values. The Wild and Scenic Rivers Act states rivers should be classified, designated, and administered as wild, scenic, or recreational. Wild rivers are “those rivers or sections of river that are free of impoundments and generally inaccessible except by trail, which watershed or shorelines essentially primitive and water unpolluted.” Scenic rivers are “those rivers or sections of rivers that are free of impoundments, with shorelines or watershed still largely primitive and shorelines largely undeveloped, but accessible in places by road.” Recreational rivers are “those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.”

The Wild and Scenic Rivers Act requires the administering agency to establish a detailed river corridor boundary of an average of not more than 320 acres per river mile and to prepare a comprehensive river management plan for those areas.

The Forest Service will cooperate with other local, state, and federal agencies which play important roles in managing the four rivers, to effectively implement this CRMP. Agencies include but are not limited to: the Agua Caliente Band of Cahuilla Indians, US Fish and Wildlife Service, Bureau of Land Management, California Department of Fish and Wildlife, California Water Resources Control Board/Santa Ana and Colorado Regional Water Quality Boards, California Department of Transportation, Riverside County, and the Western Riverside Regional Conservation Authority.

2009 Omnibus Public Land Management Act (Public Law 111-11)

Section 1852 of the 2009 Omnibus Public Lands Management Act added 10.2 miles of the North Fork San Jacinto River, 3.5 miles of Fuller Mill Creek, 9.8 miles of Bautista Creek, and 8.1 miles of Palm Canyon Creek to the National Wild and Scenic Rivers System through amendment to the Wild and Scenic Rivers Act.

Forest Plan and Forest Plan Amendment

The LMP for Southern California National Forests was originally completed in September 2005. In the document's three main parts, it provides vision, strategy, and design criteria, respectively, for four national forests: Angeles National Forest, Cleveland National Forest, Los Padres National Forest, and San Bernardino National Forest.

The 2005 Forest Plan was amended in September 2010. The Amendment was made pursuant to enactment of the 2009 Omnibus Act (above). The 2009 Omnibus Act designated portions of the North Fork San Jacinto River and Palm Canyon Creek as 'Wild', portions of the North Fork San Jacinto River and Fuller Mill Creek as 'Scenic', and portions of the North Fork San Jacinto River, Fuller Mill Creek, and Bautista Creek as 'Recreational' Rivers. The 2010 Plan Amendment added management direction to the LMP for management of the designated wild and scenic rivers.

Forest Service Manual—Comprehensive River Management Plan

Forest Service Manual 2350 provides additional information on the requirements for completing a comprehensive river management plan. Additional guidance on the suggested contents of a comprehensive river management plan is found in the "Wild and Scenic River Management Responsibilities," a technical report of the Interagency Wild and Scenic Rivers Coordinating Council (2002). The suggested contents include a description of the river setting and resource values, planning context, coordination with others, management direction, management actions, and monitoring strategies.

Management Direction

Management direction contained in this plan is designed to meet Wild and Scenic Rivers Act as well as Forest Service requirements, in order to provide a long-term management strategy for protecting and enhancing the four river segments' free-flowing condition, water quality, and outstandingly remarkable values. Management direction in this section consists of desired conditions and management standards and guidelines, which are drawn from the 2005 LMP as well as the 2010 Plan Amendment. They prioritize protecting and enhancing wild and scenic river values during the planning and implementation of resource management activities in the river corridor. Designation of wild and scenic rivers, however, neither prohibits development nor gives the Federal government control over private property.

Site-specific National Environmental Policy Act environmental analysis will be done for actions proposed on National Forest lands in the wild and scenic river corridors. All proposed projects would be checked for consistency with the CRMP during the site-specific analysis.

Desired Conditions for All Rivers by Classification

Desired conditions describe the ecological, economic, and social attributes that characterize or exemplify the outcome of land management. Desired conditions can be measured now and over time through monitoring. Desired conditions are not commitments and may be achievable only over the long term (USDA Forest Service 2005b).

The character and integrity of the four river segments as well as the 1/4-mile management buffer associated with the Wild and Scenic Rivers Act designation are maintained, with special emphasis on the protection and enhancement of river values (free flow, water quality, and outstandingly remarkable values). Maps depicting classifications for each river segment can be seen in figures 2, 3, and 4.

Wild Segments

Management of the wild segments of these corridors will be focused on protecting and preserving natural processes with minimal human influences and limited access (USDA Forest Service 2007b).

Scenic Segments

Management of the scenic segments will be focused on maintaining and enhancing the near-natural environment. The riverbanks will be undeveloped and primitive but may be accessible in places by trails. Recreation management will be designed to provide a natural-appearing setting with limited improvements (USDA Forest Service 2007b).

Recreational Segments

Management will be focused on providing river-oriented recreation in natural-appearing or culturally-influenced settings. The river and creeks may be readily accessible by roads and trails. Recreational activity will be established to protect the resources and complement the setting. Certain recreation controls will be implemented related to activities and accommodations (USDA Forest Service 2007b).

Water Quality / Free Flow

The designated river has excellent water quality that supports diverse ecological communities. The river segment exists in a free-flowing condition with a range of flows that provide optimum conditions for wildlife, natural processes, and channel integrity.

Desired Conditions for Specific Rivers

As established in the LMP, Part 2 San Bernardino National Forest Strategy (USDA Forest Service 2005c), the Forest has been divided into a series of geographical units called “Places.” Each Place has its own landscape character. Landscape character has been described as an overall visual and cultural impression of landscape attributes, the physical appearance and cultural context of a landscape that gives it an identity and “sense of place.” Desired conditions for each place paint a picture of what the Place could be as the national forest implements activities to move toward the overall forest-wide desired conditions (USDA Forest Service 2005c). The four wild and scenic river segments in the national forest are located within the following designated places:

- Anza: Bautista Creek
- Idyllwild: Fuller Mill Creek and the North Fork San Jacinto River
- Santa Rosa and San Jacinto Mountains National Monument: Palm Canyon Creek

The desired conditions for the river corridors, described below, are derived from the Place desired conditions and are tailored to the river-specific ORVs.

North Fork San Jacinto River

- Scenery: The scenic focus will be on maintaining views of jagged rocks and towering pines, especially from the scenic byway and Pacific Crest Trail. Where possible, acquisition of land will be emphasized to maintain open space and scenic qualities (USDA Forest Service 2005c).
- Wildlife: Habitat conditions for threatened, endangered, proposed, candidate, and sensitive species are improving over time (USDA Forest Service 2017). Enhancement of habitat for threatened, endangered, proposed, candidate, and sensitive species, such as the mountain yellow-legged frog, California spotted owl, and southern rubber boa will be emphasized in management activities.

Fuller Mill Creek

- Wildlife: Habitat conditions for threatened, endangered, proposed, candidate, and sensitive species are improving over time (USDA Forest Service 2017). Enhancement of habitat for threatened, endangered, proposed, candidate and sensitive species, such as the mountain yellow-legged frog, California spotted owl, and southern rubber boa will be emphasized in management activities.

Palm Canyon Creek

- Scenery: Scenic focus will be on maintaining and enhancing the regionally spectacular views of the high desert landscape in the corridor, including the deep, rugged, rocky canyons, thick riparian vegetation, and palm oases.
- Botany: The valued landscape attributes to be preserved include the high-country conifer forests, live oak in deep canyons, a diverse cactus scrub community, pinyon juniper woodlands, and the fan palm oasis. Tamarisk and other nonnative species are reduced (USDA Forest Service 2005c). Desert chaparral communities, pinyon juniper woodlands, and timber stands are at pre-fire suppression era conditions.
- Heritage Resources (Cultural): Partnerships are in place with stakeholders, such as the Monument Advisory Committee, the Bureau of Land Management, the Agua Caliente Tribal Historic Preservation Officer, Native American Tribes, and others to implement the Santa Rosa and San Jacinto Mountains National Monument Plan (USDA Forest Service 2005c). The Santa Rosa and San Jacinto Mountains were home to the Cahuilla Indians prior to European settlement and Santa Rosa Mountain is particularly significant to the Cahuilla people. Culturally affiliated tribes on the Forest include: Agua Caliente Band of Cahuilla Indians, Augustine Band of Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Los Coyotes Band of Mission Indians, Morongo Band of Mission Indians, Ramona Band of Mission Indians, San Manuel Band of Mission Indians, Santa Rosa Band of Mission Indians, Soboba Band of Mission Indians, Torres-Martinez Desert Cahuilla Indians, and Twenty-Nine Palms Band of Mission Indians (USDA Forest Service 2013).

Bautista Creek

- Wildlife: Enhancement of wildlife habitat for threatened, endangered, proposed, candidate and sensitive species, such as the southwestern willow flycatcher, arroyo toad, San Bernardino Kangaroo rat, Quino checkerspot butterfly, and slender horned spineflower will be emphasized in management activities. Maintain the unique biological diversity found in Bautista Creek and remove tamarisk and other nonnative species over time.

- Botany: Preserve the mosaic pattern of the chaparral-covered hills, the ribbons of diverse native vegetation in the canyons and riparian areas, and the presence of oaks, bigcone Douglas-fir, and pine in higher elevations. Chaparral communities and timber stands are at pre-fire suppression conditions. Habitat conditions for threatened, endangered, proposed, candidate and sensitive species are improving over time. Tamarisk and other nonnative species are reduced over time.
- Heritage Resources (Cultural and Historic): Native American access to traditional gathering areas is improved and areas are protected. Heritage resource sites are protected. Native American tribes will become partners through protocol agreements and provide assistance with interpretation and management of traditional gathering areas. The California Site Steward Program will be implemented (USDA Forest Service, 2005c). Culturally affiliated tribes on the Forest include: Agua Caliente Band of Cahuilla Indians, Augustine Band of Mission Indians, Cabazon Band of Mission Indians, Cahuilla Band of Mission Indians, Los Coyotes Band of Mission Indians, Morongo Band of Mission Indians, Ramona Band of Mission Indians, San Manuel Band of Mission Indians, Santa Rosa Band of Mission Indians, Soboba Band of Mission Indians, Torres-Martinez Desert Cahuilla Indians, and Twenty-Nine Palms Band of Mission Indians (USDA Forest Service 2013).

Management Standards and Guidelines

The management standards below prioritize protecting and enhancing wild and scenic river values during the planning and implementation of resource management activities in the river corridors. As described above, these standards and guidelines are derived from the 2005 LMP and 2010 Plan Amendment. They are intended to preserve the designated rivers' free-flowing condition and protect and enhance their outstandingly remarkable values and water quality.

These standards and guidelines are also intended to achieve the Scenic Integrity Objectives (SIO) established by the Forest Service. These are objectives that define the minimum level to which landscapes are to be managed from an aesthetics standpoint (USDA Forest Service 2005d). Specifically, a "Very High" SIO generally provides for ecological changes only and refers to landscapes where the valued (desired) landscape character is intact with only minute, if any, deviations. The landscape is unaltered (USDA Forest Service 2005d). A "High" SIO provides for conditions where human activities are not visually evident. This refers to landscapes where the valued (desired) landscape character "appears" intact. Deviations may be present but must repeat the form, line, color, texture, pattern and scale common to the landscape character. The landscape appears unaltered (USDA Forest Service 2005d).

North Fork San Jacinto River

- Water Quality / Free Flow:
 - Any proposed water resources projects would have to be reviewed under section 7 of the Wild and Scenic Rivers Act.
 - Surface water diversions and groundwater extractions, including wells and spring developments will only be authorized when it is demonstrated by the user, and/or agreed to by the Forest Service, that the water extracted is excess to the current and reasonably foreseeable future needs of forest resources (USDA Forest Service 2005d).

- Consideration of beneficial uses, existing water rights, and the absence of other available water sources will be part of the water extraction application.
 - Approved extractions and diversions will provide for long-term protection and reasonable use of surface water and groundwater resources.
 - Feasibility and sustainability assessments should be appropriately scaled to the magnitude of the extraction or diversion proposed.
- Facility Development:
 - For standards and guidelines regarding facility development in each land use zone, see the LMP, Part 2 San Bernardino National Forest Strategy (2005c).
 - In the wild segment, minimize facility development; when necessary to permit facilities, design structures to have a natural, rustic appearance (USDA Forest Service 2005c).
- User Capacity:
 - Follow thresholds and capacity guidelines as described in the User Capacity Analysis (appendix A) to ensure recreation activities do not negatively affect river values.
- Wildlife:
 - Project planning should consider conservation of suitable habitat components over the long term, including avoidance and/or minimization of additional land disturbance activities that could cause direct or indirect adverse effects to federally endangered species such as the mountain yellow-legged frog.
 - Manage Critical Biological land use zones so that activities and discretionary uses are either neutral or beneficial for the species and habitats for which the area was established. Accept short-term adverse impacts to threatened, endangered, and proposed species if such impacts will be compensated by the accrual of long-term benefits to habitat for threatened, endangered, and candidate species (USDA Forest Service 2005d).
- When implementing new projects in areas that provide for threatened, endangered, proposed, and candidate species, use design criteria and conservation practices so that discretionary uses and facilities promote the conservation and recovery of these species and their habitats. Accept short-term impacts where long-term effects would provide a net benefit for the species and its habitat where needed to achieve multiple-use objectives (USDA Forest Service 2005d).
- Scenery:
 - Design management activities to meet the SIOs shown on the Scenic Integrity Objectives Map, below in figure 6 (USDA Forest Service 2005d).
 - In the wild, scenic, and recreation segments, plan, design, and implement all management activities to be consistent with the SIO of “High.” Follow guidelines in Landscape Aesthetics: A Handbook for Scenery Management (or other current guides) for all management activities in the WSR corridor (USDA Forest Service 2005d).
 - SIOs will be met with the following exceptions:
 - Minor adjustments not to exceed a drop of one SIO level is allowable with the Forest Supervisor's approval (USDA Forest Service 2005d).
 - Temporary drops of more than one SIO level may be made during and immediately following project implementation providing they do not exceed three years in duration (USDA Forest Service 2005d).

Fuller Mill Creek

- Water Quality / Free Flow:
 - Any proposed water resources projects would have to be reviewed under section 7 of the Wild and Scenic Rivers Act.
 - Surface water diversions and groundwater extractions, including wells and spring developments will only be authorized when it is demonstrated by the user, and/or agreed to by the Forest Service, that the water extracted is excess to the current and reasonably foreseeable future needs of forest resources (USDA Forest Service 2005d).
 - Consideration of beneficial uses, existing water rights, and the absence of other available water sources will be part of the water extraction application.
 - Approved extractions and diversions will provide for long-term protection and reasonable use of surface water and groundwater resources.
 - Feasibility and sustainability assessments should be appropriately scaled to the magnitude of the extraction or diversion proposed.
- User Capacity:
 - Follow thresholds and capacity guidelines as described in the User Capacity Analysis (appendix A) to ensure recreation activities do not negatively affect river values.
- Facility Development:
 - For standards and guidelines regarding facility development in each land use zone, see the LMP, Part 2 San Bernardino National Forest Strategy (2005c).
- Wildlife:
 - Project planning should consider conservation of suitable habitat components over the long term, including avoidance and/or minimization of additional land disturbance activities that could cause direct or indirect adverse effects to federally endangered species such as the mountain yellow-legged frog.
 - Manage Critical Biological land use zones so that activities and discretionary uses are either neutral or beneficial for the species and habitats for which the area was established. Accept short-term adverse impacts to threatened, endangered, and proposed species if such impacts will be compensated by the accrual of long-term benefits to habitat for threatened, endangered, and candidate species (USDA Forest Service 2005d).
 - When implementing new projects in areas that provide for threatened, endangered, proposed, and candidate species, use design criteria and conservation practices so that discretionary uses and facilities promote the conservation and recovery of these species and their habitats. Accept short-term impacts where long-term effects would provide a net benefit for the species and its habitat where needed to achieve multiple-use objectives (USDA Forest Service 2005d).

Palm Canyon Creek

- Water Quality / Free Flow:
 - Any proposed water resources projects would have to be reviewed under section 7 of the Wild and Scenic Rivers Act.
 - Surface water diversions and groundwater extractions, including wells and spring developments will only be authorized when it is demonstrated by the user, and/or agreed to

by the Forest Service, that the water extracted is excess to the current and reasonably foreseeable future needs of forest resources (USDA Forest Service 2005d).

- Consideration of beneficial uses, existing water rights, and the absence of other available water sources will be part of the water extraction application.
- Approved extractions and diversions will provide for long-term protection and reasonable use of surface water and groundwater resources.
- Feasibility and sustainability assessments should be appropriately scaled to the magnitude of the extraction or diversion proposed.
- Facility Development:
 - ❑ For standards and guidelines regarding facility development in each land use zone, see the LMP, Part 2 San Bernardino National Forest Strategy (2005c).
 - ❑ In the wild segment, minimize facility development; when necessary to permit facilities, design structures to have a natural, rustic appearance (USDA Forest Service 2005c).
- Scenery:
 - ❑ Design management activities to meet the SIOs shown on figure 6.
 - ❑ Plan, design, and implement all management activities to be consistent with the SIO of “High” or “Very High” depending on location, as shown on figure 6. Follow guidelines in Landscape Aesthetics: A Handbook for Scenery Management (or other current guides) for all management activities in the WSR corridor (USDA Forest Service 2005d).
 - ❑ SIOs will be met with the following exceptions:
 - Minor adjustments not to exceed a drop of one SIO level is allowable with the Forest Supervisor's approval (USDA Forest Service 2005d).
 - Temporary drops of more than one SIO level may be made during and immediately following project implementation providing they do not exceed three years in duration (USDA Forest Service 2005d).
 - ❑ In the wild segment, minimize facility development; when necessary to permit facilities, design structures to have a natural, rustic appearance (USDA Forest Service 2005c).
- Botany:
 - ❑ Project planning should consider conservation of suitable habitat components over the long term, including avoidance and/or minimization of additional land disturbance activities that could cause direct or indirect adverse effects to the California fan palm oasis (USDA Forest Service 2005c).
- Heritage Resources (Cultural):
 - ❑ Until proper evaluation occurs, known heritage resource sites shall be afforded the same consideration and protection as those properties evaluated as eligible to the National Register of Historic Places (USDA Forest Service 2005d).
 - ❑ Comply with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), which states that the “recovery, treatment, and repatriation of human remains, sacred objects, and objects of cultural patrimony” would be directed to appropriate tribes (USDA Forest Service 2005d). If ancestral human remains were “discovered either by intentional excavation or inadvertent discovery,” the Forest Service would consult with any culturally affiliated tribes to develop appropriate procedures for addressing this discovery (USDA Forest Service 2005d). Human remains not under the jurisdiction of the County

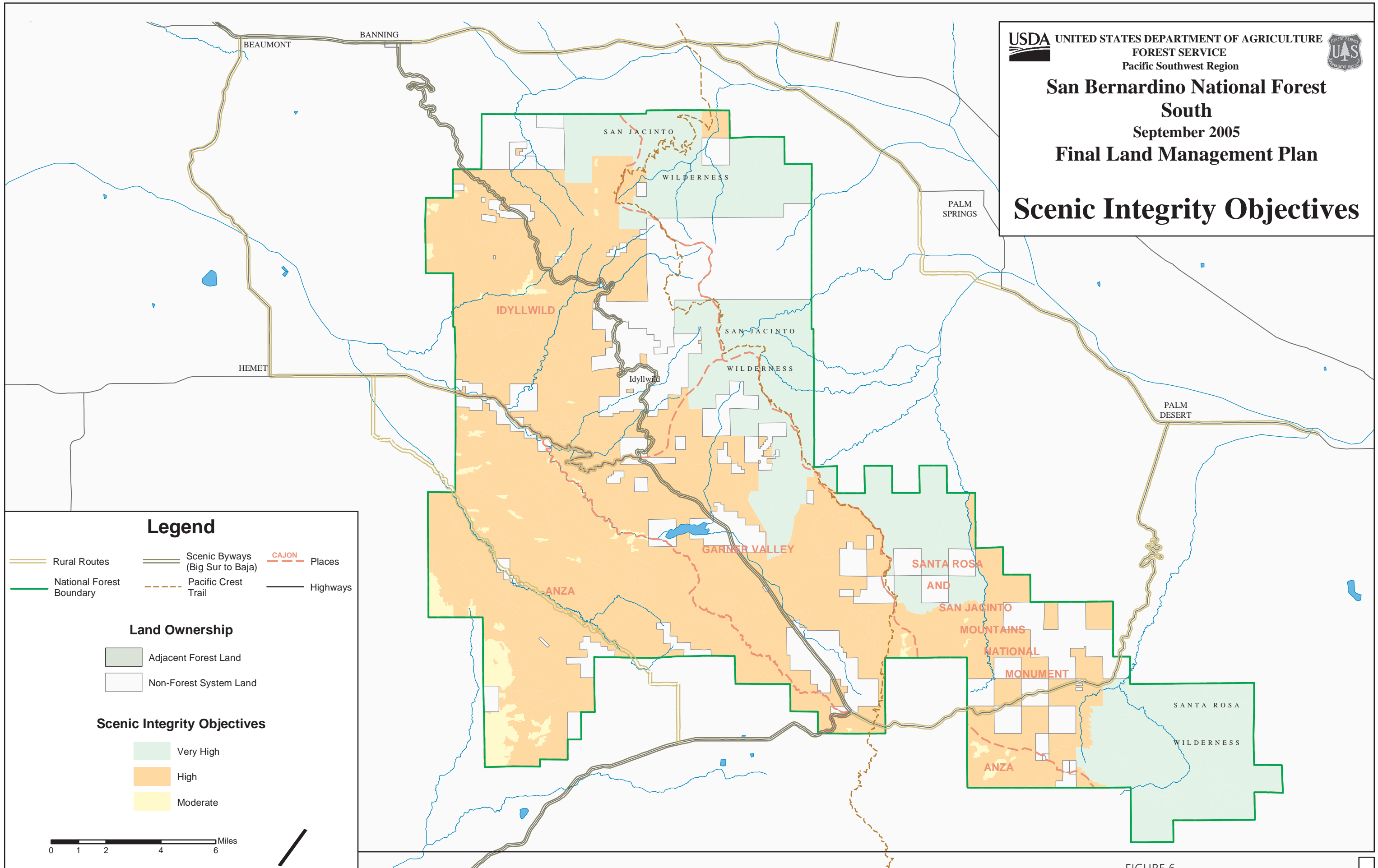
Coroner would be left undisturbed (unless there was an urgent reason for their disinterment) (USDA Forest Service 2005d).

