

## STATUS OF SPECIAL INTEREST AREAS AND RESEARCH NATURAL AREAS

### INTRODUCTION

This appendix provides an inventory of the existing research natural areas (RNAs) and Special Interest Areas (SIAs) on national forests in the Sierra Nevada and parts of the Southern Cascades. The appendix also includes management guidance from the Forest Service Manual and examples of management direction from the Tahoe National Forest Land and Resource Management Plan (LRMP) (Tahoe National Forest 1990).

### CURRENT INVENTORY OF RNAs AND SIAs

The following table lists the RNAs currently designated on national forests in the Sierra Nevada. Definitions for the column headings are noted below the table.

Table F-1. Current inventory of Research Natural Areas with attributes. The codes for Available Area, Special Unit Kind, and Status of RNA are defined in Table F 2. Taken from USDA Forest Service 2009.

Forest	Available Area	Special Unit Kind	Name of RNA	Status of RNA	Year Established	Area (acres)
Eldorado	2	230	Peavine Ridge	E	1991	1,098
Eldorado	3	230	Snow Canyon	E	2003	888
Eldorado	2	230	Station Creek	E	1991	746
<b>Forest Subtotal Area</b>						2,731
Inyo	1	230	Harvey Monroe Hall	E	1933	3,863
Inyo	1	230	Indiana Summit	E	1932	1,161
Inyo	1	230	Last Chance Meadow	E	1983	653
Inyo	1	230	McAfee Meadow	E	2003	2,422
Inyo	1	230	Sentinel Meadow	E	1983	1,933
Inyo	1	230	Whippoorwill Flat	E	1990	3,256
Inyo	1	230	White Mountain	E	1953	2,029
<b>Forest Subtotal Area</b>						15,316
Lake Tahoe Basin	1	230	Grass Lake	E	1991	355
<b>Forest Subtotal Area</b>						355
Lassen	1	230	Blacks Mountain	E	1976	94

Forest	Available Area	Special Unit Kind	Name of RNA	Status of RNA	Year Established	Area (acres)
Lassen	1	230	Blacks Mountain	E	1976	99
Lassen	1	230	Blacks Mountain	E	1976	113
Lassen	1	230	Blacks Mountain	E	1976	73
Lassen	1	230	Blacks Mountain	E	1976	143
Lassen	1	230	Cub Creek	E	1981	3,953
Lassen	1	235	Grahams Pinery	P	0	639
Lassen	1	235	Green Island Lake	C	0	1,125
Lassen	1	235	Indian Creek	C	0	3,863
Lassen	1	235	Mayfield	C	0	1,075
Lassen	1	235	Soda Ridge	C	0	1,203
Lassen	1	235	Timbered Crater	C	0	1,784
<b>Forest Subtotal Area</b>						<b>14,163</b>
Modoc	1	230	Devil's Garden	E	1933	796
Modoc	1	235	Raider Creek	C	0	6,274
<b>Forest Subtotal Area</b>						<b>7,070</b>
Plumas	1	230	Mount Pleasant	E	1990	1,315
Plumas	1	230	Mud Lke Modoc Cypress	E	1989	299
Plumas	1	230	Mud Lke Modoc Cypress	E	1989	40
<b>Forest Subtotal Area</b>						<b>1,655</b>
Sequoia	1	230	Church Dome	E	1991	1,509
Sequoia	1	230	Long Canyon	E	1990	2,132
Sequoia	1	230	Moses Mtn	E	1990	985
Sequoia	1	235	So. Mountaineer Creek	C	0	1,576
<b>Forest Subtotal Area</b>						<b>6,202</b>
Sierra	1	230	Backbone Creek	E	1971	390
Sierra	1	235	Bishop Creek	P	0	1,113

