Nomination for Outstanding Resource Waters: The National Wild & Scenic Illinois River, its Tributaries, and Associated Wetlands

1. Name and Contact Information of Nominating Organizations

Friends of the Kalmiopsis Barbara Ullian, Chair 541-659-8150 barbara@kalmiopsisrivers.org

Klamath-Siskiyou Wildlands Center Michael Dotson (541) 488-5789 michael@kswild.org

Kalmiopsis Audubon Society Ann Vileisis, President 541-332-0261 ann@kalmiopsisaudubon.org

2. Description of nominated waterbody and basin

The above-listed organizations respectfully request that DEQ consider designating 46.6 miles of the Illinois River, plus direct tributaries and associated wetlands, as Outstanding Resource Waters of the State of Oregon. We request that consideration of this designation be a high priority given the truly exceptional water quality of the Illinois and the specter of emerging proposals for industrial-scale surface mining within this cherished watershed that could irrevocably degrade it.

The nominated water bodies more specifically include:

• The National Wild and Scenic Illinois River from the upstream boundary of the Rogue River-Siskiyou National Forest downstream to Nancy Creek, a distance of approximately 46.6 miles. This includes the "Scenic" reach of the Illinois (17.9 miles from the Forest

- Service Boundary to Briggs Creek) and the "Wild" reach (28.7 miles, from Briggs Creek to Nancy Creek) of the 50.4 mile long National Wild and Scenic Illinois River.¹
- All direct tributaries of the National Wild and Scenic Illinois River from the Forest Boundary downstream to Lawson Creek, excluding Deer Creek. Major tributaries include: Josephine Creek, Briggs Creek, Silver Creek, Indigo Creek, Collier Creek, and Lawson Creek. Smaller direct tributaries include: Snail Back Creek, Six Mile and Little Six Mile creeks, Mikes Gulch, Alder Gulch, Fall Creek, Rancherie Creek, Dailey Creek, Lightning Creek, Baker Creek, Salmon Creek, Labrador Creek, Panther Creek, Yukon Creek and Horse Sign Creek.
- All associated wetlands including: Serpentine *Darlingtonia* Wetlands and small lakes and ponds, including Game Lake at the headwaters of Horse Sign Creek.

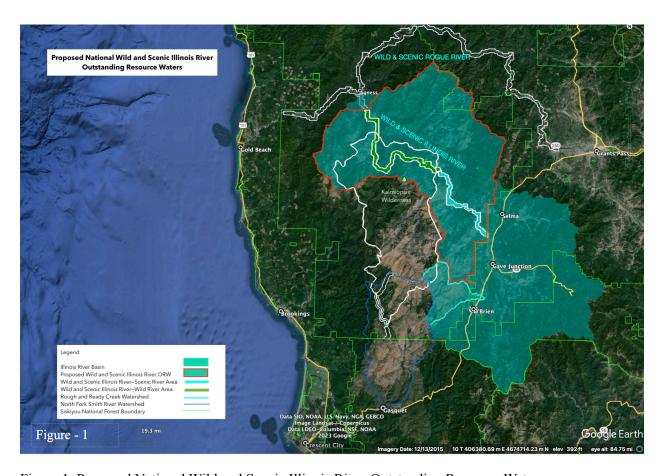


Figure 1. Proposed National Wild and Scenic Illinois River Outstanding Resource Waters

¹ We've not included the Recreational River Area (3.8 miles), from Nancy Creek down stream to the Illinois River's confluence with the National Wild and Scenic Rogue River (3.8 miles) because much of this section of the river is bordered by private land

Illinois River Basin: The Illinois River is located in the southwestern corner of Oregon and is a major tributary of the renowned National Wild and Scenic Rogue River. The Illinois Basin (628,000 acres) comprises about one-fifth of the Rogue River's watershed and contributes approximately 25 percent of its flow.² At their confluence, the contrast between the clarity of the two rivers is evident —and can be startling (Figure 2).



Figure 2 - The importance of the Illinois River and its lower tributaries to the National Wild and Scenic Rogue River cannot be overstated. At the rivers' confluence in Agness, the contrast in water quality after three inches of rain fell on both river's lower watersheds is startling—with the waters of the Illinois on the lower right relatively clear compared to the muddy waters of the Rogue. *Photo by Barbara Ullian*

The Illinois River flows entirely within the Klamath Mountains Physiographic Province. From from headwaters in the Siskiyou Mountains (at elevations exceeding 7,000 feet) in California, the East and West Forks drop through once deeply forested watersheds and join in an alluvial valley, with a number of small communities, including Selma, Takilma, and O'Brien and one incorporated city, Cave Junction (population of 2,071).

As the river leaves the lightly-populated "Illinois Valley" and enters National Forest lands, its character changes dramatically. It plunges into a spectacular, wild, and rugged canyon, where its flows are significantly augmented by a series of key tributaries, as well as perennial springs. This reach is designated as a National Wild and Scenic River and also an Oregon Scenic Waterway. The river is bordered by several inventoried roadless areas and botanical areas and churns through the Kalmiopsis Wilderness, before winding to its confluence with the Rogue, just downstream of Agness, roughly 27 miles from the Pacific Ocean and just 75 feet above sea level.

The National Wild and Scenic Illinois River and its tributaries are located in Josephine and Curry counties.

² USDA Forest Service, undated, *The Precious River: The Scenic Illinois River Concept Development Plan*, Siskiyou National Forest, p. 8.

3. Exceptional and Outstanding Values of the Wild and Scenic Illinois River

Through the federal process of considering and ultimately designating the Illinois as a National Wild and Scenic River, its "outstandingly remarkable values" were well-documented.

In 1977, the U.S. Forest Service prepared a Study Report for the Proposed Illinois Wild and Scenic River (hereafter Study Report). The Study Report was required by the 1968 Wild and Scenic River Act, which designated the lower Rogue River as one of eight original streams comprising the National Wild and Scenic River System and also named the Illinois River as one of 28 study rivers. Although the East and West Forks of the Illinois were initially studied, the final Study Report recommended that only the lower 50.4 miles of the River (from the Forest Service boundary downstream to the river's confluence with the National Wild an Scenic Rogue River) be added to the National Wild and Scenic Rivers System, and Congress ultimately acted on the recommendation in 1984.³

To this day, the Study Report compiles the best available information regarding the outstanding values of the 50.4 miles of National Wild and Scenic Illinois River.