- ❑ Protect the access to and the use of sensitive traditional tribal use areas (USDA Forest Service 2005d).







San Bernardino National Forest
South
 September 2005
Final Land Management Plan



Scenic Integrity Objectives



Legend

-  Rural Routes
-  National Forest Boundary
-  Scenic Byways (Big Sur to Baja)
-  Pacific Crest Trail
-  CAJON Places
-  Highways

Land Ownership

-  Adjacent Forest Land
-  Non-Forest System Land

Scenic Integrity Objectives




-  Very High
-  High
-  Moderate



FIGURE 6

Scenic Integrity Objectives Map

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Bautista Creek

- Water Quality / Free Flow:
 - Any proposed water resource or land disturbance projects within the WSR corridor would have to be reviewed under section 7 of the Wild and Scenic Rivers Act.
 - Surface water diversions and groundwater extractions, including wells and spring developments will only be authorized when it is demonstrated by the user, and/or agreed to by the Forest Service, that the water extracted is excess to the current and reasonably foreseeable future needs of forest resources (USDA Forest Service 2005d).
 - Consideration of beneficial uses, existing water rights, and the absence of other available water sources will be part of the water extraction application.
 - Approved extractions and diversions will provide for long-term protection and reasonable use of surface water and groundwater resources.
 - Feasibility and sustainability assessments should be appropriately scaled to the magnitude of the extraction or diversion proposed.
- Facility Development:
 - For standards and guidelines regarding facility development in each land use zone, see the LMP, Part 2 San Bernardino National Forest Strategy (2005c).
- User Capacity:
 - Follow thresholds and capacity guidelines as described in the User Capacity Analysis (appendix A) to ensure recreation activities do not negatively affect river values.
- Botany:
 - Enhance wildlife habitat for the endangered slender horned spineflower (USDA Forest Service 2005c).
- Wildlife:
 - Project planning should consider conservation of suitable habitat components over the long term, including avoidance and/or minimization of additional land disturbance activities that could cause direct or indirect adverse effects to federally endangered species such as the arroyo toad, nesting southwestern willow flycatcher, and kangaroo rat.
 - Manage Critical Biological land use zones so that activities and discretionary uses are either neutral or beneficial for the species and habitats for which the area was established. Accept short-term adverse impacts to threatened, endangered, and proposed species if such impacts will be compensated by the accrual of long-term benefits to habitat for threatened, endangered, and candidate species (USDA Forest Service 2005d).
 - When implementing new projects in areas that provide for threatened, endangered, proposed, and candidate species, use design criteria and conservation practices so that discretionary uses and facilities promote the conservation and recovery of these species and their habitats. Accept short-term impacts where long-term effects would provide a net benefit for the species and its habitat where needed to achieve multiple-use objectives (USDA Forest Service 2005d).

- Heritage Resources (Cultural and Historic):
 - Until proper evaluation occurs, known heritage resource sites shall be afforded the same consideration and protection as those properties evaluated as eligible to the National Register of Historic Places (USDA Forest Service 2005d).
 - Comply with NAGPRA, which states that the “recovery, treatment, and repatriation of human remains, sacred objects, and objects of cultural patrimony” would be directed to appropriate tribes (USDA Forest Service 2005d). If ancestral human remains were “discovered either by intentional excavation or inadvertent discovery,” the Forest Service would consult with any culturally affiliated tribes to develop appropriate procedures for addressing this discovery (USDA Forest Service 2005d). Human remains not under the jurisdiction of the County Coroner would be left undisturbed (unless there was an urgent reason for their disinterment) (USDA Forest Service 2005d).
 - Protect the access to and the use of sensitive traditional tribal use areas (USDA Forest Service 2005d).

Monitoring Plan

The CRMP monitoring plan is intended to track river corridor impacts from various kinds of land uses, including recreation, and to maintain the river corridors’ desired conditions. Monitoring these items will provide managers with key thresholds for when changes to management must be considered in order to protect the corridors’ ORVs, free flow, and water quality, and to manage use within capacity. Some of the monitoring items below are also described in more detail in appendix A, User Capacity, and are noted as such.

The following table lists the location, issue being addressed, and brief description of CRMP monitoring items. Monitoring design considers past, current, and anticipated future funding levels, along with staffing levels and other San Jacinto Ranger District priorities. Where appropriate, certain monitoring actions would be conducted in consultation with culturally affiliated Tribes. The monitoring actions selected are those that address areas of highest concern.

Table 3. Possible Monitoring Items and their Locations in the Wild and Scenic River and Corridor

Location of Monitoring Action	Potential Issue / ORV Addressed	Monitoring Action
N. Fork San Jacinto River, Fuller Mill Creek, Bautista Creek, Palm Canyon Creek	Water quality	Continue documenting water quality metrics at existing monitoring locations and consolidate data in the Forest Service’s database.
Palm Canyon, Bautista Creek	Heritage value impacts	In consultation with culturally affiliated Tribes, monitor known heritage sites for damages.
Fuller Mill Creek	Wildlife impacts from visitor use	Collect occupancy data at the Fuller Mill Creek Picnic Area during the peak use season as described in User Capacity Analysis (appendix A).
Palm Canyon	Botany impacts from visitor use	Collect group encounter data using automated trail counters during the peak season as described in User Capacity Analysis (appendix A).
N. Fork San Jacinto River	Wildlife impacts from visitor use	Collect campground occupancy data at Dark Canyon Campground as described in User Capacity Analysis (appendix A).
Bautista Creek	Wildlife and botany impacts from visitor use	Collect group encounter data using automated trail counters deployed on the Cottonwood Truck Trail during the peak season as described in User Capacity Analysis (appendix A).

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Appendix A: User Capacity Analysis for San Bernardino National Forest Wild and Scenic River Corridors

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SAN BERNARDINO NATIONAL FOREST

**USER CAPACITY ANALYSIS
FOR WILD AND SCENIC
RIVER CORRIDORS**

FINAL Technical Memo | August 2020



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PREPARED FOR:
SAN BERNARDINO NATIONAL FOREST

SUBMITTED BY:
RSG



CONTENTS

- 1.0 INTRODUCTION 1**
 - 1.1 GEOGRAPHIC SETTING1
 - 1.2 REGULATORY BACKGROUND.....3
 - MANAGEMENT GUIDANCE4
 - 1.3 USER CAPACITIES.....4
- 2.0 CURRENT USE CONDITIONS AND USER CAPACITY 8**
 - 2.1 FULLER MILL CREEK8
 - SITE OVERVIEW.....8
 - RIVER VALUES POTENTIALLY AFFECTED BY VISITOR
USE11
 - APPROACH TO ESTABLISH CURRENT USE AND
ESTIMATE USER CAPACITY11
 - VISITOR USE DATA COLLECTION EFFORT.....11
 - CAPACITY14
 - MONITORING, TRIGGERS, AND MANAGEMENT ACTIONS15
 - 2.2 PALM CANYON CREEK.....16
 - SITE OVERVIEW.....16
 - RIVER VALUES POTENTIALLY AFFECTED BY VISITOR
USE19
 - APPROACH TO ESTABLISH CURRENT USE AND
ESTIMATE USER CAPACITY19
 - VISITOR USE DATA COLLECTION EFFORT.....19
 - CAPACITY23
 - MONITORING, TRIGGERS, AND MANAGEMENT ACTIONS25
 - 2.3 SAN JACINTO RIVER (NORTH FORK)25



SITE OVERVIEW.....	25
RIVER VALUES POTENTIALLY AFFECTED BY VISITOR USE	28
APPROACH TO ESTABLISH CURRENT USE AND ESTIMATE USER CAPACITY	28
VISITOR USE DATA.....	28
CAPACITY	30
MONITORING, TRIGGERS, AND MANAGEMENT ACTIONS	30
2.4 BAUTISTA CREEK	31
SITE OVERVIEW.....	31
RIVER VALUES POTENTIALLY AFFECTED BY VISITOR USE	34
APPROACH TO ESTABLISH CURRENT USE AND ESTIMATE USER CAPACITY	34
VISITOR USE DATA COLLECTION EFFORT.....	34
CAPACITY	38
MONITORING, TRIGGERS, AND MANAGEMENT ACTIONS	40
3.0 LITERATURE CITED	41
APPENDIX A. PICNIC AREA AND PARKING LOT ACCUMULATION AND TURNOVER FORM	A-1
APPENDIX B. TRAFX TRAIL COUNTER CALIBRATION FORM—PALM CANYON TRAIL.....	B-1
APPENDIX C. TRAFX TRAIL COUNTER CALIBRATION FORM—COTTONWOOD TRUCK TRAIL	C-1

LIST OF FIGURES

FIGURE 1: SAN BERNARDINO NATIONAL FOREST LAND USE MAP	2
FIGURE 2: FULLER MILL CREEK DESIGNATED SCENIC RIVER	10
FIGURE 3: PARKING LOT AND PICNIC AREA ACCUMULATION AT FULLER MILL CREEK PICNIC AREA	13
FIGURE 4: DISTRIBUTION OF PICNICKING AND PARKING DURATIONS AT FULLER MILL CREEK PICNIC AREA.....	14
FIGURE 5: PALM CANYON CREEK DESIGNATED WILD RIVER	18
FIGURE 6: TRAFX INFRARED TRAIL COUNTER LOCATED AT PALM CANYON TRAIL	20
FIGURE 7: DAILY COUNT OF TRAIL USERS ON THE PALM CANYON TRAIL	22
FIGURE 8: MEAN HOURLY COUNT OF TOTAL USE ON THE PALM CANYON TRAIL	22
FIGURE 9: NORTH FORK SAN JACINTO SCENIC RIVER	27
FIGURE 10: DAILY OCCUPANCY OF DARK CANYON CAMPGROUND DURING THE 2017 VISITOR SEASON	29
FIGURE 11: PERCENT DAILY OCCUPANCY BY MONTH AT DARK CANYON CAMPGROUND.....	29
FIGURE 12: BAUTISTA CREEK RECREATION RIVER CORRIDOR	33
FIGURE 13: TRAFX INFRARED TRAIL COUNTER LOCATED AT THE COTTONWOOD TRUCK TRAIL.....	35
FIGURE 14: DAILY COUNT OF COTTONWOOD TRUCK TRAIL USERS.....	37
FIGURE 15: MEAN HOURLY COUNT OF TOTAL USE ON THE COTTONWOOD TRUCK TRAIL	37



LIST OF TABLES

TABLE 1: FULLER MILL CREEK PARKING AND PICNIC AREA DATA COLLECTION SCHEDULE.....	12
TABLE 2: FULLER MILL CREEK PICNIC AREA TRIGGERS AND MANAGEMENT ACTIONS	16
TABLE 3: PALM CANYON TRAIL TRIGGERS AND MANAGEMENT ACTIONS	25
TABLE 4: DARK CANYON CAMPGROUND USAGE FROM 2013-2017	26
TABLE 5: DARK CANYON CAMPGROUND TRIGGERS AND MANAGEMENT ACTIONS.....	31
TABLE 6: COTTONWOOD TRUCK TRAIL TRIGGERS AND MANAGEMENT ACTIONS.....	40

ABBREVIATIONS

CRMP	Comprehensive River Management Plan
IVUMC	Interagency Visitor Use Management Council
IWSRCC	Interagency Wild and Scenic Rivers Coordinating Council
ORV	Outstandingly Remarkable Value
WSR	Wild and Scenic River

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1.0 INTRODUCTION

San Bernardino National Forest (“the Forest”) is working with VHB to develop comprehensive river management plans (CRMPs) for four river corridors that were recently designated as wild and scenic under the Wild and Scenic Rivers Act. RSG, working as a subcontractor to VHB, is completing the user capacity analysis required for each of these plans.

The purpose of this report is to describe current use conditions and user capacities for the four wild and scenic river corridors within the Forest. The report will also briefly describe general concepts and frameworks associated with user capacities as they are applied to wild and scenic rivers. The user capacity frameworks presented follow guidance from the Interagency Visitor Use Management Council (IVUMC) and the Interagency Wild and Scenic Rivers Coordinating Council (IWSRCC).

The report is organized in the following manner. The remainder of the introduction provides context for the current analysis, describing the geographic setting, regulatory background, and the concept of user capacities. Next, there are four sections, one for each of the four wild and scenic river corridors within the Forest. Each of these four sections contains an overview of the river corridor, information about river values potentially affected by visitor use; a description of the methodology used to collect recreation use data and estimate user capacity; a description of the indicators, triggers, and thresholds identified for the capacity estimate; and a monitoring plan with recommended management actions.

1.1 GEOGRAPHIC SETTING

The San Bernardino National Forest is located in San Bernardino and Riverside counties in southern California. The Forest, which spans 679,380 acres across three ranger districts, was designated as a National Forest more than a hundred years ago. Today, the San Bernardino National Forest serves as one of southern California’s year-round outdoor recreation destinations, as well as providing valuable watershed protection. The San Bernardino National Forest was set aside for the conservation of natural resources such as trees, water, minerals, livestock range, recreation, and wildlife. In 2009, four river corridors in San Bernardino National Forest, Bautista Creek, Palm Canyon Creek, Fuller Mill Creek, and the North Fork of the San Jacinto River, received wild and scenic river designation, giving their free-flowing conditions, water quality and outstandingly remarkable values additional protection. Figure 1 shows the four river corridors in the context of the National Forest, with the North Fork of the San Jacinto River and Fuller Mill Creek in the northern portion of the Forest, Bautista Creek in the southwest portion of the Forest, and Palm Canyon Creek in the southeast portion of the Forest.

1.2 REGULATORY BACKGROUND

The Wild and Scenic Rivers Act (“the Act”) was signed into law in 1968 (Wild and Scenic Rivers Act, Public Law 90-542). The Act protects the free-flowing waters of many of the nation’s most spectacular rivers and safeguards the special character of these rivers, while also recognizing the potential for appropriate use and development. The Act strives to balance river development with permanent protection for the country’s most outstanding free-flowing rivers.

To accomplish this, the Act prohibits Federal support for actions that would adversely affect the river’s free flow or outstandingly remarkable values, such as the construction of dams or other instream activities. Designation neither prohibits development within the corridor nor gives the Federal government control over private property. The Act specifically:

- prohibits dams and other federally assisted water resource projects that would adversely affect river values;
- prohibits development on federal lands if the development would degrade river values;
- protects outstanding natural, cultural, or recreational values;
- ensures water quality is maintained; and
- requires the creation of a comprehensive river management plan that addresses resource protection, development of lands and facilities, user capacities, and other management practices necessary to achieve the purposes of the Act.

The Act requires the identification of capacities and the development of management strategies to manage use within those capacities (IVUMC 2016a). The Wild and Scenic Rivers Act, Section 3(d)(1) states:

“...the Federal agency charged with the administration of each component of the National Wild and Scenic Rivers System shall prepare a comprehensive management plan for such river segment to provide for the protection of the river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act.”

While the Act does not define user capacities, federal courts have defined the phrase to mean the maximum number of people that can be received in a designated river area without adversely impacting river values (IVUMC 2016b). Courts have required that CRMPs contain user capacities and protocols for managing use according to those capacities.

Management Guidance

The 2005 Land Management Plan for San Bernardino National Forest (“the Plan”) provides direction for designated wild and scenic river corridors within the Forest. At the time of the Plan’s completion, 12 rivers were deemed eligible for wild and scenic river status. Four of the 12 rivers were designated as wild and scenic in 2009: Bautista Creek, Fuller Mill Creek, Palm Canyon Creek and the North Fork of the San Jacinto River. A description of each designated corridor can be found in river-specific sections later in this report. The management direction for river corridors eligible for wild and scenic status in the Forest states:

“All existing facilities, management actions, and approved uses will be allowed to continue in eligible river corridors until a decision is made on inclusion into the National Wild and Scenic River System, provided these facilities, actions, and uses do not interfere with the protection and enhancement of the river’s outstandingly remarkable values or free-flowing character.

New proposals include facilities, management actions, or uses on National Forest System land are not allowed if they have the potential to affect the eligibility or potential classification of the river segment.”

Direction within the Plan for the wild and scenic river corridors applies only to National Forest System lands; it does not apply to other adjacent Federal, state, or private lands within the corridors. The Forest may work cooperatively with other willing partners using cooperative agreements and other means to facilitate development of voluntary management strategies for these other lands that will protect and enhance river values consistent with law, regulation, and policy.

1.3 USER CAPACITIES

As noted above, the Wild and Scenic Rivers Act requires that user capacities be identified, and courts have required that CRMPs incorporate these user capacities. The IWSRCC (2018) developed guidance for estimating user capacities for wild and scenic rivers, outlining a series of nine steps to follow during CRMP development:

Step 1. Describe the baseline and current conditions and uses for the WSR

- Identify baseline conditions. Baseline conditions are the conditions which were present at the time of river designation.
- Describe the current amounts and types of use and the current management direction.

Step 2. Identify desired conditions for river values and classifications

- Integrate visitor use, other public use, and administrative uses into desired conditions.
- Take into account the WSR classification as wild, scenic, or recreational.
- Divide the WSR into relevant analysis areas.
- Identify the need for action by comparing existing and desired conditions.

Step 3. Identify the kinds of use that the WSR corridor can accommodate

- Tie the kinds of public uses to the facilities that support those uses.

Step 4. Identify measurable indicators for desired conditions

- Indicators are specific resource or social attributes that can be measured to track changes in conditions associated with human use.

Step 5. Establish thresholds for each indicator

- Thresholds are the minimally acceptable condition of an indicator.

Step 6. Identify triggers that elicit management response

- A trigger is the predetermined point at which changes in an indicator require a management response to ensure that the threshold for that condition is not crossed.
- Where appropriate, more than one trigger may be set to identify levels where action is needed to prevent further decline or to reverse decline.

Step 7. Identify management actions to take when triggers are reached

- Tie management actions to triggers that prevent degradation of river values.
- Identify and decide upon those capacity-related actions ripe for decision.

Step 8. Determine the WSR corridor's user capacity

- Identify a measurable amount of use each analysis area can receive without crossing thresholds.
- Establish user capacities that reflect an appropriate quantity of use.
- Support user capacity decisions with information that meets NEPA and agency requirements.