Forest	Available Area	Special Unit Kind	Name of RNA	Status of RNA	Year Established	Area (acres)
Sierra	1	235	Home Camp Creek	P	0	949
Sierra	1	230	Sacate Ridge	E	2006	4,046
Sierra	1	230	San Joaquin Exp. Forest	E	1971	73
<b>Forest Subtotal Area</b>						6,571
Stanislaus	3	230	Bell Meadow	E	1994	640
Stanislaus	1	235	Clark Fork	C	0	617
Stanislaus	3	230	Critchfield	E	1994	843
Stanislaus	3	230	Grizzly Mountain	E	1994	681
<b>Forest Subtotal Area</b>						2,781
Tahoe	1	230	Babbitt Peak	E	1990	1,049
Tahoe	1	230	Lyon Peak/Needle Lake	E	1992	738
Tahoe	1	230	Sugar Pine Point	E	1992	647
<b>Forest Subtotal Area</b>						2,434
Toiyabe Tahoe	1	230	Babbitt Peak	E	1990	364
<b>Forest Subtotal Area</b>						364
<b>Forest Total</b>						59,643

Table F-2. The following lists defines the codes used in Table F 1.

Column Label	Codes
Available area	1=Not Reserved
	2=Reserved - Current
	3=Reserved - Pending
Special Unit Kind	230=Research Natural Areas
	235=Proposed Research Natural Areas
Status of RNA	E=established
	C=candidate
	P=pending

Table F-3. List of RNAs with embedded website link to detailed information on each area. Summarized from: <http://www.fs.fed.us/psw/programs/rna/>

Map #	RNA Name and Website Link	National Forest	Target vegetation and other significant features
31	<a href="#">Grass Lake</a>	Eldorado	moss bog, montane meadows
66	<a href="#">Peavine Point</a>	Eldorado	Pacific ponderosa pine, California black oak
79	<a href="#">Snow Canyon</a>	Eldorado	western white pine, subalpine meadows
85	<a href="#">Station Creek</a>	Eldorado	transitional forest (sugar pine – white fir – rattlesnake orchid)
37	<a href="#">Harvey Monroe Hall</a>	Inyo	alpine meadows, subalpine forest
45	<a href="#">Indiana Summit</a>	Inyo	Jeffrey pine, archeology
51	<a href="#">Last Chance Meadow</a>	Inyo	Sierran foxtail pine, meadow/stream
56	<a href="#">McAfee</a>	Inyo	alpine fell-field
76	<a href="#">Sentinel Meadow</a>	Inyo	lodgepole pine, limber pine
93	<a href="#">Whippoorwill Flat</a>	Inyo	pinyon pine– juniper woodland, limber pine
94	<a href="#">White Mountain</a>	Inyo	bristlecone pine, limber pine
11	<a href="#">Blacks Mountain</a>	Lassen	interior ponderosa pine, sagebrush
22	<a href="#">Cub Creek</a>	Lassen	mixed conifer forest
32	<a href="#">Green Island Lake</a>	Lassen	moss bog, montane coniferous forest
43	<a href="#">Indian Creek</a>	Lassen	blue oak – foothill pine
46	<a href="#">Iron Mountain</a>	Lassen	Pacific ponderosa pine, California black oak
55	<a href="#">Mayfield</a>	Lassen	knobcone pine, geology
80	<a href="#">Soda Ridge</a>	Lassen	white fir, mixed conifer forest
89	<a href="#">Timbered Crater</a>	Lassen	Baker cypress, vernal pool
24	<a href="#">Devil’s Garden</a>	Modoc	western juniper, <i>Artemisia</i> shrub-steppe
68	<a href="#">Raider Basin</a>	Modoc	white fir, northern juniper woodland
60	<a href="#">Mount Pleasant</a>	Plumas	red fir, bog fen
61	<a href="#">Mud Lake</a>	Plumas	Baker cypress, biogeography
16	<a href="#">Church Dome</a>	Sequoia	Jeffrey pine
52	<a href="#">Long Canyon</a>	Sequoia	Piute cypress, California juniper, pinyon pine
58	<a href="#">Moses Mountain</a>	Sequoia	giant sequoia, riparian/meadows
83	<a href="#">South Mountaineer Creek</a>	Sequoia	red fir, montane wet meadows
6	<a href="#">Backbone Creek</a>	Sierra	<i>Carpenteria californica</i> , unique ecosystem
9	<a href="#">Bishop Creek Ponderosa Pine</a>	Sierra	Pacific ponderosa pine
41	<a href="#">Home Camp Creek</a>	Sierra	white fir, red fir
74	<a href="#">San Joaquin Experimental Range</a>	Sierra	blue oak – foothill pine
88	<a href="#">Teakettle Creek</a>	Sierra	red fir
7	<a href="#">Bell Meadow</a>	Stanislaus	aspen, montane meadows