The Study Report's found five values to be "outstandingly remarkable" and three especially to be reliant on the entire river system:

These are the scenic, recreational, botanical, fish, and water quality values. The scenic and recreational values are closely associated to the river canyon, while the **botanical**, fish, and water quality values occur, and are reliant on, the entire river system.⁴ (emphasis added)

We underscore that all five of the river's "outstandingly remarkable" values are dependent upon or associated with its exceptionally clear water quality, which makes makes preserving the river's water quality—and ORW designation— all the more crucial.

Scenery

The river corridor is stunningly scenic owing to its rugged canyon, rocky ridges, distinctive serpentine geology with spare vegetation. The river's scenic beauty is enhanced by its deep yet translucent blue-green pools and cascading whitewater rapids.

³ U.S. Forest Service, 1977, *A Proposal: Illinois Wild and Scenic River (Study Report to Congress)*, Siskiyou National Forest, p.3-4. https://www.rivers.gov/sites/rivers/files/2023-01/illinois-study.pdf

⁴ Ibid. p. 20.

Recreation

The Illinois offers a diversity of exceptional recreational experiences, with people enjoying rafting, kayaking, swimming, camping, fishing, and hiking. Its "wild" section is reputed to be the most remote and inaccessible whitewater in the lower 48 states, featuring 150 rapids in 29 miles, including 11 class IV and 1 class V drop, the formidable "Green Wall." The river's recreational values all depend on and are enhanced by high-water quality. (See Appendix A)

Botany

The river corridor hosts diverse plant communities, including rare and endemic plants adapted to the region's unique serpentine geology. There are Jeffrey Pine savannas with native bunch grasses and notable assemblages of Western Azalea. Several of the river's unusual plants are associated with or wholly dependent on its perennial springs and distinctive serpentine wetlands, such as the uniquely charismatic California Pitcher Plant (*Darlingtonia California*), a showy carnivorous plant, and the California Lady Slipper (*Cypripedium californicum*), with striking white orchid "pouch" blossoms. (See Appendix A)

Fish

With its rugged canyons, consistent cold flows, and steep tributaries, the Wild and Scenic reach of the Illinois is an unparalleled bastion for wild winter steelhead in Oregon. It also hosts habitat for chinook, cutthroat trout, Pacific lamprey, and sturgeon, as well as "Critical Habitat" for federally threatened Southern Oregon-Northern California coho. Because the Illinois is one of few rivers on the West Coast where there is no hatchery supplementation program, it's an important refuge for the conservation of wild fish genetics. In particular, Silver Creek and Indigo Creeks are the most productive steelhead tributaries in the lower river and represent a very significant genetic core for wild steelhead populations of the Illinois and Rogue River basins.⁵ Other tributaries also host valuable habitat for steelhead and other native fish. In addition, the lower river's deep pools provide crucial thermal refugia for Rogue summer steelhead in warm summer months, increasingly important with climate change. The Illinois River's fish values are highly dependent on clear, cold, and consistent flows and deep pools. (See Appendix B)

⁵ U.S. Forest Service 1994, Silver Creek and Tributaries Wild and Scenic River Eligibility Study, Siskiyou National Forest, p. 10 & 19; US Forest Service, 1998, Indigo Creek Watershed Analysis, Siskiyou National Forest, p. 05 & A8.

Water Quality

The water quality for the Wild and Scenic Illinois is brilliant and has been described by the federal agencies responsible for managing the river as follows: "The exceptional color (bluegreen) and clarity (allowing viewing to 15 feet or greater) of the waters of the Illinois are outstanding." (See Appendix A)

Although the river's flows are tapped for human water uses (irrigation) in the "Illinois Valley," in the Wild and Scenic canyon a series of key tributaries contribute substantial clean and cold flows that contribute to the river's outstanding water quality. These include Josephine Creek, which contributes 17 percent of Illinois River water during critical low flow periods⁶; Briggs Creek which contributes 10 to 20 percent⁷; Silver Creek, which contributes 20 to 20 percent⁸; and Indigo Creek, which contributes 15 to 20 percent of the river's flows in summer.⁹

Many tributaries also have exceptional water quality. For example, Lawson Creek has been described as having "Exceptionally clear, emerald green water with water falls and pools reaching 25 feet deep." ¹⁰

Although the Wild and Scenic designation specifically identified exceptional water quality as a value of the Illinois River to be protected and enhanced into the future, the Wild and Scenic Rivers Act provides no authority for land managers to protect water quality. This is a key reason why Outstanding Resource Water designation is crucial for the future of the Illinois. (See Section 6b)

Our nomination for the National Wild and Scenic Illinois River including its tributaries and associated wetlands as Outstanding Resource Waters is consistent with the Study Report, best available science and follows the model of Oregon's first Outstanding Resource Waters, the National Wild and Scenic North Fork Smith River, which also included tributaries and associated wetlands.¹¹

⁶ US Forest Service, 1993, *Josephine Creek and Its Tributaries Wild and Scenic River Eligibility,* Siskiyou National Forest. p. 4.

⁷ US Forest Service, 1997 Briggs Creek Watershed Analysis, Siskiyou National Forest, p. 4.

⁸ US Forest Service, 1995, Silver Creek Watershed Analysis, Siskiyou National Forest, p. A-3.

⁹ US Forest Service, 1998, *Indigo Creek Watershed Analysis*, Siskiyou National Forest, p. 05 & A8.

¹⁰ US Forest Service 1994, *Lawson Creek and Its Tributaries, Wild and Scenic River Eligibility Study,* Siskiyou National Forest, p. 4.

¹¹ https://www.oregon.gov/deg/wg/Pages/WO-Standards-Policies.aspx

4. Current land management allocations and designations

Roughly 81 percent of the Illinois River Basin is federal public land. The combined watersheds of the nominated waterbodies encompass an area of approximately 306,000 acres managed by the Rogue River-Siskiyou National Forest, with approximately 8,000 acres managed by the Medford District of the Bureau of Land Management.

Within the watersheds of the nominated waterbodies, there are roughly 12 small private inholdings (most located along the Wild and Scenic River corridor) and approximately 2,300 acres of industrial forestland (located in the Upper Briggs Creek watershed).

Owing to the Illinois River's outstanding values, many parts of its watershed have been accorded special designations and protections:

Federally-designated Wilderness and National Wild and Scenic River designation: National Forest land allocations within the nominated watershed of National Wild and Scenic Illinois River include the congressionally protected Kalmiopsis Wilderness and the "Wild" and "Scenic" reaches of the National Wild and Scenic Illinois River. The "Wild" reach mostly flows through the northern part of Kalmiopsis Wilderness, and tributaries Nome, Klondike and Yukon creeks lie entirely within the Kalmiopsis Wilderness while 75 percent of the Collier Creek Watershed lies within the Kalmiopsis Wilderness.