Step 9. Establish a monitoring and adaptive management approach

- Monitoring of indicators is critical to help determine whether management actions are:
 - Implemented as designed
 - Effective in preventing degradation and protecting and enhancing river values
 - Based on valid assumptions about user behaviors, relationship of use to river values, and changes in social perception about crowding
- New information may require a CRMP amendment or capacity adjustment.
- An adaptive management strategy can be a critical tool which allows managers to use new information to shape future management approaches.
- The types of new information that may lead to a capacity adjustment include the following:
 - Results of monitoring
 - Identification of more appropriate indicators and thresholds
 - Clarification of the relationship between the level of use and condition of river values
 - Changes in visitor use patterns that could affect river values
 - Changes in original assumptions, such as management actions to be taken
 - Identification of a new ORV or new information about an existing ORV
- As a result of monitoring, new information about resource conditions, trends, and the relationship between uses and conditions may indicate that changes in monitoring methods or underlying assumptions need to be incorporated in the CRMP. For example the development of new kinds of recreational equipment may change visitor use patterns.

The IWSRCC (2018) notes that river managers must make user capacity decisions in the CRMP even when use levels do not currently threaten river values or the established desired conditions for those values. The council notes that in these circumstances, only minimal investment in data collection, monitoring, and analysis may be required to support user capacity decisions. However, the council also cautions that changing use levels may require revising user capacity decisions and warrant an increased investment in data collection, monitoring, and analysis to support modifying the initial user capacity decision.

In San Bernardino National Forest, existing information suggests that current use levels in the wild and scenic river corridors are relatively low and are not likely to threaten river values or the established desired conditions for those values. Decisions about capacity would not result in near-term management actions to regulate use levels. As a result, and in line with the IWSRCC (2018) recommendations, relatively modest data collection efforts were initiated to estimate user capacities. In addition, selected elements of the user capacity analysis incorporate secondary data sources and/or assumptions. Consequently, the visitor capacities in this report are

estimates and are not precise numbers. However, monitoring will still occur, and more precise numbers will be developed if trends suggest river values could be threatened.

One secondary data source used in the current analysis is the Forest Service's Recreation Opportunity Spectrum (ROS). The ROS was used as a substitute for primary data collection (e.g., visitor surveys) to establish thresholds for inter-group encounters at Palm Canyon Creek and Bautista Creek. The Forest Service uses the ROS to classify and describe a range of recreation opportunities available within a given area. The recreational settings are described on a continuum ranging from primitive to urban (USDA Forest Service 1982). The 2005 Forest Plan designates Fuller Mill Creek, the North Fork of the San Jacinto River, and Bautista Creek in a roaded natural ROS. In a roaded natural setting, the area is characterized by predominately natural-appearing environments with moderate evidence of the sights and sounds of people. The frequency of contact with others is moderate to high on roads, developed sites, and trails and moderate away from developed sites. Palm Canyon Creek is in a semi-primitive, non-motorized ROS. In a semi-primitive non-motorized setting, the environment is largely natural appearing. Concentration of users is low, with some evidence of others and low to moderate contact frequency.

2.0 CURRENT USE CONDITIONS AND USER CAPACITY

This section of the report contains the user capacity analysis for each of the four wild and scenic river corridors. There are four subsections, one for each river corridor. Each subsection provides an overview of the river corridor, information about river values potentially affected by visitor use; a description of the methodology used to collect recreation use data and estimate user capacity; a description of the indicators, triggers, and thresholds identified for the capacity estimate; and a monitoring plan with recommended management actions.

2.1 FULLER MILL CREEK

Site Overview

Fuller Mill Creek is free flowing from its headwaters to the intersection with the North Fork of the San Jacinto River, a distance of 3.4 miles (Figure 2), with intermittent flow for some of its length from mid to late summer through fall. The landscape surrounding Fuller Mill Creek is characterized by moderately sloping canyons and rounded ridges. Mixed oak and conifer covered hillsides and riparian vegetation dominate the views. The landscape is typical of much of the middle elevations of the San Jacinto Mountains. The entire 3.4-mile length of Fuller Mill Creek has federal classification as a recreational river. It is readily accessible by road, has some development, and less than pristine water quality (USDA Forest Service 2005). Within the San Bernardino National Forest, the creek is located in a roaded natural ROS.

A population of mountain yellow-legged frogs exists at Fuller Mill Creek. The creek supports one of the last remaining populations of this federally endangered species in southern California, as it is highly imperiled. The California spotted owl and the San Bernardino flying squirrel (both Forest Service Region 5 Sensitive species) are also present along Fuller Mill Creek. The wildlife values along Fuller Mill Creek are recognized as being outstandingly remarkable. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species at risk.

Fuller Mill Creek has relatively few recreational facilities and activities. The headwaters begin about a quarter of a mile below the Pacific Crest Trail (PCT), within the Mount San Jacinto State Park, but there is no access from the PCT to Fuller Mill Creek. No other publicly accessible trails exist within the creek corridor. Fishing was once popular on Fuller Mill Creek, but after the mountain yellow-legged frog was listed as an endangered species, fish stocking ceased, and fishing declined at the site. Currently, the only notable public opportunity for recreation is the Fuller Mill Creek Picnic Area, located on Highway 243. The Fuller Mill Creek Picnic Area is open to the public from late spring through early fall from 6:00 a.m. to 10:00 p.m. Forest staff note that



peak use of the picnic area generally occurs on weekends from Memorial Day through Labor Day. The site is usually inaccessible from late fall until spring due to winter weather and road conditions. Public access to Fuller Mill Creek from the picnic area is closed between March and October to protect the mountain yellow-legged frog, although field staff stationed at Fuller Mill Creek have occasionally observed visitors within the closure area.

Fuller Mill Creek received low to moderate use at the time of WSR designation (USDA Forest Service 2005) and the Forest reports low current use levels at the Fuller Mill Creek Picnic Area. Administrative use is limited in the corridor. Resource surveys to determine the condition of the mountain yellow-legged frog population are conducted annually. In addition, a steward monitors the Fuller Mill Creek Picnic Area during the summer season and enforces the creek closure.

San Bernardino National Forest

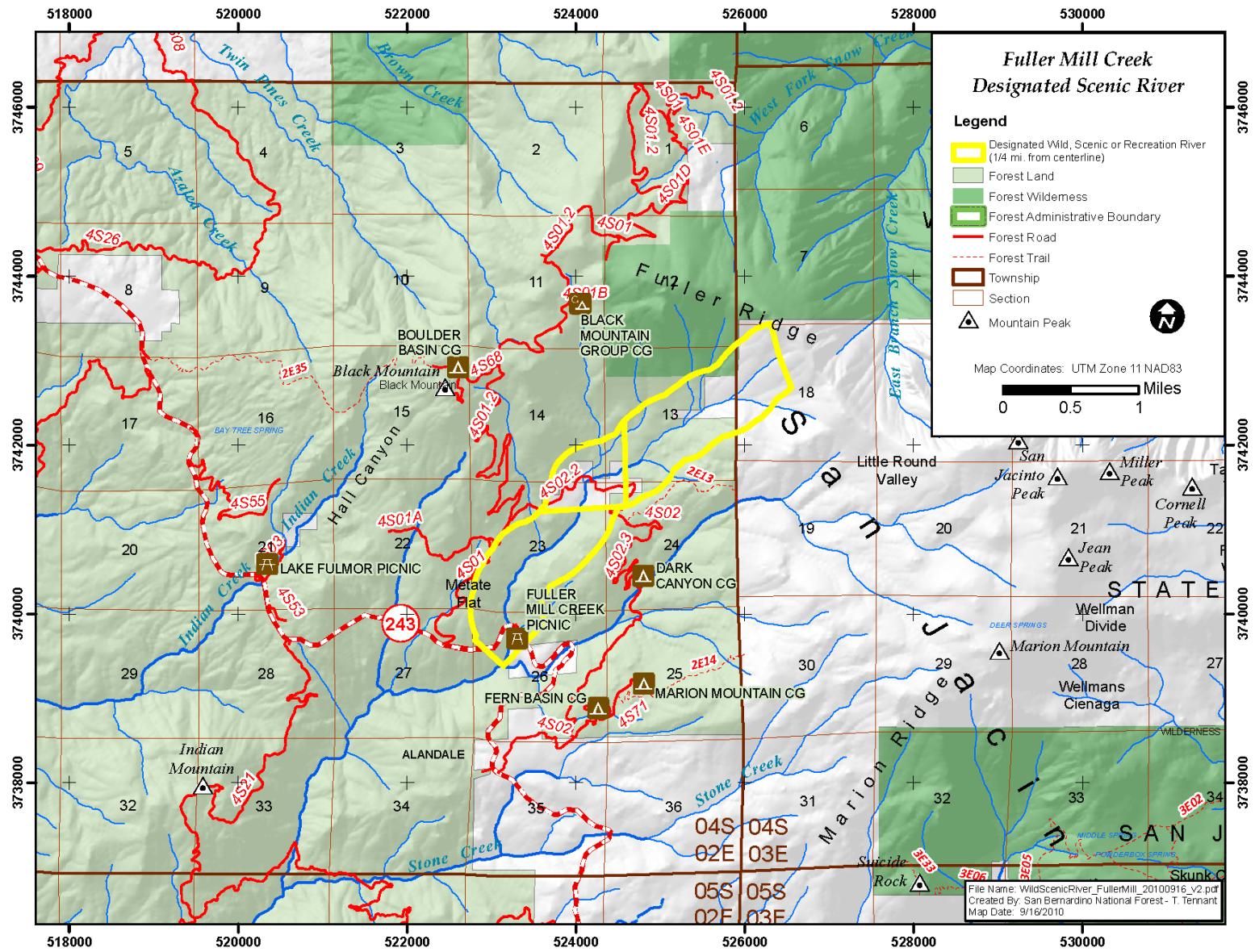


FIGURE 2: FULLER MILL CREEK DESIGNATED SCENIC RIVER

River Values Potentially Affected by Visitor Use

The eligibility study conducted prior to wild and scenic designation determined that Fuller Mill Creek possesses outstandingly remarkable wildlife values. The wildlife value most at risk is the population of mountain yellow-legged frogs, which use the creek for nesting and foraging habitat. This ORV could be impacted by visitor use via trampling, but careful monitoring and management has been implemented in an effort to prevent these impacts at the site (USDA Forest Service, 2017).

Approach to Establish Current Use and Estimate User Capacity

The only notable public access to Fuller Mill Creek exists at the Fuller Mill Creek Picnic Area. The Forest prohibits access to the creek from this picnic area during the primary use season, which limits impacts to wildlife values. However, any expansion of the physical footprint of the picnic area and parking lot would potentially affect the wildlife ORV. The user capacity will therefore be estimated as the maximum number of visitor groups that can be accommodated within the current physical footprint of the site. User capacities based on the physical capacities of recreation facilities have precedent in the Snake River Headwaters CRMP (USDA Forest Service, 2014).

Visitor Use Data Collection Effort

In order to establish current recreation use and collect data necessary to estimate a user capacity for Fuller Mill Creek, a study was conducted in 2018 to collect key information about current use levels and patterns at the Fuller Mill Creek Picnic Area during peak use times. Information collected included picnic area and parking lot accumulation and turnover rates. The study methods and results are presented below.

Methods

Parking lot and picnic area accumulation/turnover information was collected by forest staff on 18 weekend days from June 23, 2018 through September 9, 2018. Sampling occurred during 2 ½ hour time blocks covering either the lunch period (11:00 a.m. to 1:30 p.m.) or the dinner period (3:00 p.m. to 5:30 p.m.). Table 1 shows the sampling schedule for data collection and the number of groups observed during each sampling period.

At 30-minute intervals throughout each 2 ½ hour sampling period, a staff member conducted a walk-through of the picnic area and then the parking lot. Picnic tables and parking spaces were assigned numbers corresponding to lines on the data collection log. The staff member recorded which picnic tables were occupied and whether the table occupants were the same or different from the occupants that were present during the previous walk-through. In a similar manner, the staff member recorded which numbered parking spaces in the parking lot were occupied, the

make and model of each vehicle, the state on the license plate, and whether the vehicles were the same or different from the vehicles that were present during the previous walk-through. The sampling provided data on the number of occupied picnic tables and parked vehicles at half-hour intervals (i.e., picnic table and parking accumulation) as well as data on the length of time picnic tables and parking spaces were occupied by visiting groups (i.e., picnic table and parking turnover). A copy of the data collection log form is provided in Appendix A.

TABLE 1: FULLER MILL CREEK PARKING AND PICNIC AREA DATA COLLECTION SCHEDULE

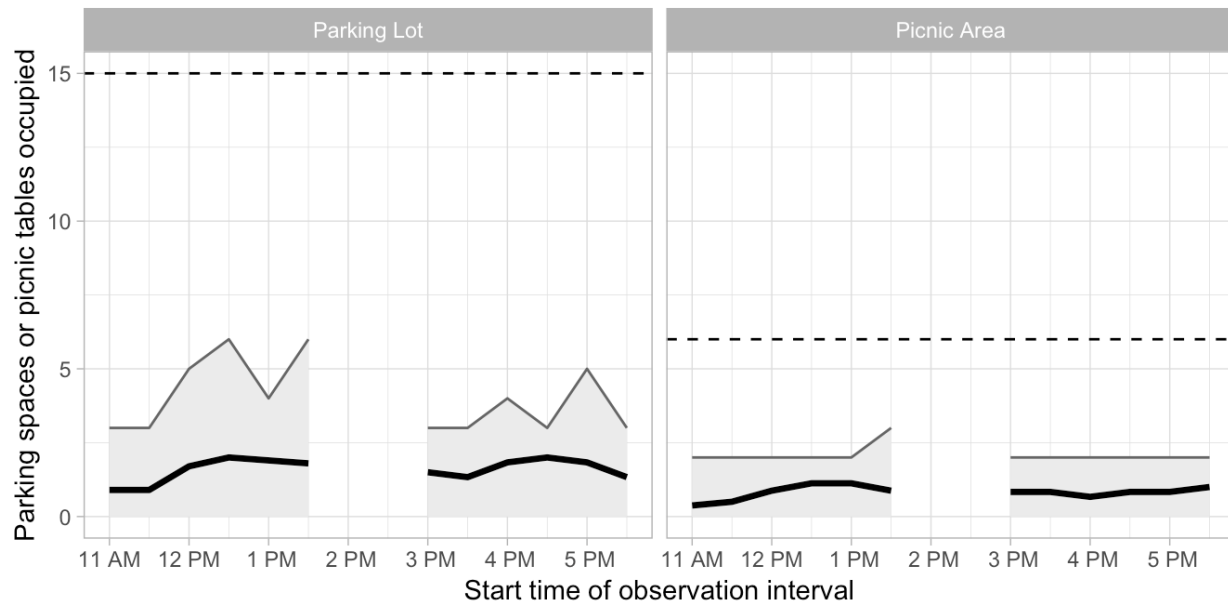
SAMPLING DATE	SAMPLING PERIOD
Saturday, June 23	11:00 a.m.–1:30 p.m.
Sunday, June 24	3:00 p.m.–5:30 p.m.
Sunday, July 1	11:00 a.m.–1:30 p.m.
Saturday, July 7	3:00 p.m.–5:30 p.m.
Saturday, July 14	11:00 a.m.–1:30 p.m.
Sunday, July 15	3:00 p.m.–5:30 p.m.
Saturday, July 21	3:00 p.m.–5:30 p.m.
Sunday, July 22	11:00 a.m.–1:30 p.m.
Saturday, August 4	11:00 a.m.–1:30 p.m.
Saturday, August 11	3:00 p.m.–5:30 p.m.
Sunday, August 12	11:00 a.m.–1:30 p.m.
Saturday, August 18	11:00 a.m.–1:30 p.m.
Sunday, August 19	3:00 p.m.–5:30 p.m.
Sunday, August 26	11:00 a.m.–1:30 p.m.
Saturday, September 1	3:00 p.m.–5:30 p.m.
Sunday, September 2	11:00 a.m.–1:30 p.m.
Saturday, September 8	11:00 a.m.–1:30 p.m.
Sunday, September 9	3:00 p.m.–5:30 p.m.

Accumulation and turnover data were entered into electronic files using two separate Excel spreadsheets by two different data entry technicians. After independent double entry of the accumulation and turnover data was completed, the results were systematically compared to identify all differences between the two versions of the data. A data entry supervisor reviewed any differences, identified the correct values by referencing the original field log sheets, and entered the correct values into the database.

The double-entered, reviewed, and corrected dataset was subjected to additional cleaning and proofing using R statistical software. Data cleaning and proofing included identification and correction of invalid values and replacement of ambiguous responses with missing value codes. R-Studio was used for data analysis and figure generation.

Analysis and Results

Parking and picnic table accumulation data indicate that use at the site is relatively low, with an average of approximately two parking spaces occupied (see the “Parking Lot” panel in Figure 4), and an average of just over one picnic table occupied throughout the sampling periods (see the “Picnic Area” panel in Figure 3). Given that average parking lot occupancy is somewhat higher than average picnic table occupancy, some visitors either do not occupy a picnic table or arrive at the site in multiple vehicles. Both of these findings are supported by field notes from the data collection. The observed use levels were well below the design capacities of the picnic area (six tables) and parking lot (15 spaces). Use of the parking area did not exceed half of the 15-vehicle capacity at any time during the study period, and picnic table accumulation reached half of the six-table capacity in only one instance.



Note: Dashed lines represent site capacity, thick solid lines represent the mean, thin solid lines represent the maximum, and the shaded area represents the range.

FIGURE 3: PARKING LOT AND PICNIC AREA ACCUMULATION AT FULLER MILL CREEK PICNIC AREA

In addition to occupancy rates, parking lot and picnic area observations were used to calculate occupancy durations (Figure 4). The average picnic table occupancy duration was 68 minutes (SD=50.7), while the average parking space occupancy duration was 41 minutes (SD=45.2). Over three-quarters (79%) of all vehicles occupied parking spaces for less than 30 minutes, while over half of all groups (55%) occupied picnic tables for less than 30 minutes.

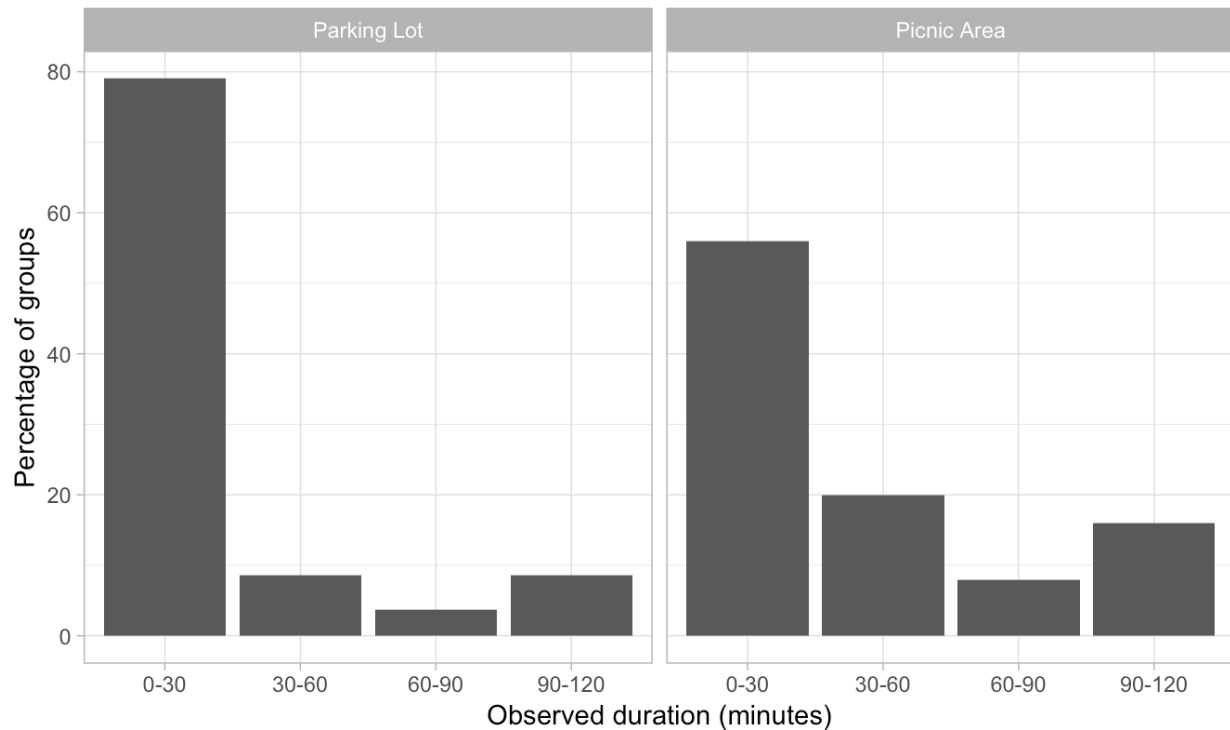


FIGURE 4: DISTRIBUTION OF PICNICKING AND PARKING DURATIONS AT FULLER MILL CREEK PICNIC AREA

Capacity

This section describes the relevant visitor use indicator, threshold, and user capacity for Fuller Mill Creek. As described earlier, the only notable public access to Fuller Mill Creek exists at the Fuller Mill Creek Picnic Area. Any expansion of the physical footprint of this picnic area and parking lot would potentially affect the wildlife ORV. The user capacity is therefore estimated as the maximum number of visitor groups that can be accommodated within the current physical footprint of the site.