<b>Map #</b>	<b>RNA Name and Website Link</b>	<b>National Forest</b>	<b>Target vegetation and other significant features</b>
17	<a href="#">Clark Fork</a>	Stanislaus	white fir, red fir
33	<a href="#">Grizzly Mountain</a>	Stanislaus	California black oak
40	<a href="#">Highland Lakes</a>	Stanislaus	mountain hemlock forest
47	<a href="#">Jawbone Ridge</a>	Stanislaus	chamise chaparral
96	<a href="#">William B. Critchfield</a>	Stanislaus	red fir, montane meadows
53	<a href="#">Lyon Peak/Needle Lake</a>	Tahoe	mountain hemlock, subalpine meadows
63	<a href="#">Onion Creek</a>	Tahoe	white fir, red fir
87	<a href="#">Sugar Pine Point</a>	Tahoe	mixed conifer forest, montane chaparral
5	<a href="#">Babbitt Peak</a>	Tahoe/ Toiyabe	Washoe pine, mountain mahogany

Figure F-1. Locations of Research Natural Areas in California. Taken from USDA Forest Service 2009.

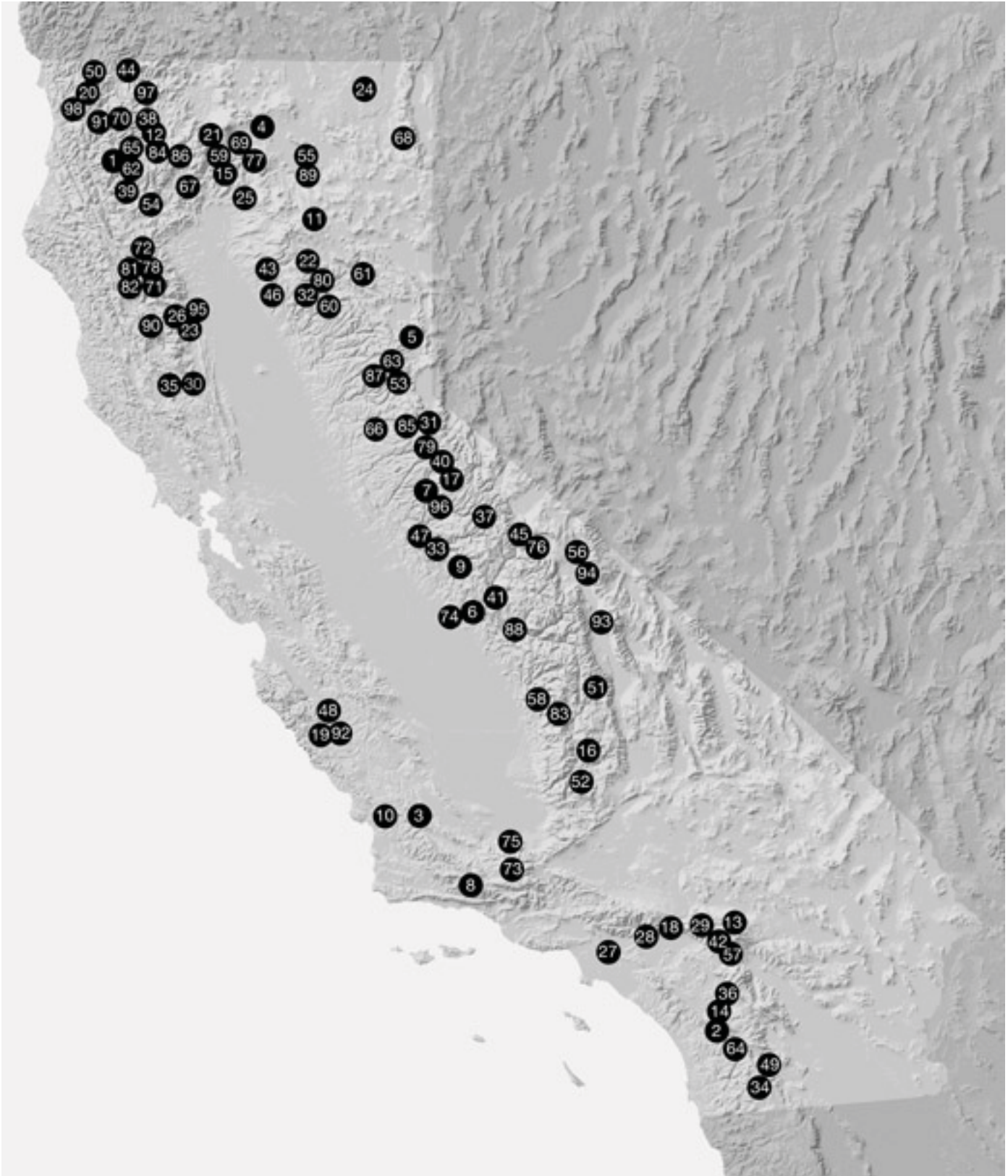




Table F-4. Current inventory of Special Interest. Taken from USDA Forest Service 2009.

Forest	Local Area Name	Special Interest	acres
Eldorado	Big Crater	Geological Areas	122.3
Eldorado	Leonardi Falls	Botanical Areas	214.9
Eldorado	Little Crater	Geological Areas	211.6
Eldorado	Mokelumne	Archaeologic Areas	335.1
Eldorado	Mokelumne	Archaeologic Areas	282.4
Eldorado	Mokelumne	Archaeologic Areas	9934.3
Eldorado	Mokelumne	Archaeologic Areas	320.8
Eldorado	Mokelumne	Archaeologic Areas	79.3