Inventoried Roadless Area designation: The "Scenic" reach flows through a dramatic canyon and is bordered by three Inventoried Roadless Areas (North and South Kalmiopsis IRAs and Takelma Mountain IRA¹²), and the Six Mile and Rancherie unroaded areas.

Forest Service Special Management Areas: The nominated watershed area also includes four Forest Service special management areas to protect rare and sensitive plants and their habitat and one Research Natural Area (Eight Dollar Mountain Botanical Area, Days Gulch Botanical Area, Game Lake Botanical Area, York Creek Botanical Area, and Hoover Gulch Natural Resource Area). The nominated watershed area also includes portions of or all of the West Illinois Valley, Briggs and Fishhook/Galice Late-Successional Reserves, as well as Supplemental Resource Areas (steep slopes and inner gorges), Backcountry Recreation Areas, Matrix, and Riparian Reserves.

Eligible National Wild and Scenic Rivers: The Forest Service found that Silver Creek and Indigo Creek are free flowing and possess one or more "outstanding remarkable values" making them eligible to be added to the National Wild and Scenic River System upon action by Congress. Though no legislative action has been taken, eligible rivers are supposed to be managed to conserve outstanding values in the interim.

¹² Takelma Mountain IRA, formerly known as the Squaw Mountain Roadless Area.

Critical Habitat: The Wild and Scenic Illinois and the accessible habitat of its tributaries is part of the designated Critical Habitat for Southern Oregon/Northern California Coho Salmon, listed as threatened under the Endangered Species Act.¹³

Serpentine Darlingtonia Wetland Conservation Strategy Essential Wetlands: Several Serpentine Darlingtonia Wetlands within the nominated waterbodies area are subject to a multiagency Serpentine Darlingtonia Wetland Conservation Strategy. In particular, some are considered to be Essential Wetlands. According to the Conservation Strategy, "The Josephine Creek watershed, a low-elevation tributary of the Illinois River in Josephine County, OR, includes the greatest abundance of all five target taxa...Because of the regional conservation importance of Josephine Creek wetlands and their close proximity to each other, all Darlingtonia wetlands in this watershed are being included as Essential Wetlands." 14

Oregon State Scenic Waterway: The Illinois River from Deer Creek down stream to its confluence with the National Wild and Scenic Rogue River (46 miles) is also one of seven rivers named to the Oregon State Scenic Waterway System in 1970.¹⁵

While all these designations recognize and aim to protect all the outstanding values of the Wild and Scenic Illinois corridor, few provide adequate tools to effectively preserve these values into the future. For example, the above mentioned *Serpentine Wetland Conservation Strategy* acknowledges that surface mining is the principle threat to these rare plant wetlands and makes recommendations for how to address the threat but land management agencies have taken no action. Wild and Scenic designation seeks "to protect and enhance water quality," but the authority for regulating water quality rests with the states under the Clean Water Act. (See section 6b)

¹³ US Dept of Commerce, NOAA, National Marine Fisheries Service, "Designated Critical Habitat Central California and Southern Oregon/Northern California Coasts Coho Salmon," *Federal Register*, Vol. 64, No. 86, May 5, 1999, 24049- 24061.

¹⁴ US Department of the Interior, Bureau of Land Management and US Forest Service, 2018, "Conservation Strategy for *Epilobium oreganum, Gentiana setigera, Hastingsia bracteosa var. bracteosa, H. bracteosa var. atropurpurea, and Viola primulifolia ssp. occidentalis in Serpentine Darlingtonia*Wetlands of Southwest Oregon and Northwest California," p. 37. The Conservation Strategy is available on request from the nominating organizations.

¹⁵ US Forest Service, 1977, A Proposal: Illinois Wild and Scenic River, Siskiyou National Forest, p. 4.

6. Additional Considerations pertaining to Screening Criteria not mentioned elsewhere

a) Does the waterbody meet water quality standards related to the outstanding values?

While the water quality of the National Wild and Scenic Illinois River is exceptional and exceeds that of the Wild and Scenic Rogue during the fall, winter, and spring, the Illinois is water-quality limited for temperature and dissolved oxygen during summer months when many coastal rivers in southwestern Oregon experience low flows water quality impairment in these categories. Several tributaries in the nominated watershed area—despite their exceptionally clean clear water—are also water quality limited for temperature. Some of this is due to natural conditions, repeated wildfire, management actions or lack thereof, and climate change.

According to the U.S. Forest Service's Watershed Condition Framework Interactive Map, there are only two sub-watersheds within the nominated watershed area identified to be "functioning at risk," which is the intermediary score between "functioning properly" and "impaired function." The two are the Josephine Creek Watershed and the Rancherie Creek Watershed. Both have extensive areas within their watersheds where streams flow though open serpentine terrain (with less shading), and stream temperatures have historically been higher than desirable for cold water fishes.

However, it's important to note that streams flowing through serpentine terrain are also likely to be groundwater dependent and subject to "delayed discharge." In short, in late summer and early fall, discharge from most streams (flowing through typical geologic formations) will decline precipitously until fall and winter rains recharge the soils and aquifers. But it been observed that discharge from streams flowing through serpentine terrain maintain a more consistent flow or decline gradually in late summer and early fall. It's thought that the "delayed discharge" and the more gradual decline can be attributed to fractures in the tectonically sheared serpentinite that retain infiltrated water and release it gradually. 16

In addition, stream surveyors have observed significant cool groundwater input in streams where there are nearby *Darlingtonia* Wetlands, which we know are primarily fed by perennial springs where there's a consistent flow of cool groundwater.

This is why including associated wetlands in Outstanding Resource Designation is so important where distinctive serpentine geology is present. Even when there may be no apparent surface connection between the wetland and the stream, there is very likely to be input from the wetland to the stream through a shallow subsurface fracture lines serving as a connecting pathway.

