

Appendix H. 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, as amended) established a method of providing federal protection of our remaining free-flowing rivers and preserving them and their immediate environments for the use and enjoyment of present and future generations. Section 5(d)(1) of the Wild and Scenic Rivers Act provides that Wild and Scenic River considerations be made during federal agency planning. Congress may designate a river as part of the National Wild and Scenic Rivers System (NWSRS) or the Secretary of the Interior, upon the nomination of the Governor of the State of California, may approve the designation. Pursuant to this mandate, an evaluation of river resources within the Reserve has been conducted.

The NWSRS study process has three distinct steps:

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

Eligibility of Headwaters Streams

Each identified river segment was evaluated to determine whether or not 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.” These values include

- scenic,
- recreational,
- geological,
- fish,
- wildlife,

- historic,
- cultural,
- ecological,
- riparian,
- botanical,
- hydrological, and
- scientific study.

No other factors were 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 in order to be eligible. For purposes of eligibility determination, the volume of flow is sufficient if it is enough to maintain the outstandingly remarkable values identified within the segment.

The Reserve was created primarily to protect and preserve the ecological values of the unique, old-growth redwood forest community constituting the Headwaters Forest. Ecological values of the Reserve include unparalleled diversity of plant and animal species. The Reserve holds important habitat for threatened animal species including the marbled murrelet, northern spotted owl, coho salmon, chinook salmon, and steelhead.

The Reserve includes the headwaters of Salmon Creek and South Fork Elk River, both of which contain populations of coho and chinook salmon and steelhead (all three species are listed as threatened under the federal Endangered Species Act). Much of the portion of Salmon Creek located within the Reserve is dominated by old-growth redwood forest riparian area, abundant large woody debris, and deep pools. Much of the riparian forest along South Fork Elk River is dominated by red alder and willows. South Fork Elk River contains abundant pools, a moderate amount of large woody debris, and abundant spawning gravels in the lower reaches. Coho salmon, chinook salmon, steelhead, and coastal cutthroat trout spawn in this river. The main tributary within the Reserve is Little South Fork Elk River, which contains an impassible barrier for anadromous fish approximately 0.25 mile upstream from its confluence with South Fork Elk River. Three species of wildlife known to occur on or near the Reserve are listed as threatened or endangered—the bald eagle, northern spotted owl, and marbled murrelet. The papillose tail-dropper slug is a “Category 2” Survey-and-Manage species in the Northwest Forest Plan (USDA, USDI 1994) that has been detected in the Reserve.

Table H-1 lists the three rivers (or portions thereof) found in the Reserve, and describes why or why not they were determined to be eligible for inclusion in the NWSRS. The table provides information on river length, percent of river corridor under BLM jurisdiction, and identifies the outstandingly remarkable value(s) associated with each river. Corridor widths vary along the South Fork Elk River coincident with the public land boundaries. No private land is included within the corridor. Along the Little South Fork Elk River and Salmon Creek, the corridor width is 0.25 mile from each side of the streambanks.

All eligible river segments must be tentatively classified as either wild, scenic, or recreational to ensure appropriate protection of the values supporting the determination. These potential classifications are also shown in table H-1. Listed in table H-2 are more exact descriptions of each river segment’s location and a brief narrative of its outstandingly remarkable value(s). See also figure H-1.

Table H-1. Eligibility of River Segments Eligibility Assessment for River Segments Identified for Possible Inclusion as Components of the National Wild and Scenic Rivers System

River Segment	Reason for Consideration ^a	Length (miles)		Free-Flowing	Outstandingly Remarkable Values ^b	Tentative Classification	BLM Jurisdiction	
		BLM	Other				Acres ^c	Portion of Corridor (%)
South Fork Elk River (Segment 1)	C, D	1.0	0.0	Yes	E, F, G, H,	Recreational	75	100
South Fork Elk River (Segment 2)	C, D	6.0	0.0	Yes	E, F, G, H	Scenic	450	100
Little South Fork Elk River with Tributary	C, D	5.0	0.0	Yes	E, F, I	Wild	1,600	100
Salmon Creek	C, D	5.0	0.0	Yes	E, F, I	Scenic	1,600	100

^a A - National Rivers Inventory
 B - 1988 Outstanding Rivers List – American Rivers, Inc.
 C - Potential Rivers Inventory – Arcata Field Office
 D - Other

^b A - Nonexistent
 B - Scenic
 C - Recreational
 D - Geological
 E - Wildlife
 F - Fish
 G - Historical
 H - Prehistoric
 I - Ecological
 J - Other

