APPENDIX C

WILD AND SCENIC RIVER ELIGIBILITY AND SUITABILITY STUDY

WILD AND SCENIC RIVER SYSTEM

The Wild and Scenic Rivers Act of 1968 (Public Law 90-542) was passed by Congress to preserve riverine systems that contain outstanding features. The law was enacted during an era when many rivers were being dammed or diverted, to balance these developments by ensuring that certain rivers and streams remain in their free-flowing condition. The BLM is mandated to evaluate stream segments on public lands as potential additions to the National Wild and Scenic Rivers System (NWSRS) during the Resource Management Plan (RMP) Process under Section 5(d) of the Act. The NWSRS study guidelines are found in BLM Manual 8351, U.S. Departments of Agriculture and Interior Guidelines, published in *Federal Register* Vol. 7, No.173, September 7, 1982 and in various BLM memoranda and policy statements. Formal designation as a Wild and Scenic River requires Congressional legislation, or designation can be approved by the Secretary of Interior if nominated by the Governor of the state containing the river segment. The following discussion provides information on how BLM considered waterways for potential inclusion in the NWSRS.

The NWSRS study process has three distinct steps:

- Determine what rivers or river segments are eligible for NWSRS designation
- Determine the potential classification of eligible river segments as wild, scenic, recreational or any combination thereof
- Conduct a suitability study to determine if the river segments are suitable for designation as components of the NWSRS

This report documents all three steps of the process for the streams in the planning area.

ELIGIBILITY OF KING RANGE STREAMS

Identification

A variety of sources were reviewed to identify waterways which could have potential for wild and scenic river designation. They include the Nationwide Rivers Inventory List, the Outstanding Rivers List compiled by American Rivers, Inc., river segments identified by state or local government, river segments identified by the public during formulation of this Resource Management Plan, and river segments identified by the planning team as having potential to meet Wild and Scenic River eligibility requirements.

The Wild and Scenic Rivers Act defines a river as a "flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes."

Thirty-five stream segments totaling 103 miles within or immediately adjacent to the KRNCA boundaries were identified for review. Some streams were divided into segments, based on land status or classification criteria (see below).These rivers are listed in Table 1: Wild and Scenic River Inventory, and shown on Figure 3-2.

Eligibility Determination

Each identified river segment was evaluated to determine whether it is eligible for inclusion in the NWSRS. To be eligible, a river segment must be "free flowing" and must possess at least one "outstandingly remarkable value" (ORV). These values include:

- Scenic
- Recreational
- Geological
- Fish
- Wildlife
- Historical
- Cultural
- Ecological
- Riparian
- Botanical
- Hydrological
- Scientific

To be considered 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. Only one such value is needed for eligibility. All values should be directly river related, meaning they should:

- Be located in the river or on its immediate shorelands (generally within ¼ mile on either side of the river);
- Contribute substantially to the functioning of the river ecosystem; and/or
- Owe their location or existence to the presence of the river.

These are the only factors considered in determining the eligibility of a river segment. All other relevant factors are considered in determining suitability. A river need not be navigable by watercraft to be eligible. For purposes of eligibility determination, the volume of flow is sufficient if it is enough to maintain the outstandingly remarkable value(s) identified within the segment.

The KRNCA has long been recognized as having significant values as a wild, rugged, coastal landscape. Approximately 100 inches of annual rainfall contributes to the abundance of rivers and streams that are integral to the values of the area. The stream systems can be generally categorized into two groups based on their geology and other watershed characteristics:

1. West Slope Streams: West slope stream segments include many short, steep watersheds running directly to the ocean. None of the watersheds penetrate further inland than the spine of the King Crest which extends no further than three miles from the ocean. The west slope offers a backcountry setting of rugged coastal mountains and undeveloped coastline unique in California. River segments pass through a mosaic of vegetation types including Douglas fir, tanoak, and chaparral. Natural landslides

from intense winter storms are common in these watersheds. The lower segments of these streams are focal points for primitive backcountry recreational activities such as hiking, backpacking, and equestrian use on the Lost Coast Trail, one of the few coastal backpacking trails in the U.S. The entire west slope has received a Class "A" scenery rating in the BLM's visual resource management program inventory due to its wild, rugged nature and outstanding ocean views. A number of significant archaeological sites exist at creek mouths and most of the perennial streams include spawning and rearing habitat for federally listed threatened steelhead populations.

2. East Slope Streams: East slope watersheds, although still steep, are generally more extensive with longer, lower gradient stream channels. All east slope streams feed into the larger Mattole River watershed, which envelops the eastern side of the KRNCA as it flows northward, emptying into the ocean near Petrolia. The Mattole is one of the few major rivers in California that has no dams along its entire length. It is a major spawning stream for steelhead trout and Coho and Chinook salmon, all federally listed as threatened. Like most rivers in northwest California, the Mattole watershed was extensively logged from the 1940s-70s, increasing erosion; the resulting sedimentation has severely impacted fishery values. The east slope tributaries within the KRNCA contain some of the remaining habitat most suitable for anadromous fish spawning and rearing.

Vegetation is dominated by Douglas fir and tanoak forest with chaparral on the upper slopes, and extensive old-growth forests along the major drainages. As a result, the watersheds contain important wildlife values including verified activity centers for the northern spotted owl, also federally listed as threatened. Other values include some rare plants, archaeological sites, and scenic and recreational values.

Table 1 summarizes the eligibility evaluation of all identified river segments. The table includes information on the length of stream segments studied, BLM acreage (including a ¼ mile corridor on either side of the stream), indicates if outstandingly remarkable value(s) are present, and identifies the potential classification of each eligible segment. Table 2 gives more detailed descriptions of each eligible river segment's location and a brief narrative of its outstandingly remarkable value(s).

CLASSIFICATION

The Wild and Scenic Rivers Act and subsequent interagency guidelines provide the following direction for establishing preliminary classifications for eligible rivers:

Wild Rivers: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic Rivers: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational Rivers: Those rivers or sections of rivers 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.