¹⁶ See the chapter on Watersheds and Hydrology in *Serpentine Geoecology of Western North America* - https://academic.oup.com/book/41004

This may be especially urgent given the Supreme Court's 2023 *Sackett v. EPA* decision, which eliminated protection for wetlands that do not have a direct and continuous surface water connection to navigable waters.¹⁷

b) Why we're requesting a watershed-based Outstanding Resources Waters designation for the Wild and Scenic Illinois River, its tributaries, and associated wetlands

Flowing through rugged and remote wilderness and canyons, the Illinois is considered one of the most pristine rivers in the lower 48. Consequently, the water quality of the Wild and Scenic section of the Illinois River and its direct tributaries—large and small—is considered excellent or outstandingly remarkable. However, despite the protective designations that have been accorded to this extraordinary wild river, they don't provide authority to actually safeguard the river's outstanding water quality—and other remarkable values that depend on that quality—into the future, as directed by the Wild and Scenic Rivers Act. 18

Although the [Wild and Scenic Rivers] Act requires managing agencies to protect and enhance water quality, the authority for regulating water quality rests with the states under the Clean Water Act (CWA).¹⁹

This paradox has been recognized by the Wild and Scenic River Interagency Coordinating Council. In 2018, the Council issued a technical paper entitled "Evaluation of State Water Quality Assessments and the National Wild and Scenic Rivers System" (hereafter Technical Paper) that identifies and discusses the critical nexus between the states and federal wild and scenic river managing agencies in protecting water quality.²⁰

Moreover, because Wild and Scenic Rivers are not isolated resources and are susceptible to a multitude of water quality stressors that originate *outside* their designated corridors, the Technical Paper also recognizes that effective protection and enhancement of wild and scenic

¹⁷ Bob Needham, "Mendelson on Sackett v. EPA's Impact on Wetlands Protection: 5 Questions," Michigan Law Blog, June 15, 2023: https://michigan.law.umich.edu/news/5qs-mendelson-sackett-v-epas-impact-wetlands-protection

¹⁸ The Act states: It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. Public Law 90-541-Oct. 1, 1968: https://www.rivers.gov/sites/rivers/files/2022-10/Public Law 90-542.pdf

¹⁹ "Evaluation of State Water Quality Assessments of the National Wild and Scenic Rivers System, A Technical Paper of the Interagency Wild and Scenic Rivers Coordinating Council," Oct. 2018: https://www.rivers.gov/sites/rivers/files/2023-07/state-water-quality-assessments.pdf

²⁰ Ibid. p.7.

rivers—and water quality, in particular—entails "looking beyond their designated corridors and considering the health of their tributaries, catchments, and watersheds."

In particular, the Paper identifies the important opportunity that designation by states of Wild and Scenic Rivers as Outstanding Resource Waters can provide to more effectively and successfully protect water quality of our nation's finest rivers into the future. It recognizes that Outstanding Resource Waters designation under the Clean Water Act, with its "theme of protecting water qualify in waterbodies of national significance aligns harmoniously with the basic principles of the [Wild and Scenic Rivers] Act."²¹

To underscore the alignment of Outstanding Resources Water and Wild and Scenic Rivers designations, the Technical Paper points to EPA's water quality standards that provide the following directive: "where high quality waters constitute an outstanding National resource, such as waters of National and State park and wildlife refuges and water of exceptional recreational or ecological significance, that water quality must be maintained and protected." The Paper also points to the "protect and enhance" language of section 10(a) of the WSR Act, which is interpreted as a "non-degradation and enhancement policy for all designated river areas" under the 1982 Interagency Guidelines. However, despite the non-degradation policy, only 48 Wild and Scenic Rivers have been identified by their respective states as having Tier 2 1/2 or Tier 3 protection, and 62.5% of them are impaired.²²

Because we are very interested in preserving the outstanding water quality of the Illinois and other wild rivers in our special corner of Southwestern Oregon, we find the opportunity to designate our finest National Wild and Scenic rivers as Outstanding Resource Waters to be a promising but also a crucial approach, especially given the prospect of future mining operations in the watershed that could pose perilous risks to water quality.

As some of the original supporters of the citizen petition to the Environmental Quality Commission and Department of Environment Quality for the Outstanding Resource Waters designation for the National Wild and Scenic North Fork Smith River, its tributaries and associated wetlands, we recognize that in water quality and ecological values, the North Fork Smith and Wild and Scenic Illinois River are similar. Their exceptional water quality and clarity and ecological values are dependent on the health of their entire watersheds, which is why we're proposing a similar watershed-based approach with this ORW nomination for the Illinois River, its tributaries and associated wetlands.

22 Ibid.

²¹ Ibid. p. 23.

Congress has designated dozens of National Wild and Scenic Rivers within Oregon, but the State has designated only one of these as Outstanding Resource Waters—the North Fork Smith. We urge the Department of Environmental Quality to begin the process of designating the National Wild and Scenic Illinois, its tributaries and associated wetlands as Outstanding Resource Waters in order to better safeguard this nationally significant waterway into the future.

7. Landowners and managers affected by the protection rules (e.g., Forest Service, BLM, state, tribes, private landowners, etc.), including those both upstream and downstream of the nominated waters.

The nominated watershed of the National Wild and Scenic Illinois River, including tributaries and associated wetlands, are with few exceptions, federal public lands, managed by the Rogue River-Siskiyou National Forest (308,000 acres) and the Bureau of Land Management, Medford District (8,000 acres). The Forest Service is the principle agency tasked with managing the river corridor and its outstanding values.

There are roughly 2,400 acres of private industrial forestland that is an inholding in the upper Briggs Creek Watershed. These private lands are subject to the Oregon Forest Practices requirements, which fall under the purview of the Oregon Department of Forestry.

We've identified 11 smaller private inholdings, most are along the National Wild and Scenic River corridor.

The Illinois River flows through the ancestral homelands of the Takelma people and the Confederated Tribes of the Siletz Indians, and the river corridor hosts several cultural sites, including falls that were historically used as fishing sites for Pacific lamprey and for salmon.

The City of Cave Junction lies upstream of the nominated waterbodies. It taps its municipal water supply from three wells and the East Fork Illinois River. None of these drinking water sources are within or downstream of the nominated waterbodies.

The Community of Agness lies located downstream of the nominated waterbodies and upstream of the confluence of the Illinois and Rogue rivers on the Rogue, with several private residences located on the lower Illinois, between the National Forest boundary and the Rogue. This short reach of mostly private land has been left out of the nomination proposal.

8. Potential environmental, social and economic benefits and impacts of ORW designation.

Because existing protective designations have limited authority to address threats of water quality degradation, Outstanding Resource Waters designation, with its anti-degradation emphasis, has important potential to work synergistically to safeguard a host of environmental, social, and economic benefits.