^c Shoreline and adjacent public lands within 0.25 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 H-2. Outstandingly Remarkable Values of Eligible River Segments Eligibility Assessment for River Segments Identified for Possible Inclusion as Components of the National Wild and Scenic Rivers System

River Segment	Segment Description	Description of Outstanding Values
South Fork Elk River (Segment 1)	From the Reserve boundary just downstream from the Elk River Trailhead in Section 35, T4N, R1W, Humboldt Meridian (H.M.) to the old town site at Falk in Section 36, T4N, R1W, H.M.	Spawning habitat for indigenous chinook and coho salmon, and steelhead. Historic and prehistoric resources are located throughout the corridor.
South Fork Elk River (Segment 2)	From the old town site at Falk in Section 36, T4N, R1W, H.M. to the headwaters in Section 14, T3N, R1E, H.M.	Spawning habitat for indigenous chinook and coho salmon, and steelhead. Habitat for the northern spotted owl, marbled murrelet, and bald eagle exists nearby. Historic and prehistoric resources are located throughout the corridor.
Little South Fork Elk River with Tributary	From the confluence with the South Fork Elk River to the headwaters in Section 21, T3N, R1E, H.M. The tributary starts in Section 8, T3N, R1E, H.M. and ends in Section 15, T3N, R1E, H.M.	Spawning habitat for indigenous chinook and coho salmon, and steelhead for the first 0.25 mile. Old-growth redwood forest provides high-quality habitat for the threatened northern spotted owl and marbled murrelet, both of which nest in the area.
Salmon Creek	From the Reserve boundary in Section 18, T3N, R1E, H.M. to the headwaters in Sections 22 and 28, T3N, R1E, H.M.	Suitable spawning habitat for indigenous steelhead. Old-growth redwood forest provides high quality habitat for the threatened northern Spotted owl and marbled murrelet, both of which nest in the area.

Suitability of Headwaters Streams

River segments of the South Fork Elk River, Little South Fork Elk River, and Salmon Creek 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 the suitability 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 area 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:

- Should the river’s free-flowing character, water quality, and outstandingly remarkable values (ORV) be protected, or are one or more other uses important enough to warrant doing otherwise?
- 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.)

- Is there a demonstrated commitment to protect the river by any nonfederal entities who 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.

- Characteristics that do or do not make the area a worthy addition to the NWSRS.
- 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.
- 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.
- The federal agency that will administer the area should it be added to the NWSRS.
- 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.
- 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.
- An evaluation of the adequacy of local zoning and other land use controls in protecting the river's ORVs by preventing incompatible development.
- Federal, public, state, tribal, local, or other interests in designation or non-designation of the river, including the extent to which the administration of the river, including the costs thereof, may be shared by state, local, or other agencies and individuals.
- The consistency of designation with other agency plans, programs, or policies and meeting regional objectives. Designation may help or impede the "goals" of other tribal, federal, state or local agencies.
- The contribution to the river system or basin integrity.
- The ability of BLM to manage the river segments under designation, or ability to protect the river area other than Wild and Scenic River designation.

Characteristics That Do or Do Not Make the River Segments Worthy Additions to the NWSRS

The two river segments (two segments of South Fork Elk River, Little South Fork Elk River, and Salmon Creek) are located within the California Coast Range Physiographic Province. There are currently five designated Wild and Scenic Rivers within this province. They include portions of the Smith River, Klamath River, Main Stem Eel River, Van Duzen River, and the entire South Fork Eel River. This amounts to a total of approximately 150 miles. Because the South Fork Elk River, Little South Fork Elk River, and Salmon Creek total only about 17 miles, addition of these relatively small river segments would not substantially benefit the NWSRS as a whole.

The Nationwide Rivers Inventory has not identified the South Fork Elk River, Little South Fork Elk River, or Salmon Creek as possessing values of national significance.

The four river segments have several outstandingly remarkable values, including the 3,100-acre old-growth redwood forest that provides habitat for the threatened northern spotted owl, marbled murrelet, coho and chinook salmon, and steelhead. Although there is suitable habitat for these fish in Salmon Creek, none of the fish mentioned above have been observed during the last two years along this particular river segment. On the Little South Fork Elk River, even though spawning habitat exists, only steelhead have been observed in this river segment, and only for 0.25 mile from its confluence with the South Fork Elk River. Observations of chinook and coho salmon, and steelhead have been observed along nearly all the South Fork Elk River segment.