TABLE1: WILD AND SCENIC RIVER INVENTORY

River Name/Segment	Reason for Consideration (1)	BLM Length (mi.)	Other Length (mi.)	Free Flowing	ORV (2)	Eligibility	Preliminary Classification	BLM Acres	Percent of Corridor (%)
Bear Creek, Main Stem	C	2.1	5.5	yes	E,H	Eligible	Wild	568.7	27.8
Bear Trap Creek	C	2.4	0.8	yes	A	Noneligible		797.5	75.6
Big Creek	C	4.4	0.0	yes	E	Eligible	Wild	584.0	100.0
Big Finley Creek	C	3.1	1.9	yes	E,G	Eligible	Wild	1141.5	61.7
Big Flat Creek	C	11.0	0.0	yes	B,C,E,G	Eligible	Wild	948.8	99.9
Bridge Creek	C	2.7	4.0	yes	A	Noneligible		899.4	40.6
Buck Creek	C	1.7	0.0	yes	B,C	Eligible	Wild	282.5	100.0
Chaparral Creek	C	0.5	0.5	yes	A	Noneligible		168.7	54.1
Chemise Creek	C	1.3	0.0	yes	A	Noneligible		209.0	100.0
Cooskie Creek	C	0.9	4.5	yes	B,C,E,G	Eligible	Wild	322.9	16.9
Fourmile Creek	C	4.3	1.3	yes	B,C,E,G,H	Eligible	Wild	1399.0	77.2
Gitchell Creek	C	4.0	0.0	yes	B,C,E	Eligible	Wild	641.3	100.0
Honeydew Creek	C	14.8	4.0	yes	E,H	Eligible	Wild	4406.7	78.7
Horse Mountain Creek	C	4.1	0.0	yes	B,C,E	Eligible	Wild	598.9	100.0
Humboldt Creek	C	0.2	1.1	yes	F	Noneligible		51.5	14.6
Indian Creek	C	1.2	1.4	yes	F,G	Eligible	Wild	424.3	45.5
Kinsey Creek	C	1.6	0.0	yes	B,C	Eligible	Wild	230.5	100.0
Little Finley Creek	C	1.8	1.2	yes	E,F,G	Eligible	Wild	569.2	59.7
Mattole River	A,B	4.0	65.7	yes	B,C,E,F,G,H	Eligible	Scenic	406.3	5.8
McKee Creek	C	1.8	0.0	yes	A	Noneligible		209.1	100.0
Mill Creek	C	2.2	0.0	yes	E	Eligible	Scenic	609.9	98.2
Nooning Creek	C	1.8	0.0	yes	E	Eligible	Scenic	595.7	100.0
North Fork Bear Creek	C	4.4	1.8	yes	E,H	Eligible	Scenic	1771.0	71.3
Oat Creek	C	1.8	0.0	yes	B,C,E	Eligible	Wild	283.6	100.0
Randall Creek	C	2.0	0.0	yes	B,C,E,G	Eligible	Wild	321.6	100.0
Sea Lion Gulch	C	1.3	0.0	yes	B,C	Eligible	Wild	228.3	100.0
Shipman Creek	C	4.2	0.0	yes	B,C,E,G	Eligible	Wild	658.9	100.0
South Fork Bear Creek (A)	C	1.4	1.3	yes	E,F,G,H	Eligible	Recreational	492.9	50.7
South Fork Bear Creek (B)	C	7.6	0.5	yes	E,F,G,H	Eligible	Scenic	2408.9	93.9
Spanish Creek	C	2.4	0.0	yes	B,C,E,G	Eligible	Wild	323.1	100.0
Squaw Creek	C	7.5	21.5	yes	E	Eligible	Wild	2485.9	25.9
Stansberry Creek	C	2.4	0.0	yes	A	Noneligible		76.9	100.0
Telegraph Creek	C	0.7	3.2	yes	E	Eligible	Scenic	359.9	18.4
Whale Gulch	C	3.1	1.8	yes	B,C,F	Eligible	Scenic	476.0	64.0
Woods Creek	C	1.5	1.0	yes	E,H	Eligible	Wild	521.6	60.3

(1) A – National Rivers Inventory B – 1988 Outstanding Rivers List, American Rivers, Inc. C – Potential eligible rivers inventory, King Range planning team D – Other	(2) A – Non-existent B – Scenic C – Recreational D – Geological E – Fish and Wildlife F – Historical G – Cultural H – Other (including Ecological)
(3) Shoreline and adjacent lands within ¼ mile of the river segment not to exceed 320 acres per mile measured from the ordinary high water mark on both sides of the river.	

TABLE 2: ELIGIBLE KRNCA RIVER SEGMENTS

River Segment	Segment Description	Description of Outstanding Values
Bear Creek, Main Stem	From confluence with North Fork and South Fork in sec. 9, T4S, R1E to private land boundary in south ½ or sec. 11, T4S, R1E. Includes all perennial tributaries.	Contains spawning and rearing habitat for federally listed steelhead and Coho and Chinook salmon.
Bear Creek, North Fork	From its headwaters in secs. 6 and 7, T4S, R1E to confluence with main stem in sec. 9. Includes all perennial tributaries.	Contains spawning and rearing habitat for federally listed steelhead and Coho and Chinook salmon. Contains verified activity center for federally listed threatened northern spotted owl. Contains *Usnea longissima* (rare lichen) listed by CA Lichen Society as a Survey and Manage species.
Bear Creek, South Fork (segment A)	From its headwaters just east of Wailaki Campground (unsurveyed section) to Shelter Cove road.	Contains spawning and rearing habitat for federally listed steelhead and Coho and Chinook salmon. Contains many significant prehistoric and historic sites. Contains *Usnea longissima* (rare lichen) listed by CA Lichen Society as a Survey and Manage species.
Bear Creek, South Fork (segment B)	From Shelter Cove road to confluence with main stem in sec. 9, T4S, R1E. Includes all perennial tributaries.	Contains spawning and rearing habitat for federally listed steelhead and Coho and Chinook salmon. Contains verified activity center for federally listed threatened northern spotted owl. Contains many significant prehistoric and historic sites. Contains *Usnea longissima* (rare lichen) listed by CA Lichen Society as a Survey and Manage species.
Big Creek	From its headwaters in sec. 28, T3S, R1W to the Pacific Ocean. Includes all perennial tributaries.	Scenic class "A" rating. Part of unique coastal backcountry backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead.
Big Finley Creek	From its headwaters in sec. 35, T4S, R1E to its junction with the Mattole River. Includes all perennial tributaries.	Contains spawning and rearing habitat for federally listed threatened steelhead. Contains verified activity center for federally listed threatened northern spotted owl. Contains several significant prehistoric sites.

River Segment	Segment Description	Description of Outstanding Values
Big Flat Creek	North Fork from its headwaters in sec. 35, T3S, R1W and Main fork from its headwaters in sec. 36, T3S, R1W to Pacific Ocean. Includes all perennial tributaries.	Scenic class "A" rating. Part of unique coastal backcountry backpacking and camping area. Popular hiking trail extends along 2 miles of creek. Contains spawning and rearing habitat for federally listed threatened steelhead. Contains several large, significant prehistoric sites near mouth of creek.
Buck Creek	From its headwaters in sec. 18, T4S, R1E to the Pacific Ocean.	Scenic class "A" rating. Part of unique coastal backcountry backpacking and camping area. Popular hiking trail near creek connects King Crest Trail with beach.
Cooskie Creek	From intersection with Chaparral Creek in sec. 9, T3S, R2W to the Pacific Ocean.	Scenic class "A" rating. Provides important upland trail access and camping. Contains spawning and rearing habitat for federally listed threatened steelhead. Contains significant prehistoric sites.
Fourmile Creek	From its headwaters in sec. 27, T2S, R2W to Pacific Ocean.	Scenery class "A" rating. Part of unique coastal backcountry backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead. Contains significant prehistoric site.
Gitchell Creek	From its headwaters in sec. 17, T4S, R1E to the Pacific Ocean. Includes all perennial tributaries.	Scenery class "A" rating. Part of unique coastal backcountry backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead.
Honeydew Creek	Includes West Fork, East Fork, and Main Fork from headwaters in sec. 26, T3S, R1W to junction with Mattole River. Includes all perennial tributaries.	Contains spawning and rearing habitat for federally listed threatened steelhead and Coho and Chinook salmon. Contains verified activity center for federally listed threatened northern spotted owl.
Horse Mountain Creek	From its headwaters in sec. 28, T4S, R1E to the Pacific Ocean. Includes all perennial tributaries.	Scenery Class "A" rating. Part of unique coastal backcountry backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead. Contains verified activity center for federally listed threatened northern spotted owl.