The ORW designation can help to protect outstanding water quality, recreation, fishery, botanical and scenic values described above into the future. These values form the basis for social and economic benefits.

The community of Agness, a remote rural community located at the confluence of the rivers, will benefit from the quality of life that comes from high quality recreation, especially fishing, boating, and other river-related activities that depend on clean water and a clean and healthy environment. Local businesses in Agness, which include restaurants, lodges and campgrounds, will benefit from protecting the clean water that flows into the lower Illinois and the Rogue, as will visitors who come to experience the recreational opportunities of the area. Private land owners along the river will benefit from the assurance of high water quality into the future.

The city of Gold Beach is located 27 miles downstream at the mouth of the Rogue River depends heavily on tourism and amenities that the National Wild and Scenic Rogue and the Wild and Scenic Illinois River and its tributaries provide, including high quality recreation, especially fishing, boating, camping, and other river-related activities that depend on clean water and a clean and healthy environment. Local businesses in Gold Beach, which include restaurants, guide services, motels, and campgrounds, will benefit from protecting the clean water that flows in the lower Illinois and into the Rogue, as will visitors who come to experience the recreational opportunities of the area. Local residents from throughout Curry County will benefit from access to high quality recreational opportunities, too.

The city of Gold Beach taps its municipal water supply from a shallow groundwater infiltration system, located along the Rogue River about 20 miles downstream of the Illinois confluence. Shallow groundwater is replenished by seasonal high flows into floodplains and so pure water from the Illinois River indirectly contributes to the city's water quality and security.

Beyond local communities, visitors and tourists from farther away will benefit from, protecting and enhancing the National Wild and Scenic Illinois River's outstanding remarkable values, especially its exceptional water quality, wild steelhead runs, and the high quality swimming and boating opportunities. Because of these exceptional values, visitors and tourists come from afar to experience whitewater rafting, fishing, and hiking. Reflecting how these values—especially fishing— lies at the center of the region's identity, the communities of the South Coast self

identify as the "Wild Rivers Coast" to emphasize the unique set of amenities and values that come from hosting a collection of free-flowing, wild and scenic rivers and salmon streams.

Tribes that return to the Illinois River for cultural purposes will likely benefit from protecting the high water quality of the river.

Since the Illinois contributes to the Rogue River's fisheries, commercial fishers that harvest Rogue River fish will benefit from conserving water quality.

All these entities—plus birds, fish, and wildlife—could be impacted by the failure to designate the Illinois as an Outstanding Resource Water, which could allow the water quality—and associated river values—to significantly degrade, especially if new and polluting land uses are proposed that could effect nominated water bodies.

Because the nominated reach is mostly inaccessible wilderness and federal Wildlands, there are few entities that could be directly impacted by ORW designation. The primary entities that could be impacted by the designation are commercial operations that have the potential to pollute and degrade water quality. These might include future mining operations on federal public lands in the nomination area that have not been withdrawn from mining or where existing claims prove to have valid rights.

9. Outreach efforts done as part of nomination, including to landowners or managers and other affected parties.

Thus far, we have reached out to the Rogue River-Siskiyou National Forest, which manages approximately 98% of the federal public lands in the nominated waterbodies. The Rogue River-Siskiyou National Forest previously supported an ORW designation, providing a letter of support in 2016, for the National Wild and Scenic North Fork Smith River that lies within its boundaries. We've also reached out to the Confederated Tribes of the Siletz Indians to inform them about this nomination. We've talked to the owner of one of the private inholdings and have started to reach out to outfitters and others who's businesses rely on preserving the exceptional water quality of the National Wild and Scenic Illinois River and its wild salmon and steelhead runs. We've reached out to the Northwest Sportfishing Industry Association. We intend to do more outreach to potentially affected parties. (See letters of support at the end: more to come!)

10. Organizations that support ORW designation for the Wild and Scenic Illinois

Klamath-Siskiyou Wildlands Center Northwest Rafting Company

Friends of the Kalmiopsis Trout Unlimited

Kalmiopsis Audubon Society American Rivers

Kalmiopsis Guides Association Native Fish Society

11. References and Resources

The Wild and Scenic Illinois River flows through a highly dissected, complex and diverse geologic setting of large and small watersheds. Much of the area is Inventoried Roadless Area or the congressionally designated Kalmiopsis Wilderness. The terrain is steep, access difficult, and for that reason, information for many parts of watersheds scarce.

The primary source of information for this Outstanding Resource Waters (ORW) nomination is found in a number of U.S. Forest Service documents and analysis, including Wild and Scenic River Eligibility Studies, prepared by the Siskiyou National Forest in 1993 and 1994. The watersheds or combinations of watersheds that are part of the proposed ORW also have Northwest Forest Plan Watershed Analysis. Although the importance of the Illinois salmon runs is widely recognized, the river's remote terrain has made it difficult for state fish management agencies to monitor. ODFW has conducted juvenile fish surveys each summer to track the status of runs. More recently, boaters who brave winter storms are providing visual information and personal observations about the exceptional water quality and great beauty of seldom seen stream reaches.

Appendix A: National Wild and Scenic Illinois Values

The official website for our nation's National Wild and Scenic River System, "rivers.gov" (https://www.rivers.gov/river/illinois) describes the National Wild and Scenic Illinois River as follows:

Located in southwest Oregon, the designated segment of the Illinois River flows from the Rogue River-Siskiyou National Forest boundary to its confluence with the Rogue River (also designated), a distance of 50.4 miles. Congress added southwest Oregon's Illinois River to the National Wild and Scenic River System in 1984, recognizing its nationally outstanding fisheries, water quality, scenery, recreation, and botanical values. The importance of the designation can be seen today in the visitors who travel along the river's scenic section, where thousands seek the relief of its clear waters during hot summer days. The Illinois River shines as one of the West's premier whitewater rivers and as a wild salmon and steelhead refuge.

It goes on to describe the river's outstandingly remarkable values:

Botany - The river supports rare and diverse plant communities. Some of the plants and wildflowers are common, and others are rare adaptations to the local serpentine geology. The California lady's slipper is a rare orchid found in northern California and southern Oregon. Each stem can have up to 21 flowers that are fertilized by trapping insects in their pouch (or slipper). Other notable species include Tolmie's star tulip, rock cress, Kalmiopsis leachiana, Indian rhubarb (umbrella plant), wild iris, butterwort, pitcher plant, Indian paintbrush, lupine, phlox, monkey flower, and camas.