Indicator

The indicator for Fuller Mill Creek is the hourly picnic table occupancy at the Fuller Mill Creek Picnic Area during the primary visitor use season (Memorial Day through Labor Day). High occupancy rates could lead to the creation of informal picnicking sites, which could potentially impact the wildlife value of the corridor through habitat destruction. Hourly picnic table occupancy is a good indicator because the measure is specific, objective, reliable and repeatable, related to visitor use, sensitive to visitor use, responsive to management, efficient to measure, and important (Whittaker and Shelby 1992, Whittaker 1992, Manning 2007).

Threshold

The physical footprint of the Fuller Mill Creek Picnic Area cannot be expanded without adversely affecting the wildlife ORV of Fuller Mill Creek. Therefore, the number of people using the Fuller Mill Creek Picnic Area at any one time may not exceed the site capacity of the picnic area (six picnic tables).

User Capacity

The daily user capacity is calculated by multiplying the number of available tables by the number of hours that the site is open and by the average group size, then dividing by the average occupancy duration. The most recent National Visitor Use Monitoring Program estimate of group size for visitors to San Bernardino National Forest (2014) was 2.7 people. The user capacity calculation is therefore as follows:

User capacity = 6 picnic tables x 16 hours (6:00 a.m. to 10:00 p.m.) x 2.7 persons per group / 1.13 hours/group = 229 visitors (or 85 groups) per day.

Note that this user capacity is an estimate and should not be treated as a precise number. With low visitor use at the site, the capacity is far higher than current use, and river values are not threatened. As a result, decisions about capacity calculations would not result in near-term management actions to regulate use levels. However, monitoring will still occur, and more precise numbers will be developed if trends suggest that river values could be threatened.

Monitoring, Triggers, and Management Actions

Although current use levels are relatively low, annual monitoring of visitor use at Fuller Mill Creek is recommended. The monitoring would involve collecting data on picnic table occupancy at the Fuller Mill Creek Picnic Area during a four-hour period (10:00 a.m. to 2:00 p.m.) on approximately 5-10 randomly selected weekend days during the peak use season. Table 2 presents potential triggers and associated management actions to protect against impacts to wildlife values at Fuller Mill Creek.

TABLE 2: FULLER MILL CREEK PICNIC AREA TRIGGERS AND MANAGEMENT ACTIONS

TRIGGERS	MANAGEMENT ACTIONS	RATIONALE FOR MANAGEMENT ACTIONS
<p>Trigger 1. Fuller Mill Creek Picnic Area fills to capacity at some point during at least 50% of monitoring days.</p>	<p>Increase distribution of information about other picnic sites in the area. Increase onsite staffing presence to enforce creek closure area.</p>	<p>To ensure that the wildlife ORV remains protected, the Forest would immediately address early indications of unanticipated increases in picnic table occupancy. More frequent monitoring will allow managers to identify changes in use patterns and take appropriate actions.</p> <p>Management actions such as education and outreach to visitors would help to maintain the level of use within the target condition by providing visitors with information about alternatives in the area and the importance of staying out of the creek closure area.</p>
<p>Trigger 2. Fuller Mill Creek Picnic Area fills to capacity at some point during at least 75% of monitoring days.</p>	<p>Make necessary changes to picnic area access, such as sizing the parking lot to accommodate fewer visitor groups at one time or instituting time limits on parking.</p>	<p>As use increases, it may be necessary to manage use more directly.</p>

2.2 PALM CANYON CREEK

Site Overview

Palm Canyon Creek is free flowing from its headwaters to the national forest boundary, a distance of 13.1 miles. The creek bed in Palm Canyon is almost always dry, with the creek flowing primarily underground for much of the year. A few short reaches have modest seasonal surface flow, creating small oases. Winter and early spring storms bring ephemeral waterfalls. Summer thunderstorms bring flash floods.

Palm Canyon is located in the lower eastern slope of the San Jacinto Mountains. The high desert mountains support peninsular pinyon woodland. Chaparral blankets the hills and Sonoran/Mohave desert vegetation covers the desert floor at lower elevations. The unique presence of the California fan palm (California’s only native palm) gives this canyon its name. Seasonal variations are not readily apparent, except within the riparian corridor when the willows turn golden before dropping their leaves in the fall. The scenery is regionally spectacular, with deep, rugged, rocky canyons, thick riparian vegetation, and palm oases.



One segment of Palm Canyon, 8.1 miles in length, has federal classification as a wild river (Figure 5). It has outstandingly remarkable values for scenery, prehistory and botany. It is also free of impoundments, is inaccessible except by a non-motorized trail, and in a primitive watershed with unpolluted waters (USDA Forest Service 2005). Within the San Bernardino National Forest, the corridor is in a semi-primitive, non-motorized ROS.

Except for the headwaters area, where State Highway 74 intersects the tributaries, no roads exist in Palm Canyon. The primary forms of visitor use include hiking, sightseeing and wildlife watching which occurs on the Palm Canyon Trail (USDA Forest Service 2005). According to forest staff, mountain biking has become the primary use of the Palm Canyon Trail over the last decade.

Palm Canyon received low visitor use at the time of WSR designation and the Forest reports that current use levels are low to moderate. Based on forest staff observations, peak use in Palm Canyon currently occurs from November through May because of more moderate temperatures and an influx of winter/spring residents to the area. Administrative use is limited in the corridor with occasional trail maintenance on the Palm Canyon Trail.

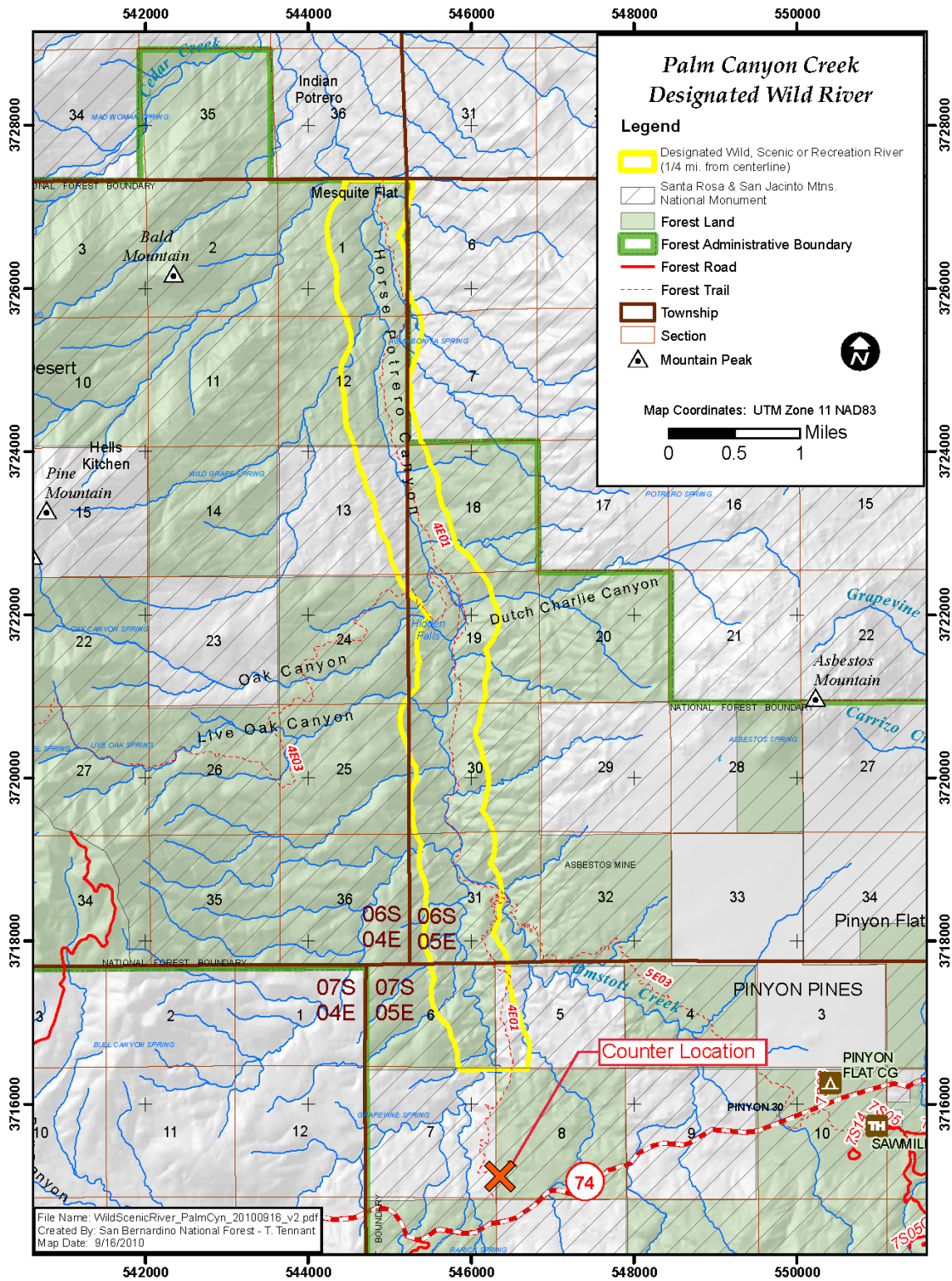


FIGURE 5: PALM CANYON CREEK DESIGNATED WILD RIVER



River Values Potentially Affected by Visitor Use

The eligibility study conducted prior to wild and scenic designation determined that Palm Canyon Creek possesses outstandingly remarkable values for scenery, prehistory and botany. The botany values could be sensitive to impacts from visitor use on the Palm Canyon Trail if higher use levels lead to the creation of social trails.

Approach to Establish Current Use and Estimate User Capacity

The only notable recreation in Palm Canyon occurs on the Palm Canyon Trail. Increased use on Palm Canyon Trail could result in an unacceptable number of intergroup encounters, which could lead to off-trail travel and the creation of social trails. While recreation is not an outstandingly remarkable value for Palm Canyon Creek, intergroup encounters can impact botany values and have been used to establish user capacities at other sites (USDA Forest Service 2018). User capacity was calculated based on the number of intergroup encounters expected on the Palm Canyon Trail, as determined using data from the 2018-2019 visitor use study described below.

Visitor Use Data Collection Effort

In order to establish current recreation use and collect data necessary to establish a user capacity for Palm Canyon Creek, a study of visitor use of the Palm Canyon Trail was conducted during the peak season in 2018-2019. Information collected included automated trail counts of visitor use on the trail and data to calibrate the automated counter.

Methods

Visitor use counts were recorded with a TRAFx infrared trail counter located on the Palm Canyon Trail near State Highway 74 (Figure 5). A location away from the trailhead was chosen in consultation with staff at San Bernardino National Forest to capture visitor use on the trail, but not activity at the trailhead, and to allow easy accessibility for direct trail observations and data downloads. The trail counter was deployed in a location where visitors passing by on the trail would not notice or tamper with it (Figure 6).

The trail counter recorded the time and date that each visitor passed by the counter from October 24, 2018 through January 30, 2019. To calibrate the counter, field staff conducted periodic trail use counts via direct observation at the counter location. These calibration counts were conducted for a total of 27 hours over the course of the study, with observation periods focused primarily on peak-use hours and days. The calibration counts were used to correct and adjust the raw infrared trail counter data, as described below. An example of the calibration log form can be found in Appendix B.

Calibration log data were entered into an electronic database using double data entry, and all electronic data were cleaned and proofed as described in Section 2.1.



FIGURE 6: TRAFX INFRARED TRAIL COUNTER LOCATED AT PALM CANYON TRAIL

Analysis and Results

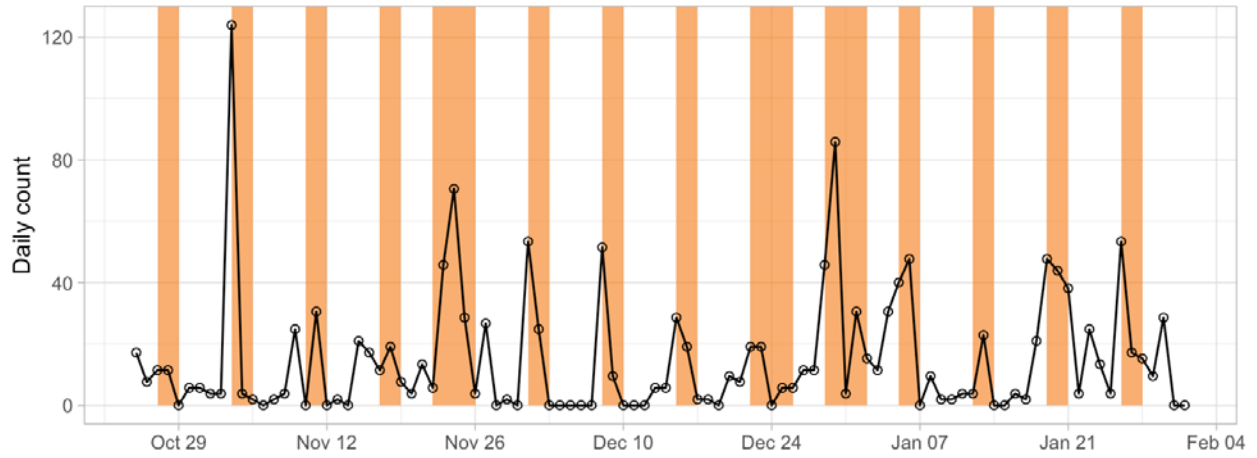
Calibration

A linear regression model was used to develop a correction factor for calibrating the infrared trail counter data. Specifically, the direct observation trail counts were aggregated into 15-minute bins, matched to corresponding 15-minute counts derived from the TRAFx infrared trail counter data, and a linear regression with no intercept term was estimated. Regression results suggest a strong statistical relationship between the direct observation counts and trail use counts recorded by the infrared trail counters. The adjusted R^2 value was 0.62 with a coefficient of 1.91 and p -value < 0.001 . All infrared trail counts reported below were therefore calibrated by multiplying by a factor of 1.91.

Although the analysis focuses on total trail volume (in either direction), the direct observation counts also provide information on travel direction and mode (i.e., hikers vs. mountain bikers). During morning observation periods, 80% of all visitors were mountain bikers (the remainder were hikers) and 87% of all visitors were traveling inbound. During afternoon observation periods, 67% of all visitors were mountain bikers and 67% of all visitors were traveling inbound. Given the small sample sizes (a total of 30 visitors were observed in the morning and 6 visitors were observed in the afternoon), this information on travel direction and mode should be interpreted with caution.

Trail Use Volume and Patterns

Throughout the study period, an average of 15 visitors were counted per day, with weekends/holidays having substantially more use than weekdays (33 visitors per day on weekends/holidays vs. 7 visitors per day on weekdays) (Figure 7). Peak weekend/holiday visitation ranged from 20 to 125 visitors per day. Trail use volumes peaked at approximately 10:00 a.m. on weekends/holidays and at approximately 1:00 p.m. on weekdays (Figure 8).



Note: Orange Bands Indicate Weekends/Holidays.

FIGURE 7: DAILY COUNT OF TRAIL USERS ON THE PALM CANYON TRAIL

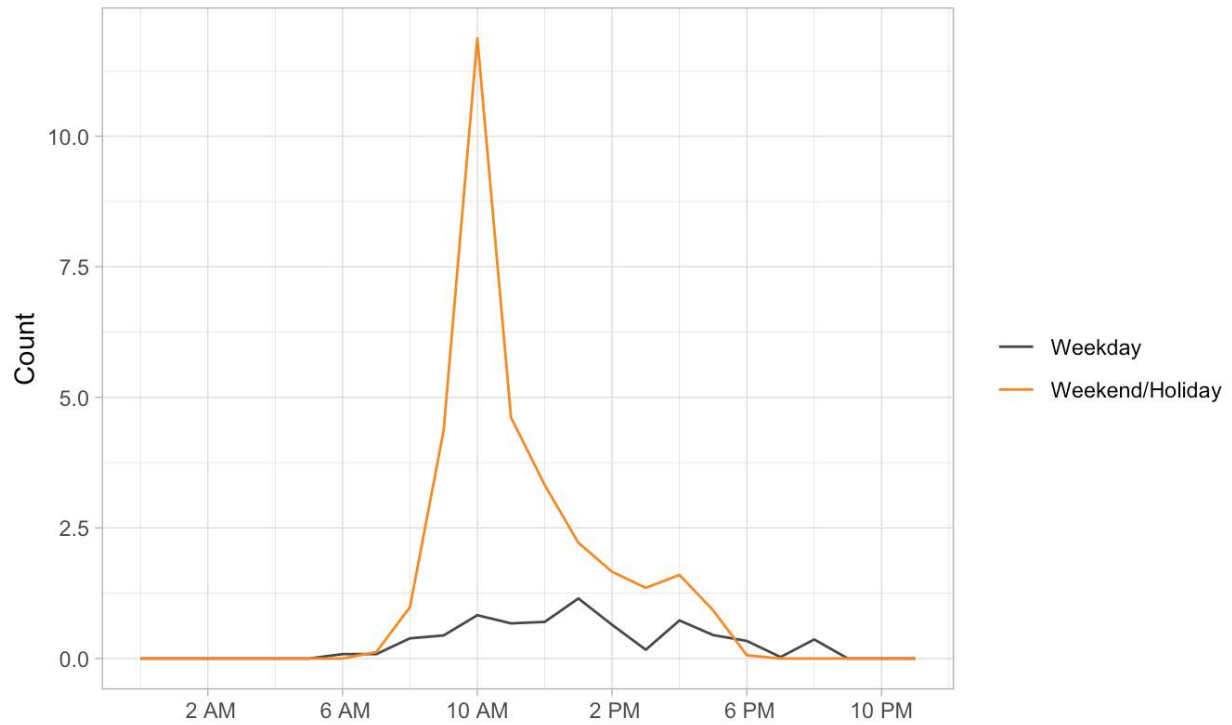


FIGURE 8: MEAN HOURLY COUNT OF TOTAL USE ON THE PALM CANYON TRAIL



Estimate of Intergroup Encounters

The trail counter data were used to calculate the expected number of intergroup encounters per hour on the Palm Canyon Trail. First, the time-stamped count data were used to approximate separate groups of visitors. Specifically, visitors passing the counter within 60 seconds of one another were assumed to be members of the same group. That is, when a time gap of less than 60 seconds was observed, it was assumed that the gap separated members of the same visitor group. When a time gap of 60 seconds or longer was observed, it was assumed that the gap separated members of different visitor groups. Applying this assumption throughout the study period results in 407 separate groups, with an average group size of 3.7 visitors. The average amount of time between when the first member of a group and the last member of the same group passed the counter (i.e., the intragroup interval) was 6.5 seconds, and the average amount of time between groups (i.e., the intergroup interval) was nearly an hour (57.7 minutes).

Second, the number of intergroup encounters was calculated for each group under the assumption that intergroup intervals of 15 minutes or less will lead to an encounter at some point on the trail (as noted earlier, visitors are largely moving in an inbound direction at this location). Overall, visitor groups had an average of 0.50 expected intergroup encounters per hour, with a range of zero to five expected intergroup encounters.

Capacity

This section describes the indicator, threshold, and calculation of user capacity for the corridor. As described earlier, the only notable recreation in Palm Canyon occurs on the Palm Canyon Trail. Increased use on Palm Canyon Trail can result in an unacceptable number of intergroup encounters, which could lead to off-trail travel and the creation of social trails. While recreation is not an outstandingly remarkable value for Palm Canyon Creek, intergroup encounters can impact botany values and have been used to establish user capacities at other sites (USDA Forest Service 2018). User capacity was calculated based on the number of intergroup encounters expected on the Palm Canyon Trail, as determined using data from the 2018-2019 visitor use study described above.