River Segment	Segment Description	Description of Outstanding Values
Humboldt Creek	From its headwaters in sec. 9, T5S, R1E in Shelter Cove to the Pacific Ocean.	One pre-historic site of unknown value.
Indian Creek	From its headwaters in sec. 27, T2S, R2W to its junction with the Mattole River. Includes all perennial tributaries.	Contains significant prehistoric and historic sites.
Kinsey Creek	From its headwaters in sec. 20, T3S, R1W to the Pacific Ocean. Includes all perennial tributaries.	Scenery Class "A" rating. Part of unique coastal backcountry backpacking and camping area.
Little Finley Creek	From its headwaters in sec. 14, T4S, R1E to its junction with the Mattole River. Includes all perennial tributaries.	Contains spawning and rearing habitat for federally listed steelhead. Contains verified activity center for federally listed threatened northern spotted owl. Contains significant prehistoric and historic sites.
Mattole River	From private land boundary between sec. 8 and 17, T2S, R2W to the Pacific Ocean.	Major recreation site. Campground, hunting, and wildlife viewing area. Contains spawning and rearing habitat for federally listed threatened steelhead and Coho and Chinook salmon. Estuary contains endangered and rare plants including federally listed endangered *Layia carnosa*, and BLM sensitive (1B) *Astragalus pynchnostachys*, *Sidalcea malachroicles*, *Castilleja affinis littoralis*, and *Gilia millifoliata*.
Mill Creek	From its headwaters in sec. 21, T2S, R2W to its junction with the Mattole River. Includes all perennial tributaries.	Contains verified activity center for federally listed threatened northern spotted owl. Contains spawning and rearing habitat for federally listed threatened steelhead and Coho salmon. Only known Coho population along the lower Mattole watershed.
Nooning Creek	From its headwaters in sec. 1, T5S, R1E to its junction with the Mattole River. Includes all perennial tributaries.	Contains spawning and rearing habitat for federally listed threatened steelhead and Coho and Chinook salmon.
Oat Creek	From its headwaters in sec. 19, T3S, R1W to the Pacific Ocean. Includes all perennial tributaries.	Scenery class "A" rating. Part of unique coastal backcountry backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead.

River Segment	Segment Description	Description of Outstanding Values
Randall Creek	From its headwaters in sec. 13, T3S, R2W to the Pacific Ocean.	Scenery class "A" rating. Part of unique coastal primitive backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead.
Sea Lion Gulch	From its headwaters in sec. 32, T2S, R2W to the Pacific Ocean.	Scenery class "A" rating. Part of unique coastal primitive backpacking and camping area.
Shipman Creek	From its headwaters in sec. 1, T4S, R1W to the Pacific Ocean. Includes all perennial tributaries.	Scenery class "A" rating. Part of unique coastal primitive backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead.
Spanish Creek	From its headwaters in sec. 18, T3S, R1W to the Pacific Ocean. Includes all perennial tributaries.	Scenery class "A" rating. Part of unique coastal primitive backpacking and camping area. Contains spawning and rearing habitat for federally listed threatened steelhead.
Squaw Creek	From its headwaters in sec. 21, T3S, R1W to private land boundary in the NW ¼ of section 8, T3S, R1W. Includes all perennial tributaries within this segment (not counting tributaries west of Little Moorehead Ridge.	Contains verified activity center for federally listed threatened northern spotted owl. Contains spawning and rearing habitat for federally listed threatened steelhead and Chinook salmon.
Telegraph Creek	From its headwaters in sec. 11, T5S, R1E to the Pacific Ocean. Includes all perennial tributaries.	Contains spawning and rearing habitat for the federally listed threatened steelhead.
Whale Gulch	From its headwaters just north of the Humboldt Co./Mendocino Co. line (unsurveyed area) to the Pacific Ocean. Includes all perennial tributaries.	Scenery class "A" rating. Part of unique coastal primitive backpacking and camping area.
Woods Creek	From its headwaters in sec. 15, T3S, R1W to its confluence with the Mattole River.	Contains verified activity center for federally listed threatened northern spotted owl. Contains *Usnea longissima* (rare lichen) listed by CA Lichen Society as a Survey and Manage Species.

SUITABILITY OF KING RANGE STREAMS

Twenty-eight river segments displayed in Table 1 were found to be eligible for inclusion into the NWSRS. Section 4(a) of the Wild and Scenic River Act mandates that all rivers found eligible as potential additions to the NWSRS be studied as to their suitability for such a designation. The purpose of this study is to provide information upon which the President of the United States can base his recommendation and Congress can make a decision. The study report describes the characteristics that do or do not make the stream segment a worthy addition to the system, the current status of land ownership and use in the area, the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the system, and several other factors. The suitability study is designed to answer these questions:

1. Should the river's free-flowing character, water quality, and ORVs be protected, or are one or more other uses important enough to warrant doing otherwise?
2. Will the river's free-flowing character, water quality, and ORVs be protected through designation? Is it the best method for protecting the river corridor? (In answering these questions, the benefits and impacts of wild and scenic river designation must be evaluated, and alternative protection methods considered.)
3. Is there a demonstrated commitment to protect the river by any nonfederal entities that may be partially responsible for implementing protective management?

Pursuant to Sections 4(a) and 5(c) of the Wild and Scenic Rivers Act, the following factors were considered and evaluated as a basis for the suitability determination for each river:

1. Characteristics that do or do not make the area a worthy addition to the NWSRS.
2. The current status of land ownership, minerals (surface and subsurface), and use in the area, including the amount of private land involved and associated or incompatible uses.
3. The reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the NWSRS. Historical or existing rights which could be adversely affected.
4. The federal agency that will administer the area should it be added to the NWSRS.
5. The estimated cost to the United States of acquiring necessary lands and interests in lands and of administering the area should it be added to the NWSRS.
6. A determination of the degree to which the state or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the NWSRS.
7. An evaluation of the adequacy of local zoning and other land use controls in protecting the river's ORVs by preventing incompatible development.
8. Federal, public, state, local, or other interests in designation or non-designation of the river, including the extent to which the administration of the river, including the cost thereof, may be shared by state, local, or other agencies and individuals. Support or opposition to the designation.
9. The consistency of designation with other agency plans, programs, or policies and in meeting regional objectives.
10. The contribution to river system or basin integrity.

11. The ability of BLM to manage the river segments under designation, or ability to protect the river area other than Wild and Scenic designation.
12. The potential for water resources development.

1. Characteristics that Do or Do Not Make the River Segments Worthy Additions to the NWSRS

The stream segments in the KRNCA are located within the California Coast Range Physiographic Province. This province was used as a basis to determine if the study segments possess characteristics of at least regional significance that would make them worthy additions to the NWSRS. The Coast Range Physiographic Province contains the highest rainfall and density of streams in California. Also, many of these streams provide habitat for anadromous fisheries. There are currently five designated Wild and Scenic Rivers within the province. They include portions of the Smith River, Klamath River, Van Duzen River, the Main Stem and Middle Fork of the Eel River, and the entire South Fork Eel River. This amounts to a total of approximately 150 miles of designated Wild and Scenic River segments in the region. Many of the eligible river segments within the KRNCA have anadromous fisheries and outstandingly remarkable scenic and recreational values. However, when considered in the context of other streams in the region, which also contain these same values to varying levels, the BLM planning team found that some river segments provided average or low quality values in this regional context and therefore were not considered to be worthy additions to the system.