Fish - The Illinois River is a world-class native salmon and steelhead river. It is significant in the variety and numbers of salmonid and other species, including coho and chinook salmon, winter steelhead, cutthroat trout (three life histories), Pacific lamprey, and green sturgeon.

In the 1970s, approximately 25,000 salmon and steelhead were caught by sport fisherman each year. The Illinois contributed another 85,000 salmon annually to offshore commercial fisheries. However, as with all West Coast rivers, numbers have declined.

The Illinois is one of the few rivers on the West Coast where there is no hatchery supplementation program. On the Illinois River, you can still watch the age-old spectacle of wild salmon jumping natural barriers in their ritual return to natal spawning grounds, where they reproduce and die.

Recreation - The river offers marvelous recreation opportunities, including whitewater that provides plenty of excitement for small rafts and kayaks. The wild section flows through a steep canyon for 29 miles between Briggs and Nancy Creeks, featuring 150 rapids of which

11 are Class IV and one is Class V. This section is reputed to be the most remote, inaccessible river segment in the lower 48 states.

Scenery - The river provides unity to the scenic experience, yet it is composed of an unlimited variety of elements. The variety stems from the water itself and is enhanced by the diverse and spectacular mountain backdrops.

Water Quality - The exceptional color (blue-green) and clarity (allowing viewing to 15 feet or greater) of the waters of the Illinois are outstanding. The water quality contributes to the exceptional habitat for the fish and botany communities in the river corridor, as well.



Rafting through the scenic Illinois canyon on beautiful blue water

Photo by Michael Dotson

Appendix B: Wild and rugged watersheds for wild salmon and steelhead

The watershed of the National Wild and Scenic Illinois River and its tributaries include some of the steepest, most rugged, inaccessible, and geologically complex public land on the West Coast. Given high precipitation and steep terrain, stream density on the Siskiyou National Forest is especially high.²³ For example the 51,600-acre Silver Creek Watershed has 325 miles of perennial streams and an estimated 342 miles of intermittent streams.²⁴ This makes excellent fish habitat, especially for steelhead.

A high percentage of the streams within the nominated waterbodies—especially in the Kalmiopsis Wilderness—host pristine or near-pristine habitat for the Illinois River Basin's wild, native, naturally reproducing salmon steelhead and cutthroat trout. The Illinois River is important as one of only two river basins of size in Oregon where there's been no program of hatchery supplementation of its wild fish runs, and so it's an important refuge for the conservation of wild fish genetics. According to the National Marine Fisheries Service, despite some few minor examples of fish introductions from outside the basin, the "Illinois River winter steelhead are generally considered to be the best remaining example in Oregon of an indigenous, 'wild' steelhead run." More colloquially, fishing guides have long recognized that Illinois winter steelhead have larger, heavier, deeper bellied bodies—a physique presumably derived from generations of fish plying powerful waters in steep canyons.

There are numerous references in U.S. Forest Service watershed analysis documents that point to the excellent salmon and steelhead habitat of the National Wild and Scenic Illinois River and its tributaries and to the importance of the Illinois River Basin as a stronghold for wild anadromous fish repopulation in the Rogue River Basin.²⁶ One Forest Service Watershed Analysis described the river's fish values in this way:

The Illinois River Basin is believed to be one of the most important and special anadromous fisheries in the Rogue Basin. The majority of wild coho salmon and winter steelhead stocks in the entire Rogue Basin spawn in the Illinois Basin. Thus, most fisheries biologist assume the

²³ In a report prepared for Forest Ecosystem Management Assessment Team by K. Norman Johnson and others in 1993, the Siskiyou National Forest was found to have a stream density of 8.54 miles per square mile. Of this there's 2,446 miles of Class I and II streams, exceeded only by Mt. Hood National Forest.

²⁴ US Forest Service, 1995, *Silver Creek Watershed Analysis*, Galice Ranger District, Siskiyou National Forest, pp, 6, 7, 10 & A6.

²⁵ US Department of Commerce, NOAA Technical Memorandum NMFS-NWFSC-10 Status Review for Oregon's Illinois River Winter Steelhead, May 1993, p. 68.

²⁶ U.S. Forest Service, 1997, West Fork Illinois River Watershed Analysis, Iteration 1, Siskiyou National Forest, p 17.

Illinois River basin to be the stronghold for wild anadromous fish populations in the Rogue Basin.²⁷

Another Forest Service watershed analysis summarized the Illinois River's fishery values in this way:

The Illinois River subbasin has more that 250 miles of stream habitat used by anadromous fish for spawning and rearing (ODFW database, 1976). Winter steelhead potentially inhabit more than 300 miles in this sub-basin depending on flow. Coho salmon utilize approximately 100 miles of stream in the Illinois. Stream surveys conducted in the 1990s indicate considerably more miles of streams used by steelhead and coho than figures included in the 1976 database. The Illinois River provides diverse aquatic and riparian habitat for the following native salmonid fish stocks: fall chinook salmon, coho salmon, winter steelhead, sea run cutthroat trout, resident cutthroat trout and rainbow trout. The Oregon Department of Fish and Wildlife lists all anadromous species as depressed. The National Marine Fisheries Service has listed N. California/S. Oregon coho salmon as threatened under the Endangered Species Act. The National Marine Fisheries Service has proposed Klamath Mountains Province steelhead for listing as threatened under the Endangered Species Act.

Steelhead trout are prevalent in the sub-basin, usually migrating upstream to remote headwater streams for spawning. Coho salmon utilize primarily the upper sub-basin above Deer Creek where interior alluvial valley habitat provides alcove and backwater habitat preferred by coho for winter rearing. Fall chinook spawn in the mainstem and east and west forks of the Illinois River, exhibiting a ocean rearing behavior whereby outmigration of juveniles occurs in the spring and early summer after emergence. Resident rainbow and cutthroat trout are present throughout the Illinois River and tributaries, proliferating above impassable anadromous fish migration barriers.²⁸

The Wild and Scenic River Study Report to Congress (albeit now out-of-date for specific fish population numbers) also underscored the exceptional fisheries value of the Illinois River:

The fish value of the Illinois is significant in variety and numbers of fish. More than 20 species of fish maintain reproducing populations in the drainage. The Illinois River, being a relatively small stream, contains a surprisingly large run of anadromous fish. Approximately 25,000 salmon and steelhead are caught by sport fishermen each year. Steelhead on this river are noted for their large size. The Illinois contributes another 85,000 salmon annually to the offshore commercial fisheries of Oregon and California.