Eldorado	Mokelumne	Archaeologic Areas	56.2
Eldorado	Mokelumne	Archaeologic Areas	13.5
Eldorado	Mokelumne	Archaeologic Areas	18.8
Eldorado	Mokelumne	Archaeologic Areas	47.4
Eldorado	Mokelumne	Archaeologic Areas	1087.1
Eldorado	Rock Creek	Botanical Areas	211.8
Eldorado	Rock Creek	Botanical Areas	17.8
Eldorado	Rock Creek	Botanical Areas	137.6
Eldorado	Rock Creek	Botanical Areas	44.7
Eldorado	Round Top	Geological Areas	244.5
Eldorado	Round Top	Geological Areas	641.0
Eldorado	Traverse Creek	Botanical Areas	224.1
Eldorado	Wrights Lake Bog	Botanical Areas	65.3
		<b>Forest Subtotal Area</b>	<b>14310.5</b>
Inyo	Ancient Bristlecone Pine	Botanical Areas	28910.8
Inyo	Bighorn Sheep	Zoological Areas	19004.0
Inyo	Bighorn Sheep	Zoological Areas	21049.2
		<b>Forest Subtotal Area</b>	<b>69512.8</b>
Lake Tahoe	Tallac	Historic Areas	241.0
		<b>Forest Subtotal Area</b>	<b>241.0</b>
Lassen	Black Rock	Geological Areas	13.5
Lassen	Crater Lake	Geological Areas	192.2
Lassen	Deep Hole	Geological Areas	125.7
Lassen	Homer/Deer	Scenic Areas	1484.3
Lassen	Montgomery	Botanical Areas	5.2
Lassen	Murken Bench	Botanical Areas	480.6
Lassen	Willow Lake Bog	Botanical Areas	60.5
		<b>Forest Subtotal Area</b>	<b>2910.8</b>
Modoc	Burnt Lava Flow	Geological Areas	8217.2
Modoc	Glass Mtn Glass Flow	Geological Areas	74.5
Modoc	Glass Mtn Glass Flow	Geological Areas	4618.4
Modoc	Glass Mtn Glass Flow	Geological Areas	8.4