The 3,100 acres of old-growth redwood forest have been identified as an outstandingly remarkable ecological value. One of the primary reasons for this conclusion is that less than 5% of the original acreage of old-growth redwood forest within the California Coast Range Physiographic Province remains today. The 3,100 acres within the Reserve are estimated to make up approximately 5% of the total acreage of existing old-growth redwood forest within the province. Most of the old-growth redwood forests are located within Redwood National Park and several state parks.

Current Uses and Land Ownership Concerns

The four river segments and identified corridors are all public lands managed by BLM. The State of California has a conservation easement that covers the river segments. This easement provides a mechanism whereby the California Department of Fish and Game can ensure that the management of the Reserve meets the goals and objectives for which it was acquired. This easement provides for and encourages the two agencies to work collaboratively to ensure the protection of natural aquatic and terrestrial habitats, particularly the old-growth redwood forest and habitats for threatened and endangered species.

Most of the mineral rights in the Reserve are owned by parties other than BLM. These mineral rights are in the process of being acquired. In the interim, it is anticipated that none of the mineral rights will be developed, due to the presence of threatened and endangered species.

No water development, water right, or instream flow concerns exist.

Current uses along the river segments include research, monitoring, day hiking, and watershed rehabilitation that involves restoring old logging roads into a naturally appearing landscape. A small parking area has been developed at the downstream end of the South Fork Elk River segment. Visitors hike along South Fork Elk River segment for the first 3 miles, along Little South Fork Elk River for nearly two miles, and along Salmon Creek for 1 mile. No other recreational activities are currently allowed along these river segments.

Three roads and four bridges are in the upstream area of the South Fork Elk River. PALCO has obtained rights-of-way to use and maintain these roads and two bridges for access across the river to private property. The corridor along this portion of the South Fork Elk River was reduced in size to exclude adjacent private land. This landowner is not in favor of including any of its property within the corridor, as it could curtail or alter its plans to harvest timber from the area.

One unmaintained bridge crosses the Little South Fork Elk River and another unmaintained bridge crosses Salmon Creek.

Resources and Uses That Would Be Enhanced or Curtailed by Designation

The four river segments are located within the Reserve. This 7,400-acre Reserve was created primarily to protect and preserve the ecological values of the unique, old-growth redwood forest community constituting the Headwaters Forest. Federal legislation for the purchase and creation of the Reserve established the management goal “To conserve and study the land, fish, wildlife, and forests occurring on such land while providing public recreation opportunities and meeting other management needs.” Because the natural resources within the four river segments are fully protected under current policies and management direction, designation would neither enhance nor curtail resource values of the area. Designation would neither enhance nor curtail other uses of the river segments, such as recreation, because all existing and future visitor activities must be consistent with the protection and preservation of all aquatic and terrestrial habitats and ecosystems within the entire Reserve. No other uses, both existing or planned, would be enhanced or curtailed by designation.

Administration of the Area

The U.S. Department of Interior Bureau of Land Management (BLM) will administer the area should it be added to the NWSRS.

Costs of Acquiring Necessary Lands and Interests in Lands and of Administering the Area

If the area is added to the NWSRS, there would be no costs involved in acquiring necessary lands and interests in lands because all of the land within the river segments is public land managed by BLM. If the area were added to the National System, there would be a minor cost associated with developing a management plan and coordinating with adjacent private landowners to ensure their activities would not cause off-site (downstream or downslope) impacts that could degrade river values.

State or Political Subdivision Participation

The DFG jointly manages the Reserve with BLM. Administration of the river segments, if they were designated, would require active participation by this state agency.

Local Zoning and Other Land Use Controls

All lands within the river segments are federal public lands where local zoning or other land use controls do not apply.

Federal, Public, State, Tribal, Local, or Other Interests in Designation or Nondesignation

BLM held public scoping sessions to solicit concerns, ideas, and proposals for long-term management of the Reserve. The record indicates that issues or concerns related to Wild and Scenic River designation and management were not mentioned by the public during the scoping process. No federal, public, state, tribal, local, or other interested parties have commented or expressed any interest in designating or not designating any rivers within or nearby the Reserve as components to the National System.

Consistency of Designation with Other Agency Plans, Programs, or Policies, and Meeting Regional Objectives

Designation would be consistent with BLM's primary management responsibility to protect and preserve the ecological values of the aquatic and terrestrial habitats within the Reserve.