Indicator

The indicator for the Palm Canyon Trail is intergroup encounters per hour. Research has demonstrated that intergroup encounters can cause visitors to temporarily leave a trail corridor to allow other groups to pass (Park et al. 2008). This often leads to social trailing and can eventually impact the botany value of the corridor. The number of intergroup encounters per hour is a good indicator because the measure is specific, objective, reliable and repeatable, related to visitor use, sensitive to visitor use, responsive to management, efficient to measure, and important (Whittaker and Shelby 1992, Whittaker 1992, Manning 2007). The number of

other visitor groups encountered is an almost universally important social indicator among recreational visitors to outdoor recreation settings (Manning 2011).

Threshold

Palm Canyon Creek lies within a semi-primitive, non-motorized ROS class. USDA Forest Service resources specify that a range of 6 to 15 encounters per day is appropriate for this ROS class (USDA Forest Service 1982; USDA Forest Service 2003). Given that the predominant use on the Palm Canyon Trail is a mechanized form of recreation (mountain biking), the upper end of this range (i.e., 15 encounters per day) would be appropriate for the trail. As the segment of the Palm Canyon Trail that is used most frequently by visitors takes approximately one hour to complete, 15 intergroup encounters on the trail is treated in the analysis as being approximately equivalent to 15 intergroup encounters per day. Thus, to ensure that river values and visitor experiences are maintained, the threshold for the Palm Canyon Trail is an average of no more than 15 intergroup encounters per hour across the primary use season.

User Capacity

The estimate of user capacity for Palm Creek is based on the threshold for intergroup encounters on the Palm Canyon Trail. Using data from the trail counter, a linear regression model was estimated to predict the number of intergroup encounters using the number of groups passing the counter each hour. The equation generated by the regression was used to predict the number of visitor groups that would generate the threshold level of 15 intergroup encounters. Regression results suggest there is a strong statistical relationship between the number of groups passing the counter each hour and the number of intergroup encounters. The adjusted R^2 value was 0.83, the coefficient was 0.228, and the p-value was less than 0.001. Using these regression results, the user capacity for the Palm Canyon Trail is 66 groups per hour, as 66 groups per hour would generate an average of 15 intergroup encounters ($15.0 = 66 \times 0.228$). Assuming an eight-hour day, this would be equivalent to a user capacity of 526 groups (or 1,947 visitors) per day. While most use of the trail was observed to be inbound, a small number of groups traveling in an outbound direction would be expected to have a larger number of encounters with inbound visitor groups. Monitoring of actual encounters among groups could be used to adjust this estimate.

Note that this user capacity is an estimate and should not be treated as a precise number. With low visitor use at the site, the capacity is far higher than current use, and river values are not threatened. As a result, decisions about capacity calculations would not result in near-term management actions to regulate use levels. However, monitoring will still occur, and more precise numbers will be developed if trends suggest that river values could be threatened.

Monitoring, Triggers, and Management Actions

Although current use levels are relatively low, annual monitoring of visitor use at Palm Canyon Creek is recommended. The monitoring would involve collecting data on intergroup counters using automated trail counters deployed on the Palm Canyon Trail during the peak season. Forest staff would conduct periodic direct observation counts of use to calibrate the counters. Table 3 presents potential triggers and associated management actions to protect against impacts to botany values at Palm Canyon Creek.

TABLE 3: PALM CANYON TRAIL TRIGGERS AND MANAGEMENT ACTIONS

TRIGGERS	MANAGEMENT ACTIONS	RATIONALE FOR MANAGEMENT ACTIONS
<p>Trigger 1. Average hourly intergroup encounters on the Palm Canyon Trail exceed 5 (~80 visitors per hour)</p>	<p>Collect data on intergroup encounters during the next visitor season to refine the relationship between trail counts and intergroup encounters.</p> <p>Increase distribution of information about other similar resources in the area.</p> <p>Encourage visitors to start their visit earlier or later in the day to avoid peak use times.</p>	<p>To ensure that the botany ORV remains protected, the Forest would immediately address early indications of unanticipated increases in encounter rates. More frequent monitoring will allow managers to identify changes in use patterns and take appropriate actions.</p> <p>Management actions such as education and outreach to visitors would help to maintain the level of use within the target condition by providing visitors with information to avoid high use times</p>
<p>Trigger 2. Average hourly intergroup encounters on the Palm Canyon Trail exceed 10 (~160 visitors per hour)</p>	<p>Make necessary changes to trail access, such as limiting parking to reduce the number of visitors on the trail at one time, institute a mandatory daily reservation system to spread use to off-peak days, or limit use with a mandatory permit system.</p>	<p>As use increases, it may be necessary to institute quotas to manage the amount of use. Changes like limiting parking are less invasive than reservation or permit systems and should be used as a first use limiting step.</p>

2.3 SAN JACINTO RIVER (NORTH FORK)

Site Overview

The North Fork of the San Jacinto River is free flowing from its headwaters to a diversion on private land, a distance of 11.4 miles (Figure 9). The river has intermittent flow for some of its length during the mid to late summer and fall. The landscape surrounding the river is characterized by spectacular views of montane meadow (colorful seasonal wildflowers are

visible from the river). Southern California subalpine forest occurs at the highest elevations. As the elevation decreases, mixed conifer and big cone Douglas fir forest come into view. Oak woodlands, chaparral and grasslands blanket the slopes at the lower elevations. Riparian woodland consisting of white alder, cottonwood and various willow species is present throughout the river corridor. The landscape possesses regionally outstandingly remarkable scenery values.

The North Fork of the San Jacinto River is presently occupied by the federally endangered mountain yellow-legged frog and also serves as historic habitat for this species. A genetically-isolated population of California spotted owl (Forest Service Region 5 Sensitive species) and potential habitat for the federally endangered southwestern willow flycatcher are also present. This area also contains the best remaining southern rubber boa habitat and San Bernardino flying squirrel historic habitat in the San Jacinto Mountains. Thus, the wildlife values in the corridor are recognized as being outstandingly remarkable. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species at risk.

Within San Bernardino National Forest, the North Fork of the San Jacinto River resides in a roaded natural ROS. The only notable visitor use opportunity within the national forest portion of the river corridor is at Dark Canyon Campground (USDA Forest Service 2005), which is open from Memorial Day through Labor Day and has 15 campsites. The annual number of visitors to Dark Canyon Campground from 2013 to 2017 as reported by the Forest is provided in Table 4. Access to the river from the campground is closed to protect the mountain yellow-legged frog. The river received low to moderate use at the time of WSR designation and the Forest reports low to moderate current use levels when the campground is open.

TABLE 4: DARK CANYON CAMPGROUND USAGE FROM 2013-2017

YEAR	NUMBER OF VISITORS
2013	486
2014	760
2015	577
2016	972
2017	1078



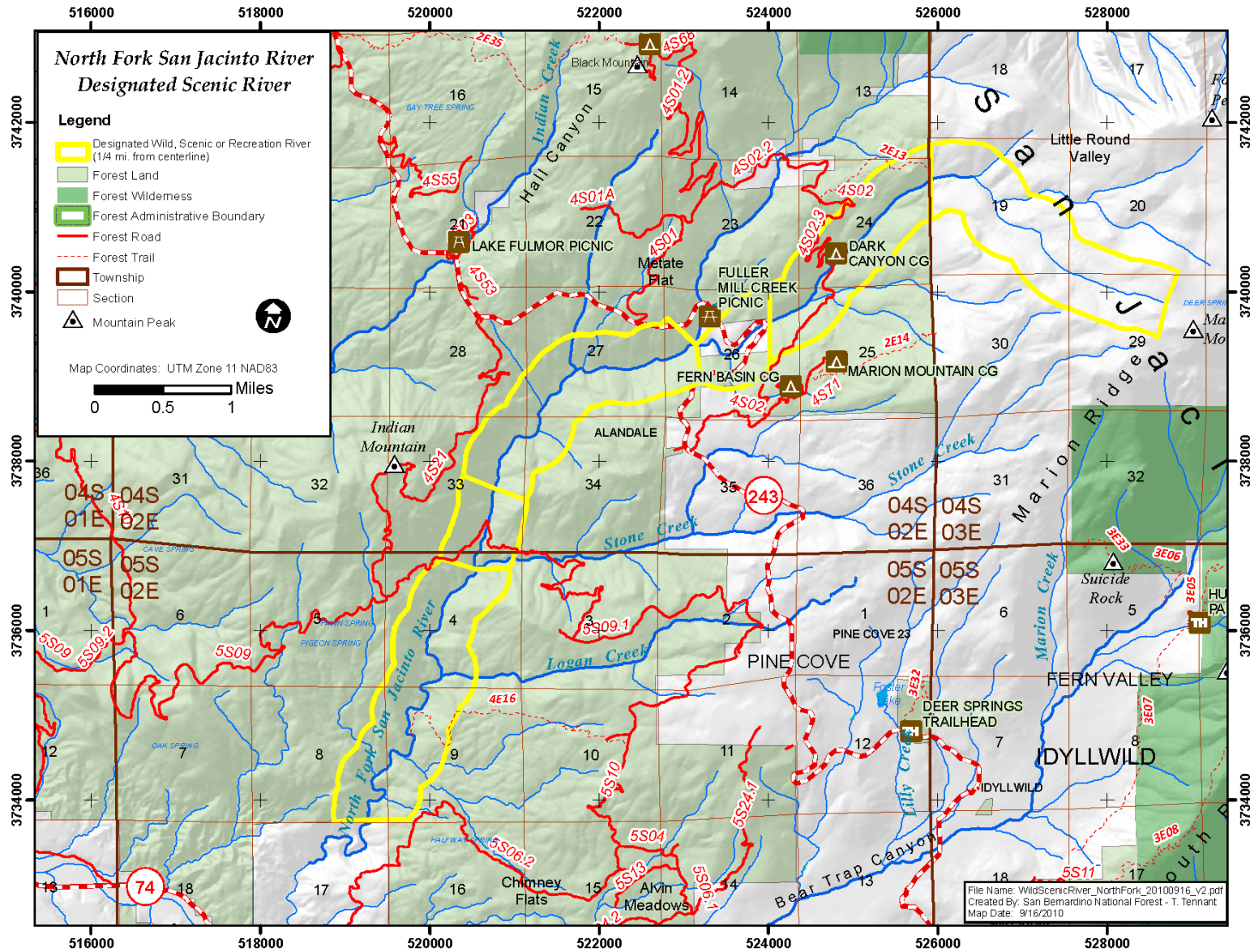


FIGURE 9: NORTH FORK SAN JACINTO SCENIC RIVER

River Values Potentially Affected by Visitor Use

The eligibility study conducted prior to wild and scenic designation determined that the North Fork of the San Jacinto River possesses outstandingly remarkable scenery and wildlife values. Wildlife values in the corridor are sensitive to impact from increasing amounts of visitor use. The wildlife value most at risk is the population of mountain yellow-legged frogs, which use the creek for nesting and foraging habitat. This ORV could be impacted by visitor use via trampling, but careful monitoring and management has been implemented in an effort to prevent these impacts at the site (USDA Forest Service, 2017).

Approach to Establish Current Use and Estimate User Capacity

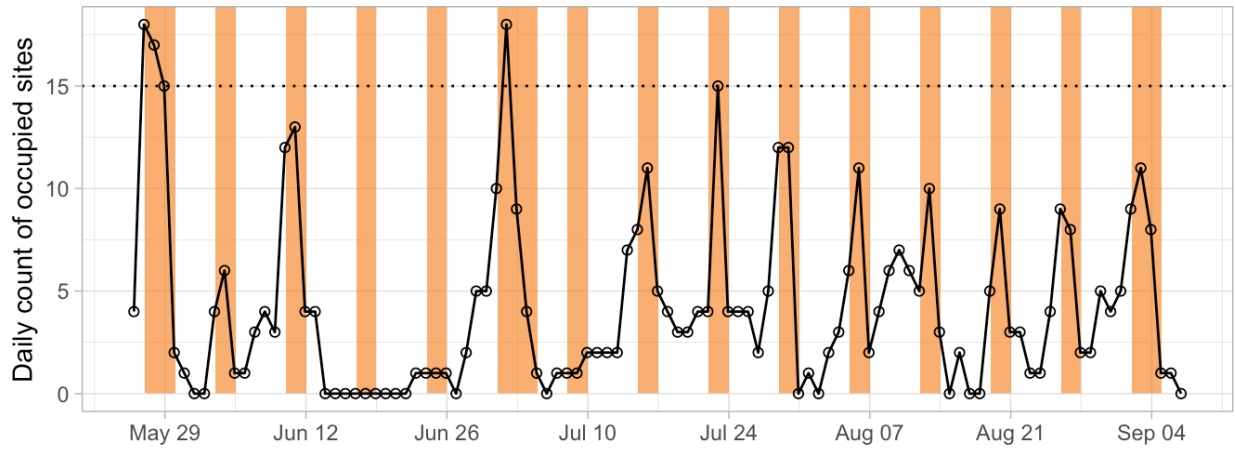
The only notable public access to the North Fork of the San Jacinto River within the San Bernardino National Forest exists at the Dark Canyon Campground. The Forest prohibits access to the creek from the campground during the primary use season, which limits impacts to wildlife values. However, any expansion of the physical footprint of the campground would potentially affect the wildlife ORV. The user capacity will therefore be estimated as the maximum number of visitor groups that can be accommodated within the current physical footprint of the site. User capacities based on the physical capacities of recreation facilities have precedent in the Snake River Headwaters CRMP (USDA Forest Service 2014).

Visitor Use Data

To quantify visitor use and estimate a user capacity for the Dark Canyon Campground, fee collection envelopes from the entire 2017 visitor use season (May 25 through September 6) were analyzed. Data collected on the fee envelopes include visitor group size, dates of campground occupancy, and length of stay. Fee collection envelope data were entered into an electronic database using double data entry, and all electronic data were cleaned and proofed as described in Section 2.1.

On average, 5.2 campsites were occupied at Dark Canyon Campground during the 2017 season (an average of 6.8 sites on weekend days and 4.3 sites on weekdays). The average group size was 3.0, and the average visit length was 1.8 nights.

Figure 10 displays the daily campsite occupancy during the 2017 visitor season. Campsite occupancy peaked each weekend/holiday during the summer season, with particularly pronounced peaks on Memorial Day weekend, 4th of July weekend, and the weekend of July 22. On these weekends, the campground was occupied at or above the design capacity of 15 campsites. Campground occupancy was otherwise below design capacity throughout the rest of the season.



Note: Orange Bands Indicate Weekends/Holidays.

FIGURE 10: DAILY OCCUPANCY OF DARK CANYON CAMPGROUND DURING THE 2017 VISITOR SEASON

Weekday occupancy of the Dark Canyon Campground was substantially lower than weekends/holidays (Figure 11). Daily occupancy rates increased somewhat from June to July and August. The weekend/holiday occupancy rate declined slightly during September. The occupancy rate in May is particularly high because the campground opened for the season on Memorial Day weekend.

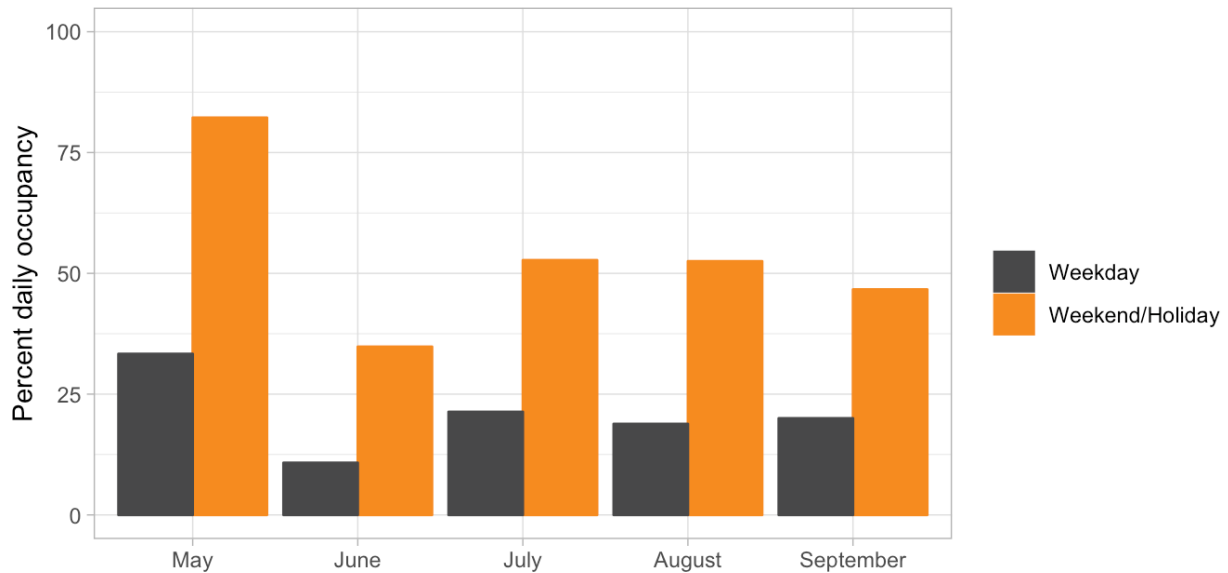


FIGURE 11: PERCENT DAILY OCCUPANCY BY MONTH AT DARK CANYON CAMPGROUND

Capacity

This section describes the relevant visitor use indicator, threshold, and user capacity for the North Fork of the San Jacinto River. As described earlier, the only notable public access to the North Fork of the San Jacinto River within the Forest exists at the Dark Canyon Campground. Any expansion of the physical footprint of this campground would potentially affect the wildlife ORV. The user capacity is therefore estimated as the maximum number of visitor groups that can be accommodated within the current physical footprint of the site.

Indicator

The indicator for the North Fork of the San Jacinto River corridor is the daily occupancy of the Dark Canyon Campground during the visitor use season (Memorial Day through Labor Day). High occupancy rates could lead to the creation of informal camping sites, which could potentially impact the wildlife value of the corridor through habitat destruction. Daily campground occupancy is a good indicator because the measure is specific, objective, reliable and repeatable, related to visitor use, sensitive to visitor use, responsive to management, efficient to measure, and important (Whittaker and Shelby 1992, Whittaker 1992, Manning 2007).

Threshold

The physical footprint of the Dark Canyon Campground cannot be expanded without adversely affecting the wildlife ORV of the North Fork of the San Jacinto River. Therefore, overnight use in the Dark Canyon Campground may not exceed 15 visitor groups (maximum of 8 people per group) per night during the visitor use season (Memorial Day through Labor Day).

User Capacity

The daily user capacity is calculated by multiplying the number of available campsites by the maximum number of persons per site at the campground:

User capacity = 15 sites x 8 visitors per site = 120 persons per day.

Note that this user capacity is an estimate and should not be treated as a precise number. With low visitor use at the site, the capacity is far higher than current use, and river values are not threatened. As a result, decisions about capacity calculations would not result in near-term management actions to regulate use levels. However, monitoring will still occur, and more precise numbers will be developed if trends suggest that river values could be threatened.

Monitoring, Triggers, and Management Actions

Although current use levels are relatively low, annual monitoring of Dark Canyon Campground occupancy is recommended. If the campground is staffed, monitoring would involve tracking nightly campground occupancy. If the campground is not staffed, information from fee envelopes would be analyzed to determine nightly occupancy. Table 5 presents potential

triggers and associated management actions to protect against impacts to wildlife values at the North Fork of the San Jacinto River.

TABLE 5: DARK CANYON CAMPGROUND TRIGGERS AND MANAGEMENT ACTIONS

TRIGGERS	MANAGEMENT ACTIONS	RATIONALE FOR MANAGEMENT ACTIONS
<p>Trigger 1. Dark Canyon Campground fills to capacity on 15% of nights during the use season.</p>	<p>Monitor occupancy during the next visitor season through direct observations.</p> <p>Increase distribution of information about other campgrounds in the area.</p>	<p>To ensure that the wildlife ORV remains protected, the Forest would immediately address early indications of unanticipated increases in campground occupancy. More frequent monitoring will allow managers to identify changes in use patterns and take appropriate actions.</p> <p>Management actions such as education and outreach to visitors would help to maintain the level of use within the target condition by providing visitors with information about alternatives in the area.</p>
<p>Trigger 2. Dark Canyon Campground fills to capacity on 30% of nights during the use season.</p>	<p>Make necessary changes to campground access, such as instituting a mandatory reservation system to make sure campground occupancy does not exceed capacity.</p>	<p>As use increases, a reservation system may discourage camping in informal sites.</p>

2.4 BAUTISTA CREEK

Site Overview

Bautista Creek is located between the San Jacinto and Cahuilla Mountains (Figure 12) and is characterized by moderately sloping canyons and rounded ridges. Green-gray chaparral, desert scrub and riparian vegetation are the dominant vegetation. Flow in the creek itself is often intermittent and seasonal variations are slight. The entire length of Bautista Creek, 13.4 miles, is federally classified as a recreational river. The entire creek is readily accessible by road or trail, has some development on the state lands, and has less than pristine water quality.