<b>Forest</b>	<b>Local Area Name</b>	<b>Special Interest</b>	<b>acres</b>
Modoc	Medicine Lake Glass Flow	Geological Areas	561.8
		<b>Forest Subtotal Area</b>	<b>14029.1</b>
Plumas	Butterfly Valley	Botanical Areas	501.5
Plumas	Feather Falls	Scenic Areas	14386.9
Plumas	Little Last Change Cyn	Scenic Areas	1541.2
Plumas	Soda Rock	Geological Areas	36.8
Plumas	Valley Creek	Botanical Areas	181.6
Sequoia	Baker Point	Botanical Areas	842.6
Sequoia	Bald Mount	Botanical Areas	437.9
Sequoia	Bodfish Piute Cypress	Botanical Areas	22.5
Sequoia	Bodfish Piute Cypress	Botanical Areas	280.7
Sequoia	Bodfish Piute Cypress	Botanical Areas	29.5
Sequoia	Bodfish Piute Cypress	Botanical Areas	15.0
Sequoia	Bodfish Piute Cypress	Botanical Areas	334.3
Sequoia	Freeman Grove	Botanical Areas (Prop)	3319.9
Sequoia	Freeman Grove	Botanical Areas (prop)	987.2
Sequoia	Packsaddle Cavern	Geological Areas	52.1
Sequoia	Slate Mountain	Botanical Areas	473.7
Sequoia	Twisselmann (Siretta Peak)	Botanical Areas	900.7
		<b>Forest Subtotal Area</b>	<b>8244.9</b>
Sierra	Carpenteria	Botanical Areas	386.3
Sierra	Courtright Intrusive Contact zone	Geological Areas	67.7
Sierra	Devils Peak	Botanical Areas	1342.0
Sierra	Dinkey Creek	Geological Areas	400.4
Sierra	King Caverns	Geological Areas	378.2
Sierra	McKinley Grove	Botanical Areas	410.3
Sierra	Nelder Grove	Historic Areas	1437.2
		<b>Forest Subtotal Area</b>	<b>4970.9</b>
Stanislaus	Bower Cave	Geological Areas	1746.0
Stanislaus	Bull Run	Geological Areas	369.5
Stanislaus	Columns of the Giants	Geological Areas	110.0
Stanislaus	Niagara Creek Falls	Geological Areas	585.0
Stanislaus	Pacific Madrone	Botanical Areas	7.4
Stanislaus	Pacific Madrone	Botanical Areas	7.4
Stanislaus	Trumbell Peak	Historic Areas	140.2
Stanislaus	Trumbell Peak	Historic Areas	3.9
Stanislaus	Windeler Cave	Geological Areas	11.2
		<b>Forest Subtotal Area</b>	<b>3529.4</b>
Tahoe	Devil's Postpile	Geological Areas	84.6
Tahoe	Glacier Meadows	Geological Areas	210.4
Tahoe	Grouse Falls	Scenic Areas	141.5
Tahoe	Mason Fen	Botanical Areas	16.3
Tahoe	Meadow Lake	Archaeologic Areas	9.8
Tahoe	Meadow Lake	Archaeologic Areas	63.3



Forest	Local Area Name	Special Interest	acres
Tahoe	Placer Co. Big Tree Grove	Botanical Areas	364.1
Tahoe	Sagehen Headwater	Botanical Areas	78.5
<b>Forest Subtotal Area</b>			<b>968.5</b>
<b>Total Area</b>			<b>132073.1</b>

**ADDITIONAL INFORMATION TO CONSIDER IN DESIGNATING AND MANAGING RNAs AND SIAs**

*Management of Research Natural Areas*

The Forest Service designates and manages a network of special areas on National Forests that are permanently protected and maintained in natural conditions, for the purposes of conserving biological diversity, conducting non-manipulative research and monitoring, and fostering education. Included in this network are:

- High quality examples of widespread ecosystems
- Unique ecosystems or ecological features
- Rare or sensitive species of plants and animals and their habitat

These RNAs help protect biological diversity at the genetic, species, ecosystem and landscape scales.