Contribution to the River System or Basin Integrity

Salmon Creek

The entire length of Salmon Creek is approximately 13 miles. The eligible river segment is nearly five miles in length, or 38% of the total river mileage. This river segment is located in the headwaters of the watershed, and existing and planned uses within the corridor (road restoration, slope stabilization projects, weed removal) would contribute to the protection and enhancement of aquatic habitats downstream. Much of Salmon Creek downstream has been heavily impacted over many years by timber harvesting activities. Several blockages in this area prevent salmon and steelhead from migrating upstream and spawning within the river segment. Only until recently have the lumber companies been actively involved in watershed rehabilitation work similar to the activities that BLM is conducting in the Reserve. Downstream from the forested lands is some privately owned agricultural land; the Humboldt Bay National Wildlife Refuge is farther downstream. Expanding the river segment, if it were designated, to include the private lands downstream or developing a legislative proposal for the entire river system from its headwaters to mouth would probably meet with opposition.

South Fork Elk River

The entire length of South Fork Elk River is approximately 10 miles. The two river segments eligible for designation total nearly seven miles, or 70% of the total river mileage. The river flows into Elk River, which extends for roughly 10 miles and enters Humboldt Bay. The river segments are located in the middle and upper reaches of the watershed, and existing and planned uses within the corridors (trail maintenance, slope stabilization projects, weed removal) would contribute to the protection and enhancement of aquatic habitats downstream. Much of the watershed has been harvested for timber. New timber harvest activities upslope from river segment 2 are planned. Downstream from river segment 1 are numerous residences and agricultural activities. Expanding the river segment, if it were designated, to include the private lands downstream and upslope lands outside of the corridor, or developing a legislative proposal for the entire river system or watershed would probably meet with opposition.

Little South Fork Elk River

The entire length of Little South Fork Elk River, approximately five miles, is eligible for system inclusion. This river is a tributary to South Fork Elk River, which is a tributary to Elk River. The river segment is located in an area of relatively undisturbed old-growth redwood forest, and existing and planned uses within the corridor (road restoration, slope stabilization projects, weed removal) would contribute to the protection and enhancement of aquatic habitats downstream. Considering the relatively small size of this river segment and drainage area compared to the Elk River drainage area, designation would not contribute a substantial amount to the basin's integrity.

Ability to Manage or Protect the River Area Other Than Wild and Scenic Designation

BLM could effectively manage the four river segments as components of the NWSRS. No current or planned management actions would be precluded from designation. However, there would be no substantial benefits from designation because BLM will continue to manage the Reserve to fully preserve and protect all the river segments identified outstandingly remarkable values. Much of the Reserve is recommended for designation as a Wilderness Study Area, and BLM's Interim Management Policy for Lands Under Wilderness Review are generally more restrictive with respect to allowable uses and activities. The entire Reserve is also protected by congressional designation and has been recommended to be designated an Area of Critical Concern.

Suitability Alternatives

Various combinations and alternative classifications of river segments were considered for designation, but after a thorough evaluation of the all the factors mentioned above, it was determined that two viable options exist: 1) recommend all eligible segments as suitable, and 2) recommend all eligible segments as nonsuitable.

These 2 alternatives were analyzed further with respect to the impacts of Wild and Scenic River designation on several resource management programs. These programs include

1. watershed restoration;
2. forest restoration;
3. recreation;
4. fire management;
5. aquatic and terrestrial habitats and species; and
6. research and monitoring.

Refer to chapter 6, "Environmental Consequences (Environmental Effects and Alternative Comparisons)," for information on this impact analysis.

Recommendation

BLM and DFG recommend that all four river segments not be designated as components to the NWSRS.

The four river segments' free-flowing character, water quality, and outstandingly remarkable values should and will continue to be fully preserved and protected because of Reserve designation. No other resource uses outweigh the importance of protecting the identified river values. Designation is not the best method for protecting the river corridor because alternative protection methods already exist and are currently being implemented pursuant to federal legislation that created the Reserve. This legislation directs BLM to protect and enhance aquatic and terrestrial habitats and ecosystems within the Reserve. As mentioned previously in chapter 4, the EIS recommends that the Reserve be designated an Area of Critical Environmental Concern and that much of the Reserve be designated a Wilderness Study Area.

Other findings, including those listed below, were considered and evaluated to reach the aforementioned recommendation.

7. There are currently five designated Wild and Scenic Rivers totaling approximately 150 miles within the California Coast Range Physiographic Province. These designated rivers protect more intact river systems and are superior examples of the remarkable values identified in the Reserve.
8. All the segments but Salmon Creek are tributaries of a larger river which is neither designated nor been found eligible for inclusion in the NWSRS.
9. There was no public interest expressed about Wild and Scenic River designation during the scoping process.