Eight river segments on seven streams in the KRNCA possess characteristics that make them worthy additions to the NWSRS. These include the Mattole River, Mill Creek, Honeydew Creek, South Fork Bear Creek (Segments A and B), Big Flat Creek, Big Creek, and Gitchell Creek, totaling 40.5 miles of river corridor on BLM public lands. These eight segments are high quality representatives of the outstandingly remarkable values when considered in the regional context.

Mattole River

The Mattole River is listed in the National Rivers Inventory and the 1988 Outstanding Rivers List published by American Rivers, Inc. The Mattole River estuary and associated beach is a focal point for recreation visitors to the Lost Coast Region and is one of the most popular sites in the KRNCA. The river carves a wide opening in the coastal mountains and offers a magnificent setting for a variety of recreational opportunities including camping, wildlife viewing and beach access. Visitors explore the estuary and beach and view the many bird species who seek refuge in the area's sheltered waters. Excellent spawning and rearing habitat exists for federally listed threatened steelhead and Coho and Chinook salmon. The estuary provides critical habitat for smolting salmon as they transition from the river to a salt water environment. The adjoining dune system contains the federally listed endangered *Layia carnosa* and other BLM sensitive rare plant species.

This significant fishery also historically attracted native Americans to the estuary, and the area contains numerous cultural sites and has been designated as an Area of Critical Environmental Concern (ACEC) to protect these values. The original human occupants of the Mattole River watershed were the Mattole and the Sinkyone. The Mattole occupied the lower watershed, including the estuary area, and the Sinkyone occupied the upper watershed. The first known Europeans to explore the area arrived in 1854, and friction between these new settlers and the native people was evident by 1858. In the span of eleven

years, the native cultures that occupied the area for hundreds or thousands of years were completely decimated. Archaeological sites are the only remaining evidence of this culture, making them especially significant.

Mill Creek

Much of the Mill Creek watershed was acquired by BLM in 1997 through a land exchange. The stream corridor contains a verified activity center for federally listed threatened northern spotted owl. Mill Creek is also an important cold water tributary to the Mattole River that provides critical spawning and rearing habitat for federally listed threatened steelhead and Coho salmon. The creek hosts the only known Coho population along the lower Mattole watershed. Much of the western part of the watershed contains a significant remnant stand of old-growth Douglas fir known locally as the "Mill Creek Forest."

Honeydew Creek

Honeydew Creek is the fourth largest tributary to the Mattole River. The Northwest Forest Plan (NWFP) identifies the watershed as a part of the King Range Late-Successional Reserve and as a Tier-1 Key Watershed (USDA, USDI 1994). Much of the original old-growth forest in the Mattole watershed was heavily logged with the advent of tractor logging after World War II. In Honeydew Creek, however, the extreme topography and unstable slopes prevented logging in much of the upper watershed. Therefore, the upper watershed is one of the few major reaches of stream within the Mattole that has been relatively unaltered by humans. Public lands within the watershed are 93% forested. Most late successional forest stands occur near stream channels; Honeydew Creek contains the second largest acreage of this forest in the Mattole watershed (MRC 1989). Verified activity centers for the federally listed threatened northern spotted owl exist within the quarter-mile corridor of Honeydew Creek. The northern spotted owl requires habitat features provided by late-seral or old-growth forests, such as closed canopy, multiple-layer, open understory, coolness, high-humidity, and structural complexity, which are present in the Honeydew Creek watershed.

Honeydew Creek also contains anadromous fisheries, including the federally listed threatened steelhead and Coho and Chinook salmon. With regard to anadromous fish habitats, Honeydew Creek may be the most intact watershed in the Mattole River basin. The lower four miles of the main stem is rather unique in the mid-Mattole basin, contained in a broad U-shaped alluvial valley with a gradient of 2% or less. Almost all other stream channels in the watershed have a gradient of 5-15% or greater. Recent research from the Oregon Cascades and Oregon Coast Range shows that flatter reaches of streams, such as the lower main stem, tend to be the most productive areas for fish and other aquatic organisms (MRC 1995).

The river corridor has other outstandingly remarkable ecological values associated with Survey and Manage Species from the NWFP Record of Decision (ROD). Seven ROD –listed species were identified in the Honeydew Creek corridor that require protection "until they can be thoroughly surveyed and site-specific measures prescribed," including a rare truffle, *Choriomyces venosus* (NWFP ROD 1997).

South Fork Bear Creek

The South Fork of Bear Creek is the largest watershed on the eastern slope of the King Range. The creek originates in the Chemise Mountain area, and flows northward between Paradise Ridge and the

King Crest. For the purpose of the evaluation, South Fork Bear Creek was divided into Segments A and B, separated by Shelter Cove Road, with Segment A to the south (upstream) and Segment B to the north (downstream). Segment A contains outstandingly remarkable cultural values while Segment B represents a majority of the spawning and/or nesting habitat for sensitive fish and wildlife species. Furthermore, Segment A has trails connecting from Nadelos and Wailaki campgrounds and Hidden Valley trailhead, which offer outstanding scenic, recreational, and interpretive opportunities on the east slope of the King Range.

While most of the South Fork of Bear Creek runs through very steep and narrow drainages, the terrain on the upper South Fork (Segment A) is relatively gentle, with some flood plain development, openings in the forest canopy, and large wet meadows in the Hidden Valley area. It contains significant cultural values including historic pioneer wagon trails and local Native American seasonal harvesting grounds, considered eligible for inclusion on the National Register of Historic Places. The original inhabitants in this watershed belonged to the Sinkyone tribe, the southernmost people to share the northwest salmon culture. Archaeologists have identified several cultural sites along the upper reaches of South Fork Bear Creek, from the headwaters area north to the vicinity near present-day Shelter Cove Road. These archaeological sites indicate long periods of continuous use.

South Fork Bear Creek, especially Segment B, provides excellent spawning and rearing habitat for the federally listed threatened steelhead and Coho and Chinook salmon. Chinook salmon spawn during the late fall, while coho salmon and steelhead spawn during the winter. Much of the watershed was logged in the mid-twentieth century, but restoration efforts and natural recovery over the last several decades have greatly improved fishery habitat. Bear Creek is the third largest tributary to the Mattole River and contributes significant flows to the main river during the late summer when water volume from the upper Mattole reaches a seasonal low. During the fall of 2002, Bear Creek continued to flow even after the main stem of the upper Mattole River ran dry.

Big Flat Creek

Big Flat Creek is located on the western slope of the King Range approximately 8.5 miles north of Shelter Cove. The entire watershed is within the King Range Wilderness Study Area (WSA). Big Flat Creek lies directly beneath the sentinel of 4,087 foot King Peak, carving its way through a deep boulder strewn canyon before flowing across a broad alluvial plain at the coast. The creek corridor and mouth make up the largest relatively flat area in the King Range backcountry and are a focal point for recreation visitors to the Lost Coast, who often camp at the creek mouth to enjoy the spectacular combination of creek, ocean, and mountains. Alluvial deposits from the creek also created a "point break" just offshore, making Big Flat a prominent surfing destination.