The Forest does not have extensive survey information on file for Bautista Creek, which is mostly an ephemeral stream. Bautista Creek is home to the arroyo toad, nesting occurrences of the southwestern willow flycatcher, and the San Bernardino kangaroo rat, all federally

endangered wildlife species. The U.S. Fish and Wildlife Service designated this area as critical habitat for the Quino checkerspot butterfly, a federally endangered insect. Forest Service Region 5 Sensitive species present include Southern California legless lizard, three-lined boa, two-striped garter snake, and the San Diego ringneck snake. Other species that occur in this area include the San Diego horned lizard, purple martin, Wilson's warbler, yellow warbler, yellow-breast chat, Swainson's thrush, and mountain lion. The greenest tiger beetle, a rare invertebrate was collected in the 1970s along the creek and may still occur. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species at risk.

Bautista Creek received low use at the time of its WSR designation. No fishing or boating opportunities are present. Sightseeing and wildlife viewing opportunities have not been significantly developed. Bautista Canyon is a major seasonal quail and deer hunting area with its remoteness providing shelter for game species. Almost all travel in the creek corridor is motorized, taking place on the Bautista Canyon Road, a dirt/gravel surfaced road that parallels the creek. Much of this travel consists of local commercial vehicles and commuter traffic from Anza to Hemet. Three trails which cross Bautista Creek are the primary points of user interaction with the creek. The Hixon-Bautista Trail begins at the Bautista Canyon Road and immediately leads upslope to Red Mountain, five miles southwest. The Alessandro Trail begins at Bautista Canyon Road and ends at the junction of forest route 6S22, a distance of 2.7 miles. Finally, the Cottonwood Truck Trail is a locally popular OHV route and is a heavily used area for recreational shooting. It begins at Bautista Road and ends at the junction of forest route 6S18, a distance of 3.5 miles. The Forest currently reports low levels of use on all three trails (USDA Forest Service 2005).



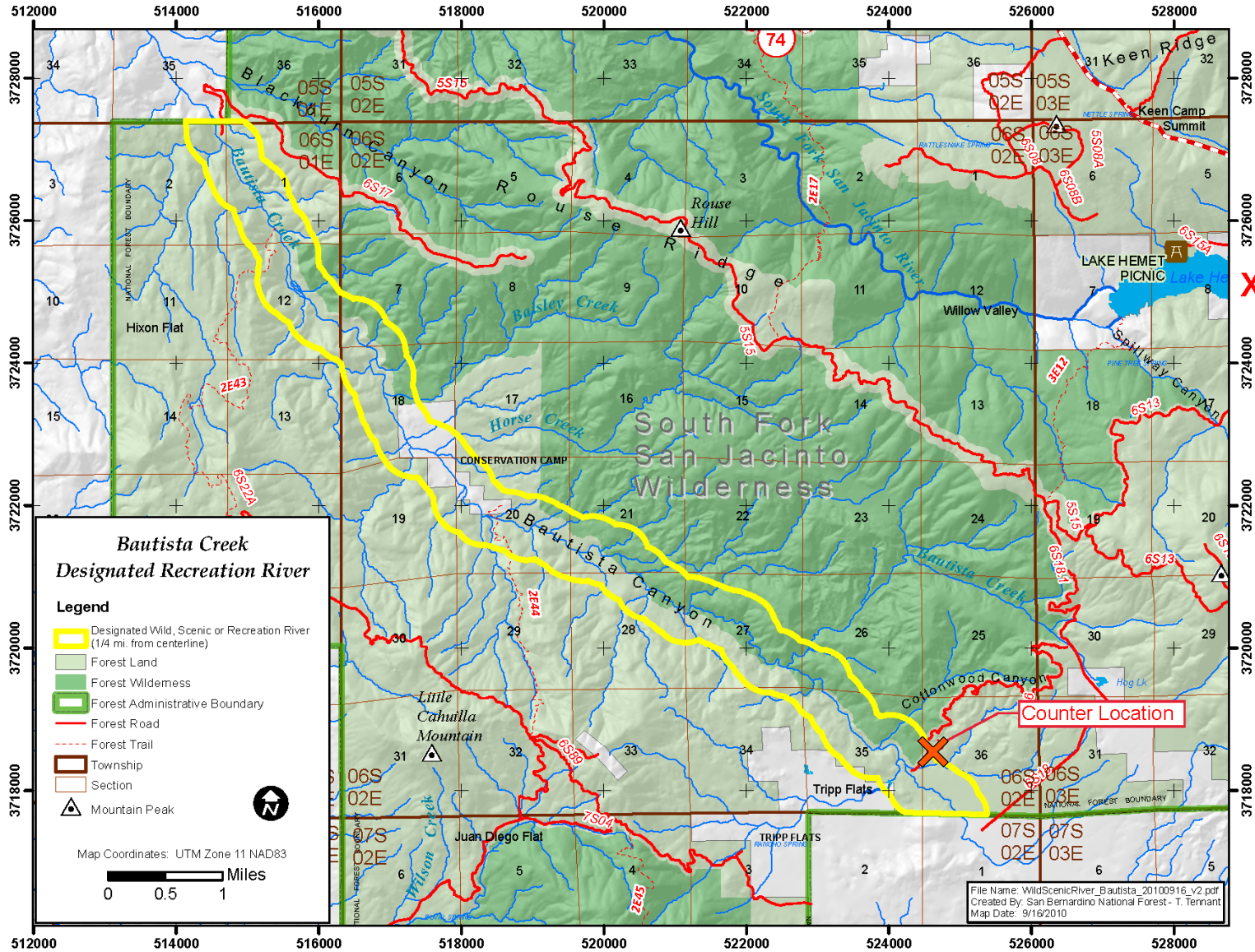


FIGURE 12: BAUTISTA CREEK RECREATION RIVER CORRIDOR

River Values Potentially Affected by Visitor Use

The eligibility study conducted prior to wild and scenic designation determined that Bautista Creek possesses outstandingly remarkable values for wildlife, botany, prehistory, and history. The wildlife and botany values of Bautista Creek could be sensitive to impacts from visitor use on the Cottonwood Truck Trail if higher use levels on the trail lead to the creation of social trails.

Approach to Establish Current Use and Estimate User Capacity

Increased use on the Cottonwood Truck Trail could result in an unacceptable number of intergroup encounters, which could lead to off-trail travel and the creation of social trails. While recreation is not an outstandingly remarkable value for Bautista Creek, intergroup encounters can impact wildlife and botany values and have been used to establish user capacities at other sites (USDA Forest Service 2018). User capacity was calculated based on the number of intergroup encounters expected on the Cottonwood Truck Trail, as determined using data from the 2018-2019 visitor use study described below.

Visitor Use Data Collection Effort

In order to establish current recreation use and collect data necessary to establish a user capacity for Bautista Creek, a study of visitor use of the Cottonwood Truck Trail was conducted during the peak season in 2018-2019. Information collected included automated trail counts of visitor use on the trail and data to calibrate the automated counter.

Methods

Visitor use counts were recorded with a TRAFx infrared trail counter located on the Cottonwood Truck Trail (Figure 12). A location away from the trailhead was chosen in consultation with staff at San Bernardino National Forest to capture visitor use on the trail, but not activity at the trailhead, and to allow easy accessibility for direct trail observations and data downloads. The trail counter was deployed in a location where visitors passing by on the trail would not notice or tamper with it (Figure 13).

The trail counter recorded the time and date that each visitor/vehicle passed by the counter from October 24, 2018 through January 30, 2019.¹ To calibrate the counter, field staff conducted periodic trail use counts via direct observation at the counter location. These calibration counts were conducted for a total of 12 hours over the course of the study, with observation periods focused primarily on peak-use hours and days. The calibration counts were used to correct and adjust the raw infrared trail counter data, as described below. An example of the calibration log form can be found in Appendix C.

¹ The counter malfunctioned for approximately 24-hours and data were not recorded from the morning of November 17 through the morning of November 18, 2018.

Calibration log data were entered into an electronic database using double data entry, and all electronic data were cleaned and proofed as described in Section 2.1.



FIGURE 13: TRAFX INFRARED TRAIL COUNTER LOCATED AT THE COTTONWOOD TRUCK TRAIL

Analysis and Results

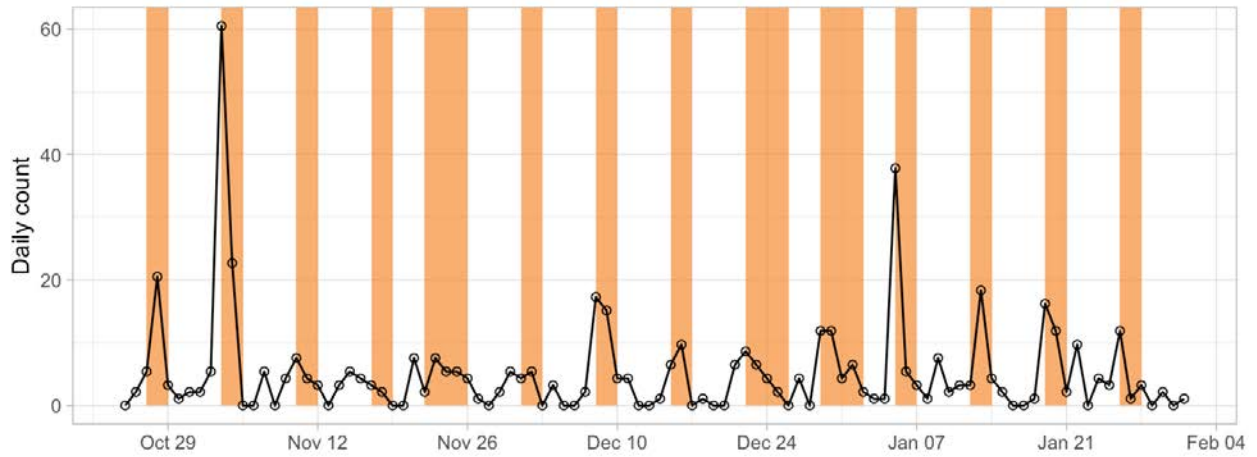
Calibration

A linear regression model was used to develop a correction factor for calibrating the infrared trail counter data. Specifically, the direct observation trail counts were aggregated into 15-minute bins, matched to corresponding 15-minute counts derived from the TRAFx infrared trail counter data, and a linear regression with no intercept term was estimated. Regression results suggest a strong statistical relationship between the direct observation counts and trail use counts recorded by the infrared trail counters. The adjusted R^2 value was 0.76 with a coefficient of 1.08 and p -value < 0.001 . All infrared trail counts reported below were therefore calibrated by multiplying by a factor of 1.08.

Although the analysis focuses on total trail volume (in either direction), the direct observation counts also provide information on travel direction and mode. All observed visitors were using off-highway vehicles (OHV) to access the trail, and 55% of these visitors were traveling inbound. Given the small sample sizes (a total of 20 visitors were observed, 2 in the morning and 18 in the afternoon), this information on travel direction and mode should be interpreted with caution.

Daily Trail Use Volume and Patterns

Throughout the study period, an average of 5 visitors were counted per day, with weekends/holidays having substantially more use than weekdays (11 visitors per day on weekends/holidays vs. 2 visitors per day on weekdays) (Figure 14). Peak weekend/holiday visitation ranged from fewer than 10 to approximately 60 visitors per day. Trail use volumes peaked at approximately 2:00 p.m. on weekends/holidays and at approximately 1:00 p.m. on weekdays (Figure 15).



Note: Orange Bands Indicate Weekends/Holidays.

FIGURE 14: DAILY COUNT OF COTTONWOOD TRUCK TRAIL USERS

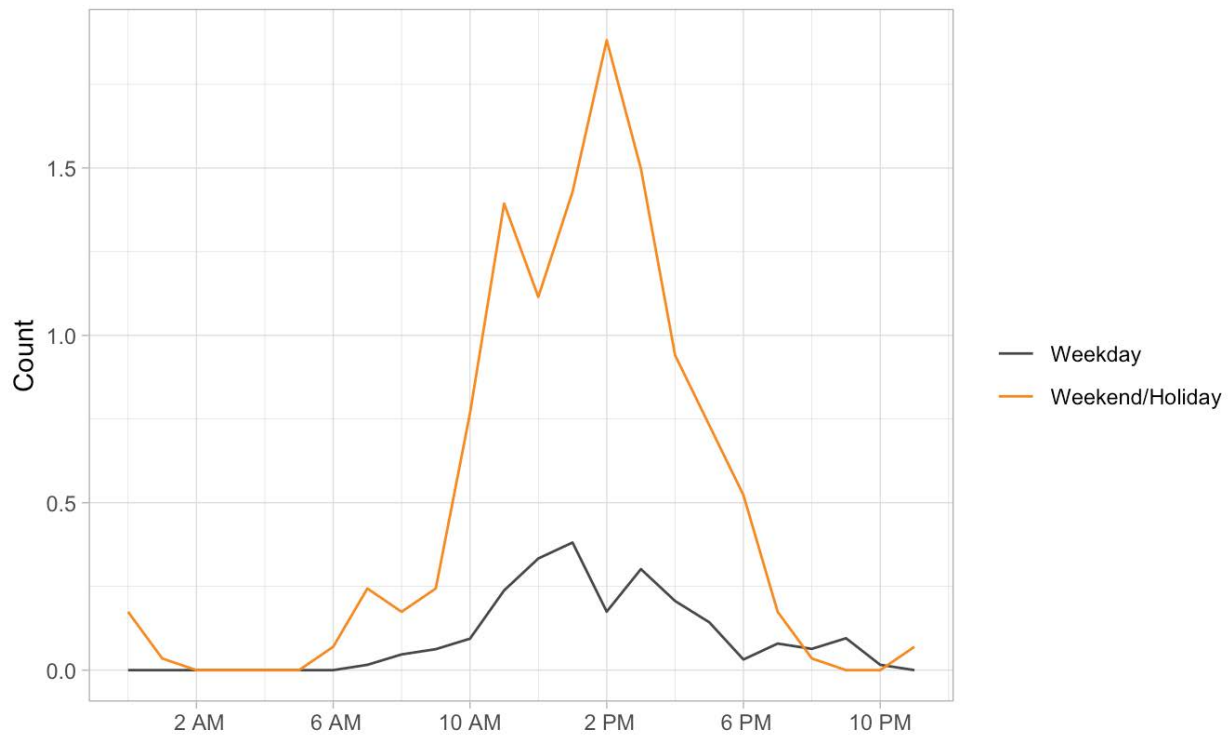


FIGURE 15: MEAN HOURLY COUNT OF TOTAL USE ON THE COTTONWOOD TRUCK TRAIL

Estimate of Intergroup Encounters

The trail counter data were used to calculate the expected number of intergroup encounters per hour on the Cottonwood Truck Trail. First, the time-stamped count data were used to approximate separate groups of visitors. Specifically, visitors passing the counter within 120 seconds of one another were assumed to be members of the same group.² That is, when a time gap of less than 120 seconds was observed, it was assumed that the gap separated members of the same visitor group. When a time gap of 120 seconds or longer was observed, it was assumed that the gap separated members of different visitor groups. Applying this assumption throughout the study period results in the identification of 316 separate groups, with an average group size of 1.6 visitors. The average amount of time between when the first member of a group and the last member of the same group passed the counter (i.e., the intragroup interval) was 10.4 seconds, and the average amount of time between groups (i.e., the intergroup interval) was 88.3 minutes.

Second, the number of intergroup encounters was calculated for each group under the assumption that each group would, on average, encounter $\frac{1}{4}$ of all other groups that passed the counter within 60 minutes of them. This assumption is valid if approximately half of all traffic on the trail is inbound, vehicles on the trail travel at approximately the same speed (i.e., they don't overtake one another), and the typical travel time on the trail is approximately 30 minutes. Overall, visitor groups had an average of 0.44 expected intergroup encounters per hour, with a range of zero to nearly three expected intergroup encounters.

Capacity

This section describes the indicator, threshold, and calculation of user capacity for the corridor. As described earlier, increased use on the Cottonwood Truck Trail could result in an unacceptable number of intergroup encounters, which could lead to off-trail travel and the creation of social trails. While recreation is not an outstandingly remarkable value for Bautista Creek, intergroup encounters can impact wildlife and botany values and have been used to establish user capacities at other sites (USDA Forest Service 2018). User capacity was calculated based on the number of intergroup encounters expected on the Cottonwood Truck Trail, as determined using data from the 2018-2019 visitor use study described above.

Indicator

The indicator for the Cottonwood Truck Trail is intergroup encounters per hour. Research has demonstrated that intergroup encounters can cause visitors to temporarily leave the trail corridor to allow other groups to pass, or to create space between groups (Park et al. 2008). This could lead to visitor-created pull-offs and can eventually impact the botany and wildlife values of the

² The use of a 120-second gap to define separate visitor groups on the Cottonwood Truck Trail led to an improved statistical fit when compared with the 60-second gap that was used for Palm Canyon.

corridor. The number of intergroup encounters per hour is a good indicator because the measure is specific, objective, reliable and repeatable, related to visitor use, sensitive to visitor use, responsive to management, efficient to measure, and important (Whittaker and Shelby 1992, Whittaker 1992, Manning 2007). The number of other visitor groups encountered is an almost universally important social indicator among recreational visitors to outdoor recreation settings (Manning 2011).

Threshold

Bautista Creek lies within a roaded, natural ROS class. USDA Forest Service resources indicate that a capacity of 30 or more intergroup encounters per day during the use season are appropriate in this ROS class (USDA Forest Service 2003, USDA Forest Service 1982). As the Cottonwood Truck Trail takes approximately one hour to complete (assuming visitors travel out and back on the trail), 30 intergroup encounters on the trail is treated in the analysis as being approximately equivalent to 30 intergroup encounters per day. Thus, to ensure that river values and visitor experiences are maintained, the threshold for the Cottonwood Truck Trail is an average of no more than 30 intergroup encounters per hour across the primary use season.

User Capacity

The estimate of user capacity for Bautista Creek is based on the threshold for intergroup encounters on the Cottonwood Truck Trail. Using data from the trail counter, a linear regression model was estimated to predict the number of intergroup encounters per hour using the number of vehicles passing the counter each hour. The equation generated by the regression was used to predict the number of vehicles that would generate the threshold level of 30 intergroup encounters. Regression results suggest there is a strong statistical relationship between the number of vehicles passing the counter each hour and the number of encounters. The adjusted R^2 value was 0.86, the coefficient was 0.139, and the p-value was less than 0.001. Using these regression results, the user capacity for the Cottonwood Truck Trail is 216 vehicles (or 135 groups) per hour, as 216 vehicles per hour would generate an average of 30 intergroup encounters ($30.0 = 216 \times 0.139$). Assuming an eight-hour day, this would be equivalent to a user capacity of 1,727 vehicles (or 1,079 groups) per day. Monitoring of actual encounters among groups could be used to adjust this estimate.

Note that this user capacity is an estimate and should not be treated as a precise number. With low visitor use at the site, the capacity is far higher than current use, and river values are not threatened. As a result, decisions about capacity calculations would not result in near-term management actions to regulate use levels. However, monitoring will still occur, and more precise numbers will be developed if trends suggest that river values could be threatened.

Monitoring, Triggers, and Management Actions

Although current use levels are relatively low, annual monitoring of visitor use of the Cottonwood Truck Trail is recommended. The monitoring would involve collecting data on intergroup counters using automated trail counters deployed on the Cottonwood Truck Trail during the peak season. Forest staff would conduct periodic direct observation counts of use to calibrate the counters. Table 6 presents potential triggers and associated management actions to protect against impacts to botany and wildlife values at Bautista Creek.