RNAs that are representative of common ecosystems in natural condition serve as baseline or reference areas. To help answer resource management questions, the baseline areas of RNAs can be compared with similar ecosystems undergoing silvicultural or other land management prescriptions. In this way, RNAs make an important contribution to ecosystem management.

RNAs are managed to maintain the natural features for which they were established, and to maintain natural processes. Because of the emphasis on natural conditions, they are excellent areas for studying ecosystems or their component parts and for monitoring succession and other long-term ecological change. Non-manipulative research and monitoring activities are encouraged in RNAs and can be compared with manipulative studies conducted in other areas.

RNAs serve as sites for low-impact educational activities. These areas are available for educational use by university and school groups, native plant societies, and other organizations interested in pursuing natural history and educational field trips.

The RNA system is envisioned to preserve a representative array of all significant natural ecosystems and their inherent processes as baseline areas. Although the RNA system has expanded significantly in recent decades, there are still many ecosystem types which are not represented. It has been especially challenging to secure RNA designations in the most productive forest and rangeland ecosystems where commodity uses have been concentrated. New areas which are proposed to fulfill gaps in the RNA system are evaluated through ongoing National Forest and National Grassland Land Management Planning efforts.

Responsibility for management of RNAs is shared between the National Forest System and Forest Service Research. The Regional Forester, with concurrence of the Research Station Director, has the authority to establish RNAs. In consultation with Forest Supervisors and District Rangers, the Station Director approves research and monitoring activities and management plans for RNAs. However, if the RNA is located within a Congressionally designated Wilderness or National Recreation Area, the Regional Forester approves these activities. The National Forest where the RNA is located has direct responsibility for day-to-day administration

and management of the RNA. Management area direction for RNAs is contained within individual National Forest Land Resource Management Plans.

The overall goal of RNA management is to maintain the full suite of ecological processes associated with the natural communities and conditions for which the RNA was designed to protect. Until recently, the primary course of action was to leave RNAs alone. However, with the recent emphasis on ecosystem management in the Forest Service, more attention is being placed on restoration of natural processes such as fire, and control of invasive alien species which alter the composition and functioning of natural communities. Although it has been a goal to maintain natural processes such as fire in RNAs, the reality is that fire was suppressed in many of these natural areas as well as the rest of the landscape. Today, scientists and land managers are working on restoring the natural fire regime to RNAs as well as other portions of the landscape.

### **Direction on Research Natural Areas in the Forest Service Manual 4063**

Research natural areas are part of a national network of ecological areas designated in perpetuity for research and education and/or to maintain biological diversity on National Forest System lands. Research natural areas are for non-manipulative research, observation, and study. They also may assist in implementing provisions of special acts, such as the Endangered Species Act and the monitoring provisions of the National Forest Management Act.

4063.01 - Authority. The general provisions of the Organic Administration Act of 1897 (16 USC 551) authorize the Secretary of Agriculture to designate research natural areas. Under regulations at 7 CFR 2.42, the Secretary has delegated this authority to the Chief, who, pursuant to 36 CFR 251.23, selects and establishes research natural areas as part of the continuing land and resource management planning process for National Forest System lands (36 CFR 219.25 and FSM 1922).

4063.02 - Objectives. The objectives of establishing research natural areas are to:

1. Preserve a wide spectrum of pristine representative areas that typify important forest, shrubland, grassland, alpine, aquatic, geological, and similar natural situations that have special or unique characteristics of scientific interest and importance that, in combination, form a national network of ecological areas for research, education, and maintenance of biological diversity.
2. Preserve and maintain genetic diversity.
3. Protect against serious environmental disruptions.
4. Serve as reference areas for the study of succession.
5. Provide onsite and extension educational activities.
6. Serve as baseline areas for measuring long-term ecological changes.
7. Serve as control areas for comparing results from manipulative research.
8. Monitor effects of resource management techniques and practices.