Rattlesnake Ridge Trail traverses the canyon of Big Flat Creek as it climbs from Big Flat to the King Crest. The forested fern-lined canyon trail offers a welcome contrast to the windswept Lost Coast Trail. It is the only trail in the King Range backcountry offering visitors an opportunity to explore a creek corridor.

Big Flat Creek contains anadromous fisheries, consisting primarily of federally listed threatened steelhead Trout. Preliminary information suggests that Big Flat Creek and other West Slope creeks of the King Range may support a subspecies of steelhead that have adapted to the area's difficult habitat conditions,

i.e., more tolerant of shallow pools and high water temperatures. A biological assessment completed in 2000 showed that estimates of juvenile steelhead trout for Big Flat Creek and Big Creek (described below) were greater than all other west slope streams included in the study (Engle and Duffy 2000).

Big Creek

Big Creek is also located on the western slope of the King Range, approximately 11.5 miles north of Shelter Cove. In addition to high juvenile steelhead populations (see above), Big Creek has outstandingly remarkable scenic and recreational values and a popular campsite for backpackers along the Lost Coast Trail. Big Creek covers the second largest drainage area on the KRNCA west slope, and a large number of natural landslides have created a wide gravel channel in the lower watershed. Therefore, the creek corridor is easy to explore and offers hikers dramatic vistas of the King Crest, rising over 3,000 feet at the head of the canyon.

Gitchell Creek

Gitchell Creek is also located on the west slope, approximately 3.5 miles north of Shelter Cove. Gitchell Creek supports a steelhead fishery in its highly scenic corridor, with alternating deep pools and boulder strewn riffles bordered by dense alder stands. The mouth of the creek is a popular overnight camping destination, and the creek corridor offers off-trail hiking and exploring opportunities. Gitchell Creek contains no individual stand-out value when compared to other streams along the Lost Coast, but instead combines a number of outstandingly remarkable values to make it an exemplary example of west slope streams.

Additional River Segments

As illustrated in Table 1, twenty other river segments in the KRNCA meet minimum eligibility criteria for inclusion in the NWSRS. The streams were grouped by location (east vs. west slope) for descriptive purposes.

Most west slope streams have anadromous fisheries (except Buck Creek, Kinsey Creek, Whale Gulch, and Sea Lion Gulch). Based on their location on the dramatic coastal slope of the King Range, all have outstandingly remarkable scenic and recreational values. They have "Class A" scenery ratings and most are popular camping destinations along the Lost Coast Trail. In addition to these values, Cooskie Creek, Fourmile Creek, Randall Creek, Shipman Creek, Whale Gulch Creek, and Spanish Creek contain known prehistoric cultural sites. Finally, Horse Mountain Creek includes a verified activity center for the federally listed northern spotted owl. Although these are significant values that meet eligibility criteria, the study team has determined that the values are not at a level that would make these segments worthy additions to the NWSRS when viewed in the context of the KRNCA as a whole, or within the California Coastal Range Physiographic Province.

On the east slope of the King Range, Big and Little Finley creeks, the North Fork and main stem of Bear Creek, Nooning Creek, Squaw Creek, and Woods Creek were noted for the presence of anadromous fisheries. Indian Creek and Little Finley Creek also have known stream-related historical sites. Most of these watersheds have been substantially modified through past logging activities and the associated construction of roads, landings, and skid trails. The resulting landscapes would not broaden the

representation of key ecosystems within the system. Although the river segments found suitable have also been impacted from past logging, the impacts are not as extensive as has occurred in these other watersheds.

In summary, although these values meet the minimum eligibility criteria, when viewed in the context of the California Coastal Range Physiographic Province, the study team determined that these river segments were not of a level of quality to make them worthy additions to the NWSRS.

2. Status of Land Ownership and Current Use

Mattole River

Only 5.2% of the Mattole River crosses public land, with most of the remainder in private ownership. A small portion of the Mattole River passing through BLM land near the King Range Administrative Site was evaluated for Wild and Scenic River designation in the Arcata Resource Management Plan (1989). Therefore, evaluation for the King Range Wild and Scenic River suitability study focuses on the remaining public land portion, known as the Mattole River mouth and estuary. The length of the Mattole River mouth and estuary study segment is approximately 4.0 miles. On this segment, 84% of the river is in BLM ownership and 16% is owned by the California State Lands Commission, yet the entire segment is managed by BLM. The State Lands Commission has granted BLM the authority to administer "all that portion of the State-owned bed of the Mattole River and the Mattole River Estuary" by Permit No. PRC 5633.9. A local rancher maintains a road through BLM lands and a low-water crossing to access his private property on the north side of the estuary. This rancher also leases public lands within the corridor for grazing. These uses do not require improvements that would conflict with Wild and Scenic River Designation. In 1981, the BLM King Range Extension Plan designated the Mattole River mouth and estuary an Area of Critical Environmental Concern (ACEC) for the protection of the estuary, archaeological sites and native sand dune ecosystems on Mattole Beach. This ACEC designation complements Wild and Scenic River designation.

The area just south of the estuary is one of the most popular recreation sites in the KRNCA, serving as a coastal/estuary access point, campground, and trailhead. This use is compatible with designation.

Mill Creek

Much of the Mill Creek watershed, including the entire length of the study segment, was purchased by the BLM in 1997. Protection of this cold water tributary was a primary purpose for acquisition of the Mill Creek parcel and was supported by the State of California and surrounding property owners. The watershed is proposed for ACEC designation in this Plan. Public use is low for dispersed day-use recreation activities. All present and anticipated uses are compatible with designation.

Honeydew Creek

Honeydew Creek drains the eastern slope of King Peak and exits the KRNCA before crossing Wilder Ridge Road. It then re-enters BLM public land for a short segment near the Honeydew Creek Campground. Approximately 82.5% of the river segment under evaluation is on BLM public land. The remaining 2.5 miles crosses private ranch lands with a couple of scattered residences. Minor use of the creek for livestock watering occurs on private lands on the lower main stem and East Fork. Current

grazing is limited to small-scale operations on individual ownerships; there are no active grazing permits on public lands in the watershed. One campground located on the lower main stem of Honeydew Creek receives moderate use for camping, picnicking, and swimming. No anticipated public or private land uses within the corridor would conflict with Wild and Scenic River designation.

Other East Slope Creeks

All east slope streams determined to be eligible for Wild and Scenic River designation have river segments crossing private lands except Nooning Creek. Those located 60% or more on BLM public land include Big Finley Creek, Woods Creek, Whale Gulch, and North Fork Bear Creek. Those located less than 60% on BLM public land are Little Finley Creek, Indian Creek, Squaw Creek, and Bear Creek's main stem. Private lands in the creek corridors are used for ranching and rural low-density residential use. No anticipated uses on private or public lands would conflict with Wild and Scenic River designation.

Bear Creek

The South Fork of Bear Creek is located mostly within the KRNCA boundary, although 49% (1.3 miles) of Segment A and 18% (1.7 miles) of Segment B pass through private property. Two existing power line rights-of-way cross BLM lands along Shelter Cove Road and Chemise Mountain Road. Also, Chemise Mountain Road parallels Segment A, and provides access to two BLM campgrounds (Wailaki and Nadelos). This combination of development has resulted in a different classification (Recreational) for Segment A, but is not incompatible with designation. There are no current uses on private lands in the corridor that are incompatible with Wild and Scenic River designation for both segments.