TABLE 6: COTTONWOOD TRUCK TRAIL TRIGGERS AND MANAGEMENT ACTIONS

TRIGGERS	MANAGEMENT ACTIONS	RATIONALE FOR MANAGEMENT ACTIONS
<p>Trigger 1. Average hourly intergroup encounters on the Cottonwood Truck Trail exceed 10 (~72 visitors/vehicles per hour)</p>	<p>Collect data on intergroup encounters during the next visitor season to refine the relationship between trail counts and intergroup encounters.</p> <p>Increase distribution of information about other similar resources in the area.</p> <p>Encourage visitors to start their visit earlier or later in the day to avoid peak use times.</p>	<p>To ensure that the wildlife and botany ORV remain protected, the Forest would immediately address early indications of unanticipated increases in encounter rates. More frequent monitoring will allow managers to identify changes in use patterns and take appropriate actions. Management actions such as education and outreach to visitors would help to maintain the level of use within the target condition by providing visitors with information to avoid high use times.</p>
<p>Trigger 2. Average hourly intergroup encounters on the Cottonwood Truck Trail exceed 20 (~144 visitors/vehicles per hour)</p>	<p>Make necessary changes to trail access, such as instituting a mandatory daily reservation system to spread use over all days, or limit use with a mandatory permit system.</p>	<p>As use increases, it may be necessary to manage use more directly by instituting quotas on the amount of use to ensure that corridor values are maintained.</p>



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APPENDIX A. PICNIC AREA AND PARKING LOT ACCUMULATION AND TURNOVER FORM

Parking Lot and Picnic Table Turnover (License Plate and Picnic Table Occupancy Recording) - Fuller Mill Creek Picnic Area

Initials _____ Date _____ Weather Sunny / Partly Sunny / Cloudy / Overcast / Precipitation No. / Yes. _____

Type	Code	Start Time		End Time		Special Event		Weather		No. / Yes.		Sunny / Partly Sunny / Cloudy / Overcast / Precipitation	
		Table Occupied?	License #	Table Occupied?	License #	Table Occupied?	License #	Table Occupied?	License #	Table Occupied?	License #	Table Occupied?	License #
Picnic Tables	P-1												
	P-2												
	P-3												
	P-4												
	P-5												
	P-6												
Main Parking Area	E												
	E												
	MP-1												
	MP-2												
	MP-3												
	MP-4												
	MP-5												
	MP-6												
	MP-7												
	MP-8												
	MP-9												
	MP-10												
	MP-11												
	MP-12												
	MP-13												
MP-14													
MP-15													
Extra	E												
Extra	E												

→ = Same group/car as previous hour
 1 = Group is occupying a picnic table
 Ø = No group at picnic table/No car parked in space
 Extra = Possible spillover parking spaces

APPENDIX B. TRAFX TRAIL COUNTER CALIBRATION FORM—PALM CANYON TRAIL

SABE – Palm Canyon Counter Calibration Count Log

Date: _____ Start Time: _____ End Time: _____

Special Event: No / Yes: _____ Initials: _____

Weather: Sunny / Overcast / Rain / Storm

Forest: SABE

Study Area: Palm Canyon

Counter: _____

Start	End	Arrivals			Departures			Comments
		Biker	Hiker	Horse	Biker	Hiker	Horse	
:00:00	:14:59							
:15:00	:29:59							
:30:00	:44:59							
:45:00	:59:59							
:00:00	:14:59							
:15:00	:29:59							
:30:00	:44:59							
:45:00	:59:59							
:00:00	:14:59							
:15:00	:29:59							
:30:00	:44:59							
:45:00	:59:59							
:00:00	:14:59							
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:15:00	:29:59							
:30:00	:44:59							
:45:00	:59:59							
:00:00	:14:59							
:15:00	:29:59							
:30:00	:44:59							
:45:00	:59:59							

Make sure to note ZERO arrivals/departures using a "0" – do not leave any cells blank.
 If a count period was missed mark using a "-" and write in the Comments section why the count was missed (e.g., you took shelter from a thunderstorm).
 At the end of the day, draw a line through any count periods that are not used during calibration.

APPENDIX C. TRAFX TRAIL COUNTER CALIBRATION FORM—COTTONWOOD TRUCK TRAIL

SABE – Bautista Canyon Counter Calibration Count Log

Date: _____ Start Time: _____ End Time: _____

Special Event: No / Yes: _____ Initials: _____

Weather: Sunny / Overcast / Rain / Storm

Forest: SABE

Study Area: Bautista Canyon

Counter: _____

Start	End	Arrivals				Departures				Comments
		OHV	Hiker	Bike	Horse	OHV	Hiker	Bike	Horse	
:00:00	:14:59									
:15:00	:29:59									
:30:00	:44:59									
:45:00	:59:59									
:00:00	:14:59									
:15:00	:29:59									
:30:00	:44:59									
:45:00	:59:59									
:00:00	:14:59									
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:30:00	:44:59									
:45:00	:59:59									
:00:00	:14:59									
:15:00	:29:59									
:30:00	:44:59									
:45:00	:59:59									

Make sure to note ZERO arrivals/departures using a "0" – do not leave any cells blank.
 If a count period was missed mark using a "-" and write in the Comments section why the count was missed (e.g., you took shelter from a thunderstorm).
 At the end of the day, draw a line through any count periods that are not used during calibration.



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Appendix B: Resource Assessment

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Resource Assessment

Introduction

Wild and scenic river planning for the San Bernardino National Forest began during the development of their land management plan. An interdisciplinary team evaluated rivers for study on the Forest and assessed which resources within the eligible river corridors qualified as an outstandingly remarkable value. The purpose of the assessment was to identify river-related outstandingly remarkable values, which help guide the focus of a river management plan. River-related values could also be identified as “significant” which means they contribute substantially to the rivers character and may need varying levels of protection and consideration during the river management planning process. This assessment was revisited and completed in October/November 2017 in an interdisciplinary workshop held at the San Jacinto Ranger District to support development of this comprehensive river management plan.

Resource Assessment

The resource assessment is important to guide the preparation of a comprehensive river management plan for the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek and Bautista Creek Wild and Scenic Rivers to protect river values. The assessment must take into consideration all features which are directly river-related, and it helps provide a holistic approach to investigating the relationship of river features. There are three components to the resource assessment process: 1) the identification of outstandingly remarkable values, 2) the identification and determination of significance levels for river-related values which contribute to its overall character, and 3) the confirmation of outstandingly remarkable values set forth for the river in the legislative history of its designation.

Outstandingly Remarkable Values

The term “outstandingly remarkable value” has never been precisely defined, but criteria have been described in “The Wild and Scenic River Study Process” which is a technical report of the Interagency Wild and Scenic Rivers Coordinating Council (1999) and Forest Service Handbook 1909.12 (82.73a) (USDA Forest Service 2015). The resource assessment is based on the professional judgment of the interdisciplinary team and documents objective, scientific, analysis based on reviews of available literature, consultation with experts, and field work.

Outstandingly remarkable values are commonly such things as scenery, recreation, geology, fisheries, wildlife, prehistory, history, hydrology, or botany. To be considered river related, a value should be located in the river or its immediate environment (generally within ¼ mile on either side), contribute substantially to the functioning of the river ecosystem, owe its existence to the presence of the river, or some combination of these things.

River-related values must be rated for level of significance. Levels include:

- Outstandingly remarkable — Unique, rare, or exemplary feature that is significant at a comparative regional or national scale.
- Significant (not outstandingly remarkable) — Values which still contribute substantially to the river’s character. These values may still need varying levels of protection and consideration during river planning process.

- Insufficient information — If the level of existing data is insufficient to make a determination of significance, then it must be identified what is needed to get sufficient data. The value needs to be protected as outstandingly remarkable until more information is gathered.

The following outstandingly remarkable values were identified for the North Fork San Jacinto River, Fuller Mill Creek, Palm Canyon Creek, and Bautista Creek:

- Scenery
- Wildlife
- Botany
- Heritage Resources (Historic)
- Heritage Resources (Cultural)

Findings and Discussion of Values

Discussion of values, criteria, findings, and rationales for conclusion specific to each of the four wild and scenic rivers in San Bernardino National Forest are detailed below (USDA Forest Service, 2005f).

North Fork San Jacinto River

1. Scenery

Criteria for an Outstandingly Remarkable Value

The landscape element forms of landform, vegetation, water, color, and related factors result in notable or exemplary visual features, attractions, or both. When analyzing scenic values, additional factors—such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed—may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

Finding

This landscape is a remarkable life-zone journey of the San Jacinto Mountains and possesses regionally outstandingly remarkable visual values.

Discussion of Values – Rationale for Conclusion

The North Fork San Jacinto River is located in the San Jacinto Mountains and characterized by steep, rugged, river cut canyons. Spectacular views of montane meadow (with colorful seasonal wildflowers are visible from the river) and southern California subalpine forest occur at the highest elevations. As the elevation decreases, mixed conifer and bigcone Douglas fir forest come into view. Oak woodlands, chaparral, and grasslands blanket the slopes at the lower elevations. Riparian woodland consisting of white alder, cottonwood, and various willow species is present throughout the river corridor. The creek itself is sometimes intermittent. The Scenic Integrity Objective is a mixture of High and Moderate. Some of the landscape here has been influenced and altered by man, with roads, cabins, and recreation infrastructure present. Seasonal variations are very apparent; especially in the fall as the wetland species turn golden before shedding their leaves. The scenery here is diverse, ranging from dramatic, high-elevation rocky alpine to middle-elevation mixed conifer and oak woodland to lower-elevation chaparral and grassland, all with riparian interlaced throughout.

2. Recreation

Criteria for an Outstandingly Remarkable Value

Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout the region or are unique or rare within the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing, hunting, and boating. Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region. The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.

Finding

The creek corridor possesses no outstandingly remarkable recreation values.

Criteria for an Outstandingly Remarkable Value

The North Fork San Jacinto River is located in a Roaded Natural Recreation Opportunity Spectrum (ROS). Within the Mt. San Jacinto State Park, the river crosses the Pacific Crest Trail (PCT), the Marion Mountain Trail (2E14), and the Seven Pines Trail (2E13). It also passes by the Little Round Valley wilderness campsite. The river next passes the Dark Canyon Campground within the Forest and passes within ¼ mile of the Fuller Mill Creek Picnic Area. From that point, no other formal recreation opportunities exist except for access to the Webster Trail (2E16) in Section 9. Fishing (but no boating) opportunities are present. Informal sightseeing and wildlife viewing opportunities are present. Almost all of the recreation use along Fuller Mill Creek is local in origin, mostly from the Inland Empire and Idyllwild communities, not from outside the region. It is a low to moderate recreation use southern California multi-elevation recreation area, and the creek corridor is characterized by no outstandingly remarkable recreation values.

3. Geology

Criteria for an Outstandingly Remarkable Value

The river or the area within the river corridor contains one or more examples of a geologic feature, process, or phenomenon that is rare, unusual, or unique to the region. The feature or features may be in an unusually active stage of development, represent a “textbook” example, represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures), or some combination of these things.

Finding

No outstandingly remarkable geologic values exist.

Discussion of Values – Rationale for Conclusion

The North Fork San Jacinto River is part of the San Jacinto Mountains Ecological Subunit of California. The San Jacinto Mountains contain mostly Mesozoic granitic rocks. Also, there are large areas of Pre-Cretaceous metasedimentary rocks and small areas of Pleistocene sediments. Portions of the San Jacinto Mountains are very steep, especially the escarpments above the Palm Springs area. Mass wasting and fluvial erosion are the main geomorphic processes. Soils are thin on the steep slopes, building in depth in the canyons.

4. Fish and Wildlife

Criteria for an Outstandingly Remarkable Value

Fisheries values should be judged on the relative merits of fish populations, habitat, or a combination of these river-related conditions. Wildlife values should be judged on the relative merits of either terrestrial or aquatic wildlife populations, habitat, or a combination these things.

Finding

Wildlife and habitat values are of high quality along the North Fork San Jacinto River and are recognized as being outstandingly remarkable.

Fish values are not outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

Rainbow and brown trout are present in the North Fork San Jacinto River. Rainbow trout are also supplemented through stocking by the California Department of Fish and Game. Two other native fish are known to occur; the Santa Ana speckled dace (Forest Service Region 5 Sensitive Species) and the partially armored three-spine stickleback. There is high quality habitat and the North Fork San Jacinto River is a locally important fishing location. However, fisheries values along the North Fork San Jacinto River are not recognized as being outstandingly remarkable.

The North Fork San Jacinto River is historic habitat for and presently occupied by a population of mountain yellow-legged frog (federally endangered), and a genetically isolated population of California spotted owl (Forest Service Region 5 Sensitive Species). Potential habitat for southwestern willow flycatcher (federally endangered) is present. The area also contains the best remaining habitat for the southern rubber boa and historic habitat for the San Bernardino flying squirrel in the San Jacinto Mountains. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

5. Heritage resources (Cultural)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have rare or unusual characteristics or exceptional human-interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes.

Finding

Cultural values are not considered to be outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

Information of Native American use within the North Fork San Jacinto River is limited. The steep river corridor limited the opportunity for use, which resulted in use that was usually focused or specialized (food or resource gathering and processing sites) and scattered throughout the corridor. Due to the

steepness of adjacent landforms, the potential for extensive prehistoric occupation with exceptional human-interest values, extraordinary interpretive potential, or national or regional importance is low. The evidence of past Native American use in the corridor is not rare or unique for California and does not have exceptional human-interest values.

6. Heritage resources (Historic)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual, or one-of-a kind in the region. A historic site(s) and/or feature(s) in most cases are 50 years old or older.

Finding

Historic values are not considered to be outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

The knowledge of the span and complexity of historic use of the North Fork San Jacinto River corridor is limited. Due to the steepness of adjacent landforms, the potential for extensive occupation or use is low. Any sites or features located within the corridor would be considered common for the local area and region and may possess local significance but they are not rare, unique, or noteworthy enough to have significance beyond the local level.

7. Botany

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains nationally or regionally important populations of indigenous plant species. Of particular significance are species considered to be unique; populations of federally or State-listed (or candidate) threatened, endangered, or sensitive species; or both. When analyzing vegetation, additional factors, such as diversity of species, numbers of plant communities, and cultural importance of plants, may be considered.

Finding

The North Fork San Jacinto River does not possess outstandingly remarkable botanical values.

Discussion of Values – Rationale for Conclusion

The North Fork San Jacinto River supports locally significant populations of lemon lily, a Forest Service Region 5 Sensitive Species plant species. Habitat along the creek and various meadows may support occurrences of several Forest Service Region 5 Sensitive Species plant species, although none are known at this time. High quality mixed conifer and bigcone Douglas-fir forest in this location have been identified as habitats of high ecological significance in the four southern California National Forests. The presence of these habitat types and the lemon lily occurrence are important, but the North Fork San Jacinto River is not recognized as having outstandingly remarkable botanical values.

Summary of Outstandingly Remarkable Values

Based on the rare, unique, exemplary, and significant features and characteristics described in the previous section, the following values were determined to be outstandingly remarkable for the North Fork San Jacinto River:

Scenery

The scenery here is diverse, ranging from dramatic, high-elevation rocky alpine to middle-elevation mixed conifer and oak woodland to lower-elevation chaparral and grassland, all with riparian interlaced throughout. This landscape is a remarkable life-zone journey of the San Jacinto Mountains and possesses regionally outstandingly remarkable visual values.

Wildlife

The wildlife values along the North Fork San Jacinto River are recognized as being outstandingly remarkable based on 1) presence of historic and suitable habitat for mountain yellow-legged frog in the headwater tributaries of the North Fork San Jacinto River, 2) recognition of the value of this habitat based on the extremely endangered status of the mountain yellow-legged frog and, 3) the diversity of Forest Service Region 5 Sensitive Species present; California spotted owl, southern rubber boa, and San Bernardino flying squirrel also occur.

Fuller Mill Creek

1. Scenery

Criteria for an Outstandingly Remarkable Value

The landscape element forms of landform, vegetation, water, color, and related factors result in notable or exemplary visual features, attractions, or both. When analyzing scenic values, additional factors—such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed—may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

Finding

The creek corridor possesses no outstandingly remarkable visual values.

Discussion of Values – Rationale for Conclusion

Located in the San Jacinto Mountains, Fuller Mill Creek is characterized by moderately sloping canyons and rounded ridges. Mixed oak and conifer covered hillsides and riparian vegetation dominate the view. The creek itself is sometimes intermittent. The Scenic Integrity Objective is High. Some of the landscape here has been influenced and altered by man, with roads, cabins, and recreation infrastructure present. Seasonal variations are moderate. The scenery here is not highly diverse. This landscape is typical of much of the middle elevations of the San Jacinto Mountains.

2. Recreation

Criteria for an Outstandingly Remarkable Value

Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout the region or are unique or rare within the region. Visitors are willing to travel long distances

to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing, hunting, and boating. Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region. The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.

Finding

The creek corridor does not possess outstandingly remarkable recreation values.

Discussion of Values – Rationale for Conclusion

Fuller Mill Creek is located in a Roaded Natural ROS. The headwaters of the creek begin about ¼ mile below the PCT, within the Mt. San Jacinto State Park. There is no access from the PCT to Fuller Mill Creek, however, and no other public trails are within the creek corridor. Fishing opportunities are present here, but while fishing was popular in the past, after the proposal for listing of the mountain yellow-legged frog, stocking ceased and fishing activities at this site have fallen off. No boating opportunities are present. Sightseeing, wildlife viewing, and interpretive opportunities have not been developed. The major recreation opportunity is the small Fuller Mill Creek Picnic Area, located below Highway 243 in Section 26. Almost all of the recreation use along Fuller Mill Creek is local in origin, mostly from the Inland Empire and Idyllwild communities, not from outside the region. It is a low to moderate recreation use southern California mid-elevation recreation area, and the creek corridor is not characterized by any outstandingly remarkable values.

3. Geology

Criteria for an Outstandingly Remarkable Value

The river or the area within the river corridor contains one or more examples of a geologic feature, process, or phenomenon that is rare, unusual, or unique to the region. The feature or features may be in an unusually active stage of development, represent a “textbook” example, represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures), or some combination of these things.

Finding

No outstandingly remarkable geologic values exist.

Discussion of Values – Rationale for Conclusion

Fuller Mill Creek is part of the San Jacinto Mountains Ecological Subunit of California. The San Jacinto Mountains contain mostly Mesozoic granitic rocks. Also, there are large areas of Pre-Cretaceous metasedimentary rocks and small areas of Pleistocene sediments. Portions of the San Jacinto Mountains are very steep, especially the escarpments above the Palm Springs area. Mass wasting and fluvial erosion are the main geomorphic processes. Soils are thin on the steep slopes, building in depth in the canyons.

4. Fish and Wildlife

Criteria for an Outstandingly Remarkable Value

Fisheries values should be judged on the relative merits of fish populations, habitat, or a combination of these river-related conditions. Wildlife values should be judged on the relative merits of either terrestrial or aquatic wildlife populations, habitat, or a combination these things.

Finding

Wildlife values along Fuller Mill Creek have been determined to be outstandingly remarkable. The river does not possess outstandingly remarkable fish values.

Discussion of Values – Rationale for Conclusion

No native fisheries occur in Fuller Mill Creek; however, rainbow trout have been stocked by early settlers and by California Department of Fish and Game. Portions of the Fuller Mill Creek have good quality habitat but fish values are not considered to be outstandingly remarkable. Fuller Mill Creek is home to a population of mountain yellow-legged frog. The creek supports one of the last remaining populations of this federally endangered species in southern California. This species is highly imperiled. Surveys conducted in this creek for the mountain yellow-legged frog in 2002 yielded eight individuals. The California spotted owl and the southern rubber boa (Forest Service Region 5 Sensitive Species) are also present along Fuller Mill Creek. There is potential for the San Bernardino flying squirrel (Forest Service Region 5 Sensitive Species) to occur. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

5. Heritage resources (Cultural)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have rare or unusual characteristics or exceptional human-interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes.

Finding

Cultural values are not considered to be outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

Though information of Native American use in the Fuller Mill Creek corridor is limited, what is known indicates the use to be focused, with sites representing more specialized functions. These types of sites are not rare or unusual in character for the area and appear to possess no outstandingly remarkable values. Due to the steepness of adjacent landforms, the potential for extensive prehistoric occupation with exceptional human-interest values, extraordinary interpretive potential, or national or regional importance is low.