4063.03 - Policy. Research Natural Areas may be used only for research, study, observation, monitoring, and those educational activities that maintain unmodified conditions. The selection and establishment of research natural areas within the National Forest System primarily emerges from continuing land and resource management planning and associated environmental analyses (FSM 1920 and FSM 1950). Forest plans shall include analysis of, and recommendations for, any proposed research natural areas establishment.

4063.41 (1) Vegetation Management. If such practices as prescribed burning and livestock grazing are to be used to maintain ecologic conditions, describe those practices, explain their use, and list their proposed scheduling. This shall include the prescription for fire in and near the research natural area, including the use of prescribed fire and the control of natural fire. If parts of the research natural area are assigned for eventual prescribed burning, they shall be described as well as areas assigned for permanent protection from fire. Control of fire within research natural areas shall be by methods that cause the least disturbance. Normally, methods that employ machinery shall not be used. In developing the prescription for fire, consider the role of natural fire in sustaining or managing the vegetation. If fire is prescribed, only part of the research natural area shall be allocated for prescribed burning and part shall be reserved for permanent protection.

### **Examples of Management Direction in RNAs from the Tahoe National Forest Land and Resource Management Plan (1990)**

#### **A16 Research Natural Areas (Tahoe National Forest 1990, p. V-54):**

Complete establishment reports and submit to Chief with recommendation for establishment for areas allocated as recommended Research Natural Areas.

Investigate and evaluate candidate areas for which final selection has not been made. If screening results in selection for Research Natural Area purposes, prepare Establishment Report and submit to Chief for establishment.

Established areas will be managed as Research Natural Areas. In the interim, areas will be managed to protect Research Natural Area Values until designation action is completed or the area has been dropped from further consideration. Unit is - areas

Occurs on those National Forest System lands allocated as candidate or recommended Research Natural Areas and on those areas subsequently established as Research Natural Areas.

#### **P4 Fire Protection - Research Natural Areas (Tahoe National Forest 1990, p. V-193)**

Control of fire within research natural areas shall be by methods that cause the least disturbance. Normally, methods that employ machinery shall not be used. In developing the prescription for fire, consider the role of natural fire in sustaining or managing the vegetation. If fire is prescribed, only part of the research natural area shall be allocated for prescribed burning and part shall be reserved for permanent protection. Exception to non-manipulative standard:

##### a) Suppression Strategy:

1) Contain: Fire intensity Level 1

2) Control: Fire Intensity Levels 2-6

The contain suppression strategy may be approved and extended to Fire intensity Level 2 if an analysis has shown that a fire at this intensity level does not threaten persons or property outside the area, or the uniqueness of the RNA.

##### b) Prevention

Because of low use of this area during periods of high intensity fire potential, prevention within the RNA will be limited; however, prevention of human-caused fires in higher-use areas outside the RNA will be aggressive to prevent fires that would threaten the RNA.

##### c) Fuel treatments

1. Inside RNA

Conduct all fuel treatment activities, including the use of planned prescribed fire, in accordance with the plan developed to manage and protect this area.

2. Outside (adjacent) to RNA

Where activity and natural fuels create a threat of a damaging fire carrying into the RNA, treat to a level that reduces the risk to an acceptable level.

Fire intensity levels (FILs) provide "an expression of fireline intensity, based on typical and/ or calculated flame length of a fire behavior condition. FILs are used in the analysis to reflect the differences in difficulty of suppression and fire effects on natural and cultural resources." (Ref. FSH5109.19 ch40.5 9/85) FPA uses the following FIL categories.

Table F-5. Fire Intensity Level (FIL) Categories

Fire Intensity Level	Flame Length	Burning Index
1	0-2	0-20
2	2.1-4	21-40
3	4.1-6	41-60
4	6.1-8	61-80
5	8.1-12	81-120
6	12 and over	121 and over

***Management of Special Interest Areas***

The following are examples of management direction for specific SIAs on the Tahoe National Forest.