Other West Slope Creeks

Big Creek, Big Flat Creek, Buck Creek, Horse Mountain Creek, Kinsey Creek, Oat Creek, Randall Creek, Sea Lion Gulch, Spanish Creek, and Gitchell Creek are almost completely under public ownership, with the exception of small private parcels in the corridor at Big Flat Creek and Fourmile Creek. Currently, all of these river segments are protected under the BLM's Interim Management Policy for Lands under Wilderness Review, pending a final decision by Congress regarding Wilderness designation. No proposed land uses would conflict with Wild and Scenic River management.

Sixty-eight percent of Fourmile Creek is located on BLM public land. The remainder of the watershed is on lands used for low density residential use or ranching. This use would be compatible with designation.

Less than 14% of Humboldt Creek and 17% of Telegraph Creek are located on public lands. The remainders of these corridors are in the Shelter Cove Subdivision, zoned for residential development. BLM has authorized one right-of-way for a water facility and pipeline in the Telegraph Creek corridor for Shelter Cove. The community uses the creek as its main water supply. In the long term, a large number of residences could be constructed in these watersheds. This level of development would likely be incompatible with Wild and Scenic River designation. In addition, only 16% of Cooskie Creek is located on public land. BLM Manual 8351.33A(2) entitled "Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation and Management" states: "In situations where there is limited public land (shoreline and adjacent land) administered by the BLM within an identified river study area, it

may be difficult to ensure those identified outstandingly remarkable values could be properly maintained and afforded adequate management protection over time. Accordingly, for those situations where the BLM is unable to protect or maintain any identified outstandingly remarkable values, or through other mechanisms (existing or potential), river segments may be determined suitable only if the entity with land use planning responsibility supports the finding and commits to assisting the BLM in protecting the identified river values. An alternative method to consider these segments is for state, local governments or private citizens to initiate efforts under section 2(a)(ii), or a joint study under section 5C of the Wild and Scenic Rivers Act." Humboldt County has land use planning responsibility for the private lands on these segments. The BLM has not approached the county regarding their support for Wild and Scenic River designation of these three segments, since the study team determined that they are not worthy additions to the system.

3. Potential Uses of the Land to be Enhanced or Curtailed by Designation/ Historical or Existing Rights That Could Be Adversely Affected, including Water Resources Projects

Public lands in the King Range are either Administratively Withdrawn or designated as a Late-Successional Reserve (LSR) in the Northwest Forest Plan ROD (1994). This land allocation conveys a specific set of stipulations regarding management and protection of old-growth forest dependent wildlife and fishery habitats. Also, all of the corridors include Riparian Reserve designations under this same plan. All west slope streams (except Telegraph and Humboldt Creek), and Honeydew Creek are located in the King Range WSA, which is being managed to protect wilderness character pending consideration for wilderness designation by Congress. All of these management designations would be enhanced by Wild and Scenic River designation.

Mattole River

The Mattole River mouth and estuary is a popular recreation site for local residents and visitors to the King Range. The Mattole River Campground is BLM's only developed campsite on the KRNCA coastline and is located within the ¼ mile river corridor under evaluation. BLM has proposed improving this campground in the future to protect resource values and enhance the quality of the visitor experience. This development will be modest and would complement Wild and Scenic River designation by enhancing opportunities for visitors to enjoy the river corridor.

Locally, the gravel bar surrounding the estuary is treated as a commons and is used by local residents as a source for personal-use gravel or sand, firewood cutting, and target practice. In recent years, the gravel bar has also become a gathering place for overflow campers from the developed campground. This RMP includes goals to manage uses in the estuary to protect the area's significant ecological values, including limiting vehicle use to designated corridors. Wild and Scenic River designation would be compatible with these management goals.

Fishing was historically a major use of the estuary; fishermen came to the area annually during salmon runs to fish at the first riffles. However, use declined with the corresponding decline in populations of salmon. In 1991 the State Fish and Game Commission closed the river to fish harvesting to protect salmonids, in response to requests from the Mattole Watershed Alliance (NCRWQCB 2002). Currently,

catch-and-release fishing for steelhead trout is still allowed (as of 2003) in the upstream portion of the study segment, and drift-boat fishermen use the gravel bar as a takeout point. Fishing use is carefully managed by the California Department of Fish and Game and the National Marine Fishery Service to protect remaining runs of salmonids.

The Mattole Salmon Group and Mattole Restoration Council have completed projects to anchor root-wads and driftwood logs in the estuary in an effort to increase habitat for salmonids. Placement of further habitat improvement structures in the river would have to undergo an evaluation to ensure that they do not negatively impact the free-flowing character of the river (Section 7). However, these projects would probably be minimally affected by designation since their intent is to enhance the outstandingly remarkable fishery values.

The beneficial uses and water quality objectives for the Mattole River are contained in the *Water Quality Control Plan for the North Coast Region* (Basin Plan) as amended in 1996 (NCRWQCB). These beneficial uses include:

1. Municipal and Domestic Supply (MUN)
2. Agricultural Supply (AGR)
3. Industrial Service Supply (IND)
4. Water Contact Recreation (REC-1)
5. Non-Contact Water Recreation (REC-2)
6. Commercial or Sport Fishing (COMM)
7. Cold Freshwater Habitat (COLD)
8. Estuarine Habitat (EST)
9. Wildlife Habitat (WILD)
10. Migration of Aquatic Organisms (MIGR)
11. Spawning, Reproduction, and/or Early Development (SPWN)

In addition, the beneficial use of water related to rare, threatened, or endangered species (RARE), has been proposed for this basin, because federally-listed Coho and Chinook salmon and steelhead trout are found in the watershed (NCRWQCB 2001a). Also, aquaculture (AQUA) in the watershed is listed in the Basin Plan (NCRWQCB 1996) as a potential beneficial use.

There is a great deal of local concern over in-stream flows and potential water development proposals to export river water out of the Mattole basin. Part of this concern was fueled by a private developer's proposal to pump water from North Coast rivers into large polymer bags and haul them by barge to southern California. No specific proposal was made for such an operation in the Mattole watershed. During recent years, the upper river has dried up completely during the late summer, threatening survival of salmon and steelhead fry. Local restoration groups are encouraging water users to store water for dry season use and not draw upon the limited river flows. Wild and Scenic River designation would not impact existing water rights on the Mattole or other streams in the KRNCA. However, designation would establish a federal water right for the designated segments which could limit future proposals to remove water from the river, especially if these uses impacted outstandingly remarkable values such as salmonid populations.

Bear Creek

Foreseeable uses on public lands in the Bear Creek watershed would not be impacted by designation. Campgrounds in the corridor have all been recently reconstructed, with future plans limited to development of small trailhead parking areas and non-motorized trails. Designation would establish a federal reserve water right, which would not affect existing private land uses/water rights but could affect future stream diversions, especially during the low-flow summer period. However, protection of flow levels would be required under the Endangered Species Act, with or without Wild and Scenic River Designation.

Mill Creek

Mill Creek was evaluated for potential uses of the land as a requirement for the acquisition agreement in 1997. Identified uses within the Mill Creek corridor include overnight camping and multiple use trails for day use and/or accessing the remainder of the King Range backcountry. None of these uses will be impacted or curtailed by designation, and recreational opportunities could be enhanced.