²⁷ US Forest Service, 1997, *West Fork Illinois River Watershed Analysis, Illinois Valley Ranger District,* Siskiyou National Forest, p. 14 and p. 2 of the Fisheries appendix.

²⁸ US Forest Service, 1997, Briggs Creek Watershed Analysis, Siskiyou National Forest, p.6.

The Report went on to extoll astounding fish abundance that has no doubt been degraded over the past several decades, but it describes, too, the remarkable life history diversity for this river's runs that likely persist to some degree:

An estimated 30,000 winter-run steelhead migrate up the Illinois River each winter to spawn. Winter-run steelhead provides an important recreational value. Up to 10,000 summer-run steelhead move from the Rogue River into the lower Illinois each fall to rest in its cool water before resuming their migration up the Rogue....

The river supports a large run of fall chinook salmon, with an annual escapement of about 20,000 fish. Small runs of coho salmon and spring- run chinook also enter the river. Each year about 1,400 coho enter the river in October and November on a spawning migration.

The number of sea-run cutthroat entering the Illinois annually has not been definitely established, but is estimated at about 5,000 fish. The life history of cutthroat is similar to that of winter steelhead, except that adults return to spawn after one season of ocean residence.

Native resident rainbow and cutthroat trout are present in nearly all perennial headwater streams of the basin. In many of the tributary streams a natural linear progression of populations occur, with cutthroat trout in the headwaters, followed downstream by rainbow trout, steelhead, and chinook salmon.²⁹

Life history diversity is an important factor for the future resilience of fish populations and is supported by preserving high water quality and excellent habitat.

Southern Oregon/ Northern California Coast (SONCC) Coho are a threatened species listed under the Endangered Species Act, and the Illinois River is considered to be "Critical Habitat" for this species. SONCC coho typically transit through the wild and scenic canyon section of the river to reach lower gradient spawning habitat up in the "Illinois Valley." The lower Illinois is considered to be migration and rearing habitat for this species, but Josephine Creek (nominated waterbody) is considered to be rearing and spawning habitat (StreamNet Interactive fish habitat mapper).

Although status of Pacific Lamprey are not much mentioned in Forest Service analyses, StreamNet's Interactive fish habitat mapper identifies a lamprey spawning area just upstream of the waterbodies proposed for nomination, in the vicinity of Eight Dollar Mountain, suggesting that the proposed reach is used for migration. Historic evidence suggests that the falls of the

²⁹ US Forest Service, 1977, A Proposal: Illinois Wild and Scenic River, Siskiyou National Forest, pp. 24 & 47.

Illinois were once covered with abundant lamprey ascending the rock obstacles to reach their spawning grounds.

White and green sturgeon from the Rogue River enter the Illinois River from time to time, but little is known about the life history of these massive, ancient fish. There are past accounts of sturgeon reaching Illinois falls, but the local ODFW fish biologist thinks that sturgeon habitat is now likely restricted to pools in the lower river.

Several major tributaries to the Illinois afford significant habitat for winter steelhead. The Forest Service identified Silver Creek and Indigo creeks as "the two most important tributaries in terms of wild fish production" in the Illinois River Basin. Silver Creek as noted for its extensive high quality habitat, with pristine conditions, large deep pools, excellent water quality and cascade habitat and "pocket pools" that provide for excellent rearing habitat. In addition the remoteness of the stream makes it generally inaccessible to fisherman, providing juvenile steelhead "excellent conditions to rear to smolt size without fishing pressure." ³⁰

Lying not far downstream, Indigo Creek likewise hosts excellent habitat for winter steelhead. According to the Forest Service's watershed analysis of Indigo Creek, this tributary has a disproportionally high capability for steelhead spawning and rearing.³¹ Together, Silver and Indigo Creeks are the mainstay of steelhead habitat in the lower Illinois and represent a very significant genetic core for steelhead populations of the Illinois and Rogue River basins.³² Both Silver and Indigo Creek are important producers of steelhead for the world-renowned Rogue River fishery.³³

Data regarding the *current* status of salmon and steelhead runs on the Illinois are quite limited, in part owing to the rugged terrain which makes if difficult for fishery agencies to regularly monitor returning runs. However, the Oregon Department of Fish and Wildlife's Aquatic Inventories (AQI) Program conducts annual summer snorkel surveys to monitor coho, steelhead and cutthroat, (typically juveniles) in the Illinois, including in the nominated reach. Although the AQI snorkel survey project is designed to look at long term trends in distribution and abundance on large spatial scales—larger than specific streams and reaches—program data shows that the Wild and Scenic section of the Illinois remains an excellent producer of steelhead, especially in comparison with most all other streams. According to the AQI data, average steelhead counts (all

³⁰ US Forest Service, 1994, *Silver Creek and Its Tributaries Wild and Scenic River Eligibility Study*, Siskiyou National Forest, pp. 10, 11 & 19.

³¹ US Forest Service, 1998, *Indigo Creek Watershed Analysis*, Siskiyou National Forest, p. 05 & A8.

³² Ibid. p. A8

³³ US Forest Service, 1994, *Indigo Creek and Its Tributaries, Wild and Scenic River Eligibility Study*, Siskiyou National Forest, p. 10.

surveys since 2002 to present) per survey (typically 1000 meters) for the Oregon Coast DPS is 30. But in the Rogue (Klamath Mountains Provence DPS) it's 62, in the Illinois it's 47, and in the Lower Illinois its 100.³⁴

At this time of growing concern about climate change and its impacts on freshwater ecosystems and biodiversity, the deep pools of the Illinois River, shaded by steep canyon walls, are crucial for providing thermal refuge for aquatic life, even as ambient temperatures rise in summer months. The summer steelhead run of the Rogue is known to enter the Illinois and to climb upstream as far as Collier Creek to take refuge in the deep pools at the mouths of the lower river's tributaries.³⁵

³⁴ Interview, Ron Constable, ODFW, Aquatic Inventories Program, April 2024.

³⁵ Interview, Steve Mazur, ODFW Gold Beach District Fish Biologist, April 2024.

Appendix C: Down the River Narrative Description of Nominated Waterbodies

The Illinois River enters BLM and US Forest Service lands as it flows around the base of the cone-shaped Eight Dollar Mountain, one of the most significant botanical sites in Oregon. Wild azaleas line the river's banks, and perennial springs form wet meadows and Serpentine Darlingtonia Wetlands. These lush wetlands punctuate otherwise spare but lovely Jeffrey Pine savannas with native bunch grasses and wildflowers.