**Botany, aquatic and geologic (Tahoe National Forest 1990, p. III-29):**

Candidate Research Natural Areas (RNA's) needed to complete the botanical target system will be identified. Preferred locations are in wilderness or Limited-use areas. The aquatic and geologic target system is deferred, and known unique areas will be considered and Special Interest Areas (SIAs) recommended on a case-by-case basis. Identified RNA's may be classified for research and educational purposes.

**Cultural Resources (Tahoe National Forest 1990, pp. III-33 to III-34)**

The TNF is charged with managing cultural resources as a nonrenewable resource to maintain their scientific, historical, and social integrity. A number of laws, Executive Orders, and regulations provide direction for the TNF cultural resource management program. These have been codified in FSM 2361 as objectives, policies, and responsibilities. Briefly, the TNF is charged with conducting an inventory of resources located within the Forest, evaluating resources for their eligibility for the National Register of Historic Places, and managing those resources with historical, scientific, or social significance.

The TNF fosters and maintains relationships with the California Office of Historic Preservation, the President's Advisory Council on Historic Preservation, local universities and colleges, Native American tribes and organizations, historical societies, and parties interested in cultural resources of the TNF. The relationship with

the California Office of Historic Preservation and the President's Advisory Council is formal and involves regular consultation as specified by 36 CFR 800. Cultural resource activities are also coordinated with the California State History Plan and the Statewide Archaeological Site Survey.

Consultation with Native American tribes and organizations occurs when Forest management decisions may affect cultural resources of interest or concern to Native Americans. These may be religious areas, archaeological sites or artifacts, or areas traditionally used by California Native Americans. The TNF is directed by the American Indian Religious Freedom Act to ensure that Its policies and procedures do not infringe upon Indian religious freedom.

Cultural resources are especially vulnerable to disturbance; once disturbed or damaged, the information lost is irreplaceable. Vandalism of cultural resources is a major concern. The large amount of private land within the TNF boundary and the ease of access to most areas of the Forest have contributed to an ever-increasing vandalism problem. Bottle and relic collectors have systematically disturbed historical sites Disturbance stems from use of metal detectors and shovels to obtain artifacts; in some cases heavy equipment is used. No specific activities are employed to remedy this situation. A comprehensive program of public education, site enhancement, 'antiquities' signing, and frequent patrolling will be necessary to reduce vandalism.

A major objective of the cultural resources program is identification and protection of cultural resources threatened by Forest projects. This is a base-level management strategy. Higher levels of management that may be initiated in the future include interpretive displays from specific cultural resources for public education and enjoyment, and intensified efforts to obtain scientific information through archaeological studies. The initiation of cultural resource inventories separate from Forest project impetus would increase the rate at which cultural resources are identified and protected. Separate cultural inventories would also help correct a bias in the cultural resource database from forested lands having received a disproportionate share of inventory work.

#### **A15 Special Interest Area (Tahoe National Forest 1990, p. V-179)**

Investigations and Management: Examine, establish, and manage specially designated areas that possess geological (including paleontology), botanical, scenic, zoological, cultural and other features that warrant protection through Special Interest Area classification according to 36 CFR 294 l(a). This includes National Natural Landmark designation. Unit is acres. Occurs on those NFS lands where a significant special interest feature has been identified.

#### **Direction on Special Interest Areas in the Code of Federal Regulations (36 CFR 294.1):**

“Suitable areas of national forest land, other than wilderness or wild areas, which should be managed principally for recreation use may be given special classification as follows: (a) Areas which should be managed principally for recreation use substantially in their natural condition and on which, in the discretion of the officer making the classification, certain other uses may or may not be permitted may be approved and classified by the Chief of the Forest Service or by such officers as he may designate if the particular area is less than 100,000 acres. Areas of 100,000 acres or more will be approved and classified by the Secretary of Agriculture”

## REFERENCES

Tahoe National Forest 1990. Land and resource management plan. USDA Forest Service, Region 5.

USDA Forest Service 2009. Research Natural Areas. Regional Level Datasets. Remote Sensing Lab, Region 5, USDA Forest Service. <http://www.fs.usda.gov/detail/r5/landmanagement/gis/?cid=STELPRDB5327833>