Honeydew Creek

Honeydew Creek includes one recreational development (Honeydew Creek Campground). This site would not be affected by Wild and Scenic River designation.

All other east slope streams with river segments crossing private lands have similar potential uses for rural residential and ranching purposes that would not be curtailed by Wild and Scenic River designation.

West Slope Creeks

Eligible streams on the west slope, including Fourmile Creek, Sea Lion Gulch, Big Creek, Big Flat Creek, Whale Gulch, Gitchell Creek, and Shipman Creek, have similar potential uses due to their location inside the King Range WSA that would be enhanced by Wild and Scenic River designation. Primarily, these river segments' potential uses are limited to recreational purposes for backcountry visitors, but may include scientific studies for educational purposes and/or recreation research, which would be enhanced by Wild and Scenic River designation.

Humboldt Creek and Telegraph Creek are both located in the Shelter Cove subdivision. Only a small percentage of land along both of these segments is administered by the BLM. Shelter Cove is expected to continue growing at a moderate rate, and over the long-term a large number of residences will likely be developed within these corridors. This development could be curtailed by designation.

Diversion of additional water from any of the streams during the summer low-flow period could impact outstandingly remarkable values. Wild and Scenic River designation would not impact current water rights, but could affect future diversions from the streams.

Alterations to existing water withdrawal facilities may be approved under Section 7 of the Wild and Scenic Rivers Act, as long as there is no direct adverse effect to the values for which the river was designated.

4. Federal Agency that will Administer KRNCA Wild and Scenic River Segments

The U.S. Department of the Interior Bureau of Land Management (BLM) would administer all river segments under evaluation should they be included in the NWSRS.

5. Estimated Cost of Acquisition and Administration

There would be no need to acquire additional lands for most KRNCA river segments to be included in the National Wild and Scenic River System. The exception would be Telegraph and Humboldt Creeks; a large number of residential lots would need to be acquired (or placed under conservation easements) in these stream corridors to maintain their character. There would also be a modest cost associated with developing management plan(s) for all designated streams, and coordinating with adjacent private landowners to ensure that their activities would not cause offsite (downstream or downslope) impacts that could potentially affect river values.

6. State or local political subdivision participation in river preservation and management

During the initial scooping period for this Plan, no government agencies commented or expressed interest specifically in wild and scenic river designation. However, numerous state and federal agencies have committed funding and effort to protecting river related values on the study segments. For example, the California Coastal Conservancy and Wildlife Conservation Board have funded land acquisitions to protect Mill Creek and the Mattole River. The U.S. Fish and Wildlife Service (FWS), California Department of Fish and Game (CDFG), and BLM have existing agreements to support salmon recovery in the Mattole River. The North Coast Regional Water Board has prepared a Technical Support Document (TSD) that addresses sources of sediment and temperature impairments, loading capacities, and load allocations necessary to restore sediment and temperature conditions supportive of beneficial uses related to the cold water fishery in the Mattole River watershed. Humboldt County has cooperated with the BLM in storm-proofing county roads to reduce sedimentation of area streams. In summary, there is already a strong established level of cooperation among federal, state, and local agencies to restore and protect streams in the region.

7. Local Zoning and Land Use Planning Adequacy in protecting the river values

Most portions of the study segments are located on federal lands administered by the BLM and local zoning would not apply. Where the segments cross private lands, most stretches are zoned for grazing/timber management with low density residential use. These uses at the scales foreseen within the study segments would be compatible with Wild and Scenic River designation. The private lands encompassing most of the Telegraph Creek and Humboldt Creek segments are zoned for residential development. As the community of Shelter Cove grows, a large percentage of the land base in these watersheds could be developed for residences at a high density level. Wild and Scenic River designation would not be compatible with this development.

8. Federal, public, state, local or other interests in designation/non-designation of the river. Support or Opposition to the Designation.

A description of other federal, state, and local agency involvement and interest in river management is contained under Item 6 above. Residents of the Mattole Valley and southern Humboldt County have a long history of active interest in river conservation (House 1999). During the scoping period for this plan, several local residents expressed concerns specific to the Mattole River estuary and the potential impacts of any projects to export water from the area. These comments were in response to proposals by a private water developer to construct a system to export water from the mouths of north coast rivers to Southern California. Wild and Scenic River designation was supported as one avenue to stop this potential development. No other comments specific to Wild and Scenic River designation were received during the scoping period. However, many comments were received regarding protection of river related values including water quality/quantity, anadromous fisheries, and scenic values.

A number of grass roots organizations in the region directly support watershed management and restoration efforts that protect and enhance the outstandingly remarkable values of many of the study segments. The Mill Creek Watershed Conservancy is a consortium of local residents from Petrolia and the surrounding region that assisted BLM in acquiring the Mill Creek parcel in 1997, and continues to lead efforts to restore the health of the watershed. The Mattole Salmon Group has also done considerable salmonid enhancement and watershed rehabilitation work in the Mattole Watershed. The group initiated a Chinook salmon hatchbox program in 1982, and installed a Coho hatchbox facility in 1987 on the South Fork of Bear Creek. The Mattole Restoration Council oversees watershed restoration projects on public and private lands throughout the Mattole Valley. Other organizations involved with watershed management include Sanctuary Forest and the Middle Mattole Conservancy. In summary, there is exceptionally strong local support in the area for river conservation.

9. The consistency of designation with other agency plans, programs or policies and in meeting regional objectives.

Wild and Scenic River designation for most of the study segments would be consistent with other agency plans and programs for the region. All of the study segments except Telegraph and Humboldt Creek flow through public lands designated as a Late Successional Reserve or administratively withdrawn under the Northwest Forest Plan. The segments are also classified as Riparian Reserves under the Aquatic Conservation Strategy of this regional plan for public lands in the Pacific Northwest. These designations are intended to conserve in-tact forest and aquatic ecosystems and are compatible with Wild and Scenic River designation. Wild and Scenic designation of Humboldt and Telegraph Creek would not be compatible with local zoning or land use management plans.

10. Contribution to River System or Basin Integrity

The Mattole River estuary has a seasonal cycle, open to the ocean from fall to late spring, and closed by a sand berm that develops during the summer and early fall. When the river mouth is closed by the berm, a small lagoon of approximately seven acres is formed. This variable wetland is rich in wildlife, and the lagoon serves a critical function in the life cycle of the king salmon. The limits to anadromous fisheries populations are not clearly understood, but are related to water temperature, diet, and predation, which are, in turn, related to the availability of riparian habitat. In gross terms, all ecological problems in the

estuary are related to its function as an endpoint of in-river storage of sediment. Any management action that reduces the input of sediment into the river system will benefit the Mattole River estuary and lagoon. Furthermore, because native Mattole king salmon populations are diminished to a point where their viability remains a question, Wild and Scenic River designation of the river segment under evaluation will contribute significantly to the integrity of the Mattole River system as a whole.