6. Heritage resources (Historic)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual or one-of-a kind in the region. A historic site(s) and/or feature(s) in most cases are 50 years old or older.

Finding

Historic values are not considered to be outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

The knowledge of the span and complexity of human use of the Fuller Mill Creek corridor is limited but several sites are known to be located within the corridor. Research indicates that the historic use was associated with logging. Fuller Mill Creek was logged from 1880 through 1895, with the timber brought down by wagon to San Jacinto. The sites and features recorded within the corridor are common in the local area and region and may possess local significance, but they are not rare, unique, or noteworthy enough to have significance beyond the local level.

7. Botany

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains nationally or regionally important populations of indigenous plant species. Of particular significance are species considered to be unique; populations of federally or State-listed (or candidate) threatened, endangered, or sensitive species; or both. When analyzing vegetation, additional factors, such as diversity of species, numbers of plant communities, and cultural importance of plants, may be considered.

Finding

Although this habitat is important, botanical values along Fuller Mill Creek are not considered to be outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

Fuller Mill Creek provides occupied habitat for a locally significant population of lemon lily, a Forest Service Region 5 Sensitive Species.

Summary of Outstandingly Remarkable Values

Based on the rare, unique, exemplary, and significant features and characteristics described in the previous section, the following values were determined to be outstandingly remarkable:

Wildlife

The wildlife values along Fuller Mill Creek are recognized as being outstandingly remarkable based on 1) presence of occupied habitat for mountain yellow-legged frog and recognition of the value of this habitat for species recovery, 2) recognition of the significance of this occurrence; it is one of only several occurrences in southern California with a total population estimated at 100 individuals, and 3) presence of other Forest Service Region 5 Sensitive Species including the California spotted owl and San Bernardino flying squirrel.

Palm Canyon Creek

1. Scenery

Criteria for an Outstandingly Remarkable Value

The landscape element forms of landform, vegetation, water, color, and related factors result in notable or exemplary visual features, attractions, or both. When analyzing scenic values, additional factors—such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed—may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

Finding

This high-desert landscape possesses outstandingly remarkable visual values.

Discussion of Values – Rationale for Conclusion

Palm Canyon is located in the lower eastern slope of the San Jacinto Mountains, characterized here by steeply sloping canyons and narrow ridges, with deep, rugged canyons. The high desert mountains support pinyon-juniper woodlands. Chaparral blankets the hills and Colorado Desert vegetation covers the desert floor at lower elevations. The unique presence of the California fan palm (California's only native palm) gives this canyon its name. It is a nationally significant palm oasis. The creek bed in Palm Canyon is almost always dry, flowing underground for much of the year. A few short reaches have modest seasonal surface flow, providing haven for small oases. The Scenic Integrity Objective is High. Some of the landscape here has been influenced and altered by man, especially in the Santa Rosa Indian Reservation, with roads and cabins present. Seasonal variations are not readily apparent, except within the riparian corridor when the willows turn golden before dropping their leaves in the fall. The scenery here is regionally spectacular, with deep, rugged, rocky canyons, thick riparian vegetation, and palm oases. Winter and early spring storms bring ephemeral waterfalls. Summer thunderstorms bring flash floods.

2. Recreation

Criteria for an Outstandingly Remarkable Value

Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region, or are unique or rare within the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, research, wildlife viewing, camping, photography, hiking, and hunting. Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region. The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.

Finding

Recreation values are not outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

Palm Canyon is located in a Semi-Primitive Non-Motorized ROS. The Palm Canyon Trail (4E01) parallels most of the length of the canyon. Except for the headwaters area, where many small natural surface roads and State Highway 74 intersect the tributaries, Palm Canyon is unroaded. No recreation opportunities exist, other than hiking, sightseeing, and wildlife watching. Almost all of the limited

recreation use in Palm Canyon is local in origin, mostly from the communities in the Coachella Valley, not from outside the region. It is a very low recreation use desert canyon, and the creek corridor is not characterized by outstandingly remarkable recreation values.

3. Geology

Criteria for an Outstandingly Remarkable Value

The river or the area within the river corridor contains one or more examples of a geologic feature, process, or phenomenon that is rare, unusual or unique to the region. The feature or features may be in an unusually active stage of development, represent a “textbook” example, represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures), or some combination of these things.

Finding

No outstandingly remarkable geologic values exist.

Discussion of Values – Rationale for Conclusion

Palm Canyon is part of the San Jacinto Mountains Ecological Subunit of California. The San Jacinto Mountains contain mostly Mesozoic granitic rocks. Also, there are large areas of Pre-Cretaceous metasedimentary rocks and small areas of Pleistocene sediments. Portions of the San Jacinto Mountains are very steep, especially the escarpments above the Palm Springs area. Mass wasting and fluvial erosion are the main geomorphic processes. Soils are thin on the steep slopes, building in depth in the canyons.

4. Fish and Wildlife

Criteria for an Outstandingly Remarkable Value

Fisheries values should be judged on the relative merits of fish populations, habitat, or a combination of these river-related conditions. Wildlife values should be judged on the relative merits of either terrestrial or aquatic wildlife populations, habitat, or a combination these things.

Finding

Neither fish nor wildlife values are outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

Recent surveys have not indicated the presence of fish within Palm Canyon. The best habitat is present on the Santa Rosa Indian Reservation lands; Palm Canyon on National Forest lands is mostly dry on the surface. Palm Canyon is not recognized as having outstandingly remarkable values for fish. Palm Canyon on adjacent Bureau of Land Management public lands provides habitat for southwestern willow flycatcher, least Bell’s vireo, summer tanager, yellow warbler, yellow-breasted chat, gray vireo, southern yellow bat, and Peninsular Range bighorn sheep. On National Forest lands, the riparian vegetation in Palm Canyon provides potential habitat for the federally endangered southwestern willow flycatcher and least Bell’s vireo, although none have been reported there. Portions of the canyon are historic habitat for mountain yellow-legged frog, a federally endangered species. Palm Canyon is also home to the federally endangered peninsular bighorn sheep. The sheep are dependent upon springs for water and rocky open escape terrain. While they are attracted to the riparian habitat and/or the palm oases, they are not

necessarily dependent upon them. From this standpoint, Palm Canyon is not recognized as having outstandingly remarkable wildlife values.

5. Heritage resources (Cultural)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have rare or unusual characteristics or exceptional human-interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes.

Finding

The canyon meets the standards for a Traditional Cultural Property as highly significant, and has outstandingly remarkable prehistoric values.

Discussion of Values – Rationale for Conclusion

Evidence of Cahuilla use of Palm Canyon, especially for the last two thousand years, is present in the proposed WSR. This evidence reflects all aspects of Native American life and has exceptional human-interest value to the local Native American and Tribal community as well as scientific value. The Canyon is located in the heart of Cahuilla ethnographic territory, and the Cahuilla continue to use the area for traditional practices. The Canyon meets standards for a Traditional Cultural Property as highly significant.

6. Heritage resources (Historic)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual or one-of-a kind in the region. A historic site(s) and/or feature(s) in most cases are 50 years old or older.

Finding

Historic values are not considered outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

The knowledge of the span and complexity of historic use is limited but several sites are known to be located within the corridor. Research indicates that the historic use was associated with ranching and livestock raising. Palm Canyon long horn cattle have been raised within the corridor for over 120 years. This hardy breed and the pioneering families who raised them are part of the American West story. The sites and features recorded within the corridor are common in the local area and region and may possess local significance, but they are not rare, unique, or noteworthy enough to have significance beyond the local level.

7. Botany

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains nationally or regionally important populations of indigenous plant species. Of particular significance are species considered to be unique; populations of federally or State-listed (or candidate) threatened, endangered, or sensitive species; or both. When analyzing vegetation, additional factors, such as diversity of species, numbers of plant communities, and cultural importance of plants, may be considered.

Finding

The Palm Oases within Palm Canyon, both on National Forest and Bureau of Land Management lands, are recognized as having outstandingly remarkable botanical value.

Discussion of Values – Rationale for Conclusion

California fan palms are relics from millions of years ago when the area that is now desert was wetter and occupied by a tropical forest. Today these native North American trees occur only in locations with a high water table. Permanent streams within steep sided canyons or large springs provide habitat for the largest groves. Smaller groves occur where seeps or moist canyon sides provide moisture even where surface water is intermittent. The Palm Canyon Oases are adjacent to underground faults, which bring water to the surface. California fan palms can reach a maximum of 82 feet and are the dominant feature in the overstory. The oases community is long-lived with individual trees reaching the age of 150-200 years. Reproduction occurs only from mature trees and only after extremely wet winters. Fire is an integral part of the ecology of the palm oases as it removes the understory shrubs allowing more water for the fire tolerant palms and also causes a flush of growth as small palms are released from shade. Where fire is allowed to occur, there is a combination of mature trees in the canopy, and smaller palms that inhabit the understory.

Palm Canyon supports the largest California fan palm oasis in the United States. The abundance of these palms, relics from millions of years ago are nationally significant and unique. This location is also recognized as an area of high ecological significance within the four southern California National Forests.

Summary of Outstandingly Remarkable Values

Based on the rare, unique, exemplary, and significant features and characteristics described in the previous section, the following values were determined to be outstandingly remarkable:

Scenery

The scenery here is regionally spectacular, with deep, rugged, rocky canyons, thick riparian vegetation, and palm oases. Winter and early spring storms bring ephemeral waterfalls. This high-desert landscape possesses regionally outstandingly visual values.

Cultural

Palm Canyon is within the heart of Cahuilla territory. There are many Native American sites along the entire portion of the canyon, including village sites, seasonal camps and numerous specialized activity areas including rock art, agave roasting pits, and milling features. The major occupation has occurred within the last two thousand years. Cahuilla today continue to use the area for gathering of traditional

plants for food and medicine. The Canyon meets the standards for a Traditional Cultural Property as highly significant and has outstandingly remarkable pre-historic values.

Botany

The Palm Oases within Palm Canyon are recognized as having outstandingly remarkable habitat value due to 1) a location that supports the largest California fan palm oasis in the United States, 2) the abundance of these native palms, relics from millions of years ago that are nationally significant and unique, and 3) the location is recognized as an area of high ecological significance within the four southern California National Forests.

Bautista Creek

1. Scenery

Criteria for an Outstandingly Remarkable Value

The landscape element forms of landform, vegetation, water, color, and related factors result in notable or exemplary visual features, attractions, or both. When analyzing scenic values, additional factors—such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed—may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment.

Finding

This landscape is typical of much of the lower elevations of the San Jacinto and Cahuilla Mountains, and possesses no outstandingly remarkable visual values.

Discussion of Values – Rationale for Conclusion

Bautista Creek is located between the San Jacinto and Cahuilla Mountains and is characterized by moderately sloping canyons and rounded ridges. Green-gray chaparral, desert scrub, and riparian vegetation dominate the view. The creek itself is often intermittent. The Scenic Integrity Objective is Moderate. Much of the landscape here is somewhat rural in feel, and has been significantly influenced and altered by man, with wildfire scars, roads, camps, and some light ranching development present. Although it is part of an allotment, it is not currently grazed. Seasonal variations are slight. The scenery here is not highly diverse.

2. Recreation

Criteria for an Outstandingly Remarkable Value

Recreational opportunities are, or have the potential to be, popular enough to attract visitors from throughout or beyond the region, or are unique or rare within the region. Visitors are willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, camping, photography, hiking, fishing, hunting, and boating. Interpretive opportunities may be exceptional and attract, or have the potential to attract, visitors from outside the region. The river may provide, or have the potential to provide, settings for national or regional usage or competitive events.

Finding

Almost all of the recreation use along Bautista Creek is local in origin, mostly from the Inland Empire communities, not from outside the region. It is a relatively low recreation use southern California backcountry canyon, and the river corridor is not characterized by any outstandingly remarkable recreation values.

Discussion of Values – Rationale for Conclusion

Bautista Creek is located in a Roaded Natural ROS, but has little recreation use along the creek. No fishing/boating opportunities are present. Sightseeing and wildlife viewing opportunities have not been developed. There is a Juan Bautista de Anza interpretive panel on State of California lands within the creek corridor. Other than that, there are no interpretive opportunities here. Almost all travel is motorized, in vehicles on the Bautista Canyon Road 5109B, a native surface road that parallels the creek. Much of this travel is local commercial vehicles and commuter traffic, from Anza to Hemet. The Bautista Canyon Road is also the location of a Federal Highway/Riverside County of Transportation project to pave and expand the 8.2 miles from a one-lane road to a two-lane road. It would provide for a new interpretive site and pullouts and new developed off-highway vehicle (OHV) parking for Hixon Flat and Alessandro trailhead. The Hixon-Bautista Trail (2E43) begins at the Bautista Canyon Road in Section 1 (private land) and immediately leads upslope to Red Mountain, five miles southwest. The Alessandro Trail (2E44) begins at Bautista Canyon Road in section 20 and ends at the junction of 6S22, a distance of 2.7 miles. Bautista Canyon is a major seasonal quail and deer hunting ground. Its remoteness provides shelter for game species. Also, it has Cottonwood Truck Trail (6S16) which is a locally popular OHV route as well as a heavily used area for recreational shooting.

3. Geology

Criteria for an Outstandingly Remarkable Value

The river or the area within the river corridor contains one or more examples of a geologic feature, process, or phenomenon that is rare, unusual or unique to the region. The feature or features may be in an unusually active stage of development, represent a “textbook” example, represent a unique or rare combination of geologic features (erosional, volcanic, glacial, or other geologic structures), or some combination of these things.

Finding

No outstandingly remarkable geologic values exist.

Discussion of Values – Rationale for Conclusion

Bautista Creek is part of the San Jacinto Mountains Ecological Subunit of California. The San Jacinto Mountains contain mostly Mesozoic granitic rocks and the Cahuilla Mountains contain mostly Pre-Cenozoic granitic and metamorphic rocks. Also, there are large areas of Pre-Cretaceous metasedimentary rocks and small areas of Pleistocene sediments. Portions of the San Jacinto Mountains are very steep, especially the escarpments above the Palm Springs area. Mass wasting and fluvial erosion are the main geomorphic processes. Soils are thin on the steep slopes, building in depth in the canyons. Some locally significant sand, silt, and gravel operations occur in the area.

4. Fish and Wildlife

Criteria for an Outstandingly Remarkable Value

Fisheries values should be judged on the relative merits of fish populations, habitat, or a combination of these river-related conditions. Wildlife values should be judged on the relative merits of either terrestrial or aquatic wildlife populations, habitat, or a combination these things.

Finding

Bautista Creek possesses the largest number of endangered wildlife species of any location on the forest. Wildlife values in Bautista Creek are recognized as being outstandingly remarkable. Aquatic habitat along Bautista Creek is important but is not considered an outstandingly remarkable value.

Discussion of Values – Rationale for Conclusion

The forest does not have extensive survey information on file for Bautista Creek, which is mostly an ephemeral stream. Bautista Creek is home to populations of arroyo toad, nesting occurrences of the southwestern willow flycatcher, and the San Bernardino kangaroo rat, all federally endangered wildlife species. The U.S. Fish and Wildlife Service designated this area as critical habitat for the Quino checkerspot butterfly, a federally endangered insect. Forest Service Region 5 Sensitive Species present include the Southern California legless lizard, three-lined boa, two-striped garter snake, and San Diego ringneck snake. The greenest tiger beetle, a rare invertebrate was collected in the 1970s along the creek and may still occur. This creek was designated as a Critical Biological Zone in the 2005 Land Management Plan to limit the level of human development to manage for protection of species-at-risk.

5. Heritage resources (Cultural)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by Native Americans. Sites must have rare or unusual characteristics or exceptional human-interest value(s). Sites may have national or regional importance for interpreting prehistory; may be rare and represent an area where a culture or cultural period was first identified and described; may have been used concurrently by two or more cultural groups; or may have been used by cultural groups for rare or sacred purposes.

Finding

Bautista Creek has had regionally significant pre-historic use, and possesses outstandingly remarkable values.

Discussion of Values – Rationale for Conclusion

Evidence of Native American use of the Bautista Creek Canyon is present within the proposed WSR. This evidence reflects all aspects of Native American life and has exceptional human-interest value to the local Native American and Tribal community as well as scientific value. Ethnographic research has documented Native American place names for areas within the drainage. The Canyon meets standards for a Traditional Cultural Property as highly significant.

6. Heritage resources (Historic)

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains a site(s) or feature(s) associated with a significant event, an important person, or a cultural activity of the past that was rare, unusual, or one-of-a kind in the region. A historic site(s) and/or feature(s) in most cases are 50 years old or older.

Finding

Historic values for Bautista Creek have regional and national significance and are considered to be outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

The most important activity of the historic period was the travels of Juan Bautista de Anza in 1774 and again in 1776. The canyon was used as a route of the earliest efforts to reach the San Francisco Bay area from Sonora, Mexico. De Anza made two trips through the canyon. This trail route is designated as a National Historic Trail, which is the Bautista Canyon Road corridor itself (not a trail). It is nationally significant and possesses outstandingly remarkable values.

7. Botany

Criteria for an Outstandingly Remarkable Value

The river or area within the river corridor contains nationally or regionally important populations of indigenous plant species. Of particular significance are species considered to be unique; populations of federally or State-listed (or candidate) threatened, endangered, or sensitive species; or both. When analyzing vegetation, additional factors, such as diversity of species, numbers of plant communities, and cultural importance of plants, may be considered.

Finding

Botanical values along Bautista Creek are recognized as being outstandingly remarkable.

Discussion of Values – Rationale for Conclusion

Bautista Creek provides occupied habitat for the slender-horned spine-flower, a federally endangered plant species. Within the four southern California National Forests, this plant occurs only on the Cleveland (31 acres) and San Bernardino National Forests (17 acres). The Bautista Creek population is significant because it is the only known location on the forest, consists of a large number of individuals (approximately 2,000), and plants are scattered over a two-mile stretch of the Creek. These annual plants occur on alluvial benches in or adjacent to the stream channel. Habitat is created by deposition of sediments carried by the stream. The habitat is dependent on proper functioning condition of the creek; therefore, downstream habitat is affected by hydrologic alterations upstream. Proper management of water and watersheds provides the most significant benefit because the plant habitat is tied to hydrology and fluvial geomorphology and also because many of the remaining 23 occurrences of the spine-flower occur downstream off of National Forest lands.

Summary of Outstandingly Remarkable Values

Based on the rare, unique, exemplary, and significant features and characteristics described in the previous section, the following values were determined to be outstandingly remarkable:

Wildlife

Bautista Creek is considered to have outstandingly remarkable wildlife values based on 1) the presence of populations of arroyo toad and San Bernardino kangaroo rat, and nesting occurrences of the southwestern willow flycatcher, all federally endangered species; 2) the U.S. Fish and Wildlife Service designation of Bautista Creek as Critical Habitat for the Quino checkerspot butterfly, a federally endangered insect; 3) the presence of fourteen Forest Service Region 5 Sensitive Species; 4) recognition of this stream as an area of high ecological significance within the four southern California National Forests in the Southern California Mountain and Foothill Assessment; and 5) recognition that Bautista Creek supports the largest number of endangered wildlife species of any location on the forest.

Botany

Bautista Creek is considered to possess outstandingly remarkable botanical values based on the occupied habitat of the slender-horned spine-flower, a federally endangered plant species occurring on alluvial benches within the creek corridor. Regional and national significance of this occurrence is based on 1) the population occurring in one of only two locations of this plant in the four southern California National Forests, 2) this population being the only known population on the forest, 3) the large number of individuals (approximately 2,000) within this population, and 4) the quantity of occupied habitat of this population (occurs over a two mile stretch of creek).

Cultural

Bautista Creek has many Native American sites of exceptional human-interest along the whole length of the canyon. Most of the sites represent occupation or habitation sites while others represent specialized activities such as milling features for food processing. While few archaeological investigations have been undertaken, ethnohistoric Cahuilla village sites occur at the upper portion of the drainage. The canyon meets the standards for a Traditional Cultural Property as highly significant. It possesses outstandingly remarkable values.

Historic

The most important event of the historic period was the passages of Juan Bautista de Anza in 1774 and again in 1776. The canyon was used as a route of the earliest efforts to reach the San Francisco Bay area from Sonora Mexico. De Anza made two trips through the canyon. This trail route is designated as a National Historic Trail, which is the Bautista road corridor itself (not a trail). It is nationally significant and possesses outstandingly remarkable values.