Bear Creek is a 13,820 acre tributary to the Mattole River. Along with adjacent Honeydew Creek, Bear Creek is comprised of predominately public land in the Mattole basin. These are also the least impacted (relative to other sub-basins in the Mattole watersheds) by historic and on-going land use practices. Within the Mattole basin they are the tributaries best suited as functional refugia for anadromous fisheries, as well as for high restoration potential. The restoration impetus of Honeydew Creek and Bear Creek in particular contributes to the current focus on ecosystem management through watershed restoration. It provides a foothold for public/private cooperation and a starting point from which to assess and prioritize watershed conditions, and to enhance the integrity of both river systems and the entire Mattole River basin.

The upper two-thirds of the Honeydew Creek watershed have been under public management since 1970. It has been managed by BLM as part of Zone 7 of the KRNCA with the primary use of wildlife habitat conservation. The second largest stand of old-growth forest in the entire Mattole River basin protects the headwaters of Honeydew Creek. Because of these relatively undisturbed headwaters areas, overall habitat conditions are recovering slightly quicker than other Mattole watersheds. Considering the size of the basin, relatively few active sources of sedimentation have been identified (MRC 1989). In summary, Honeydew Creek is a major component of the Mattole watershed and contributes greatly to its integrity.

Part of the Mill Creek watershed was logged prior to 1975, with the exception of 210 acres which now constitute the largest grove of old-growth habitat within the lower Mattole watershed (MRC 1989). This grove, located on the west side of a middle reach of the creek, accounts for the relative stability of the lower reaches of the creek, which is the coldest and cleanest tributary in the lower river, contributing significantly to the river environment and integrity.

Other study segments in the Mattole watershed contribute in varying degrees to the integrity of the watershed, but not at a level of significance comparable to the above described segments.

All of the west slope streams are individual distinct watersheds flowing directly into the Pacific. Therefore they are complete systems in and of themselves and do not contribute to the integrity of any larger river system.

11. Management or Protection other than Wild and Scenic River Designation

In the case of river segments that are found not suitable for designation, BLM will continue to manage these streams as integral ecosystem components of the King Range. Management objectives in the King Range RMP call for continued emphasis on restoration of anadromous fisheries, riparian ecosystems, late successional forests and other components of healthy watersheds in Mattole River tributaries. West slope streams (with the exception of Telegraph and Humboldt Creeks) are all located in the King Range WSA.

The preferred alternative for this plan also calls for the BLM to file on water rights to protect the aquatic habitat of KRNCA streams. Also, most water resource projects would be incompatible with the King Range Act, Northwest Forest Plan, and the BLM's Interim Management Policy for Lands under Wilderness Review. For example, hydropower facilities, dredging, diversion and channelization, irrigation, and flood control measures are inconsistent with the vision of the King Range, and would therefore not be permitted to the extent of BLM's authority.

ANALYSIS OF ALTERNATIVES

In accordance with NEPA and the Wild and Scenic River Act of 1968, BLM used an interdisciplinary planning team to draft an array of alternatives for Wild and Scenic Rivers. These alternatives ranged from proposing that none of the eligible river segments be found suitable and recommended for designation under Alternative A, eight river segments found suitable and recommended for designation under Alternative B, fifteen river segments found suitable and recommended for designation under Alternative C, and all twenty-eight eligible river segments to be found suitable and recommended for designation under Alternative D (Preferred). Specifically:

- Alternative A (No Action): No segments recommended
- Alternative B: Big Creek, Big Flat Creek, Gitchell Creek, South Fork Bear Creek (Segments A and B), Honeydew Creek, Mill Creek, and Mattole Estuary recommended.
- Alternative C: Same as B with the addition of Shipman Creek, Buck Creek, Randall Creek, Horse Mountain Creek, Kinsey Creek, Oat Creek, and Spanish Creek.
- Alternative D (Preferred Alternative): All study segments recommended.

The impacts of these alternatives are analyzed in Chapter IV of the plan.

RECOMMENDATION

It is recommended that the following river segments, as defined in Table 2, be designated as components to the NWSRS: Mattole River Estuary, Mill Creek, Honeydew Creek, Segments A and B of the South Fork of Bear Creek, Big Creek, Big Flat Creek, , and Gitchell Creek. The remaining study segments were found to be unsuitable.

PROTECTIVE MANAGEMENT

All river segments found to be eligible for inclusion in the NWSRS are placed under protective management by the BLM. Subject to valid existing rights, the BLM is required to protect the free-flowing characteristics and outstandingly remarkable values in the stream corridors. The BLM must also protect the corridor from modifications that would impact the tentative river classification (i.e., change the classification potential from Wild to Scenic, or from Scenic to Recreational). These management restrictions apply only to public lands. Once suitability is determined and the Record of Decision (ROD) for the RMP signed, protective management continues only for those segments found suitable for designation. This protective management remains in effect until Congress makes a final decision regarding designation, or the RMP is amended.

Rationale

Many of the river segments under evaluation have similar land tenure status, historical uses, and potential or existing uses. Therefore, the primary distinction for the KRNCA streams found suitable for designation by the planning team was the exceptional combination of outstandingly remarkable values that make them worthy additions to the NWSRS. In selecting the eight segments found suitable and recommended for designation in Alternative D, the planning team determined these streams represent the "crown jewels" of the King Range with their wild character, scenic beauty, outstanding recreation opportunities, quality anadromous fisheries, and/or significant cultural values.

The Mattole River mouth and estuary, Mill Creek, Honeydew Creek, South Fork Bear Creek, Big Creek, Big Flat Creek, and Gitchell Creek would make worthy additions to the NWSRS for the following reasons:

- Magnificent scenery, extensive recreational opportunities for day use, camping, and access to backcountry trails in the KRNCA.
- Excellent spawning and rearing habitat for federally listed salmonids. The Mattole Estuary also contains habitat for the federally listed endangered *Layia Carnosa.*
- The presence of these quality anadromous fisheries is also related to the significant cultural sites found at the Mattole River, South Fork Bear Creek, and several coastal streams.
- Designation would preserve and protect the free-flowing character, water quality, and outstandingly remarkable values of these exceptional river segments.
- A commitment has been demonstrated by the local community and non-federal entities to work collaboratively with BLM in implementing protective management of the resource values in these streams.
- No land ownership or potential uses would be in conflict or curtailed if these river segments were designated.
- No costs would be involved in acquiring necessary lands and interest in lands, as the BLM already manages the majority of land in the suitable corridors.

Of the river segments found non-suitable, the primary factor was the conclusion that they would not make worthy additions to the system. Although the segments have outstandingly remarkable values that meet eligibility criteria, the study team has determined that the values are not at a level that would make these segments worthy additions to the NWSRS when viewed in the context of the KRNCA as a whole, or within the California Coastal Range Physiographic Province.

Many of these watersheds have been substantially modified through past logging activities and the associated construction of roads, landings, and skid trails. The resulting landscapes would not broaden the representation of key ecosystems within the system. Although several of the segments found suitable have also been impacted from past logging, the impacts are not as extensive as has occurred in the non-suitable watersheds. A second factor contributed to the non-suitable recommendation for Humboldt and Telegraph Creeks. Although these watersheds are currently somewhat undeveloped, local (County) and

regional (Coastal Zone) planning calls for these stream corridors to be developed as residential areas within the Shelter Cove subdivision. This high level of development will change the character of the watersheds and be incompatible with Wild and Scenic River designation. Fisheries and other watershed values for all streams including the non-suitable segments will be afforded protection through state and local land use plans, the Endangered Species Act, and the Northwest Forest Plan.