An interpretive boardwalk trail at the Eight Dollar Mountain Botanical Area winds through the fragile botanically rich landscape, featuring a mass of azaleas, to the edge of a very large Darlingtonia wetland. There's a trail along the river from here to Little Falls and the Little Falls Recreation Area, where at the right time of year one can watch the Illinois Basin's wild Chinook salmon leaping to clear this natural barrier as they have for thousands of year on their return to natal spawning grounds.

Josephine Creek flows into the Illinois from the left. According to the Wild and Scenic Eligibility Study for Josephine Creek and its tributaries, this creek adds approximately 17 percent to the flow of the Illinois during critical low flow periods.³⁶

A little further downstream, in the 17.9 mile Scenic River Area of the Wild and Scenic Illinois River, there are epic swimming holes where on hot summer days thousands of visitors seek relief in the cool, clear and clean waters of the Illinois. Here you also find the beautiful Illinois River Falls. Downstream, the canyon deepens, solitude increases, and the river's volume ever increases with inflows from tributaries of varying sizes.

At Briggs Creek, the beginning of the Wild River Area, the character of the river changes again as it enters the Kalmiopsis Wilderness. Briggs Creek, with its 43,700 acre watershed, enters on the right. According to the Forest Service's Watershed Analysis, Briggs Creek adds approximately 10 to 20 percent to the flow of the Illinois River and is an important wild steelhead producer.³⁷

Between Briggs Creek and Lawson Creek, there are 150 rapids. Eleven are Class IV and one is Class V.³⁸ Large and small tributaries enter into the river, some as waterfalls. The Wild River Area of the Illinois is said to be the most remote, inaccessible sections of river in the lower 48 states and has been called "one of the preeminent whitewater challenges in the United States."³⁹

³⁶ US Forest Service, 1993, *Josephine Creek and Its Tributaries Wild and Scenic River Eligibility*, Siskiyou National Forest.

³⁷ US Forest Service, 1997, *Briggs Creek Watershed Analysis*, Siskiyou National Forest, p. 4.

³⁸ See Rivers.gov: <u>https://www.rivers.gov/river/illinois</u>

³⁹ Tim Palmer, *The Wild and Scenic Rivers of America*, Island Press, 1993, 205.

After the most challenging rapids in the Wild River Area, four large tributaries come in. Collier Creek enters on the left flowing out of the Kalmiopsis Wilderness. There's no flow estimates but it has excellent water quality and appears to be an important produce of anadromous salmonids.⁴⁰

Next comes Silver Creek, flowing from a 51,600 acre watershed and contributing 20 to 30 percent to the flow of the Illinois. Silver Creek has considerable local influence on the Illinois down stream of it, especially in the summer months.⁴¹ Silver Creek has exceptional water quality for fish and is one of the two most important tributaries (Indigo Creek is the other), in terms of wild fish production in the Illinois River Basin.⁴²

Three miles downstream of the confluence of Silver Creek, Indigo Creek enters the Illinois River, also from the right/ east. While it's watershed is approximately 49,000 acres or 8 percent of the Illinois Basin, it provides 15 to 20 percent of the total Illinois River flow and its capability for steelhead spawning and rear is disproportionately high.⁴³ Silver and Indigo Creeks are the mainstay of steelhead habitat in the lower Illinois and represent a very significant genetic core for steelhead populations of the Illinois and Rogue River basins.⁴⁴ Both Silver and Indigo Creek are producers of steelhead for the world famous Rogue River fishery.⁴⁵

Lawson Creek is the last major tributary of the Wild and Scenic Illinois before it enters the Wild and Scenic Rogue River. It's also where we propose that the Outstanding Resource Waters designation should end due to the amount of private land bordering the 3.8 mile Recreational River Area. Like Indigo and Silver creeks, Lawson Creek has excellent water quality.⁴⁶ Its 25,000-acre watershed provides excellent fish habitat, though it's not as productive as Silver and Indigo.

Lawson Creek does have a unique geologic/hydrologic feature that has been described as an area of the creek dominated by bedrock. Tributaries, seeps and springs enter the mainstem—some

⁴⁰ US Forest Service, 1993, *Collier Creek and Tributaries Wild and Scenic River Eligibility Study*, Siskiyou National Forest, pp. 6 & 8.

⁴¹ US Forest Service, 1995, Silver Creek Watershed Analysis, Siskiyou National Forest, p. A-3.

⁴² US Forest Service, 1994, *Silver Creek and Tributaries Wild and Scenic River Eligibility Study*, Siskiyou National Forest, p. 10 & 19.

⁴³ US Forest Service, 1998, *Indigo Creek Watershed Analysis*, *Siskiyou National Forest*, p. 05 & A8.

⁴⁴ Ibid., p.8.

⁴⁵ US Forest Service, 1994, *Indigo Creek and Its Tributaries, Wild and Scenic River Eligibility Study*, Siskiyou National Forest, p. 10.

⁴⁶ US Forest Service 1994, *Lawson Creek and Its Tributaries, Wild and Scenic River Eligibility Study,* Siskiyou National Forest, p.4.

containing *Darlingtonia*. The result is: "Exceptionally clear, emerald green water with water falls and pools reaching 25 feet deep."⁴⁷

Increasingly, expert kayakers have run several of the lower Illinois River's tributaries, including Silver, Indigo, and Lawson Creeks. These runs are studded with class IV and V rapids, waterfalls, and the risk of log jams. This high-adventure recreation requires an extremely high level of skill and strength. Putting-in for these wild and little-run whitewater reaches demands rigorous and lengthy hikes on old trails or no trails, sometimes with lots of poison oak, carrying boats and paddles. Some highly skilled paddlers regard the reward of paddling on beautiful, clear rivers in the lower Illinois to be worth the extreme effort.



Kayaking tributary Lawson Creek, Photo by Pricilla Macy, Into the Outside blog

⁴⁷ Ibid., p. 4.

APPENDIX D: Summary of current designations or protections for the waterbody or watershed

- a. National Wild and Scenic River The Illinois River, from the USFS boundary 50.4 miles downstream to its confluence with the National Wild and Scenic Rogue River
- b. Oregon State Scenic Waterway The Illinois River, from Deer Creek 46 miles, down stream to its confluence with the National Wild and Scenic Rogue River
- c. Federally-designated Wilderness Most of the "wild" reach of the Wild and Scenic Illinois River flows through the Kalmiopsis Wilderness Area. Tributaries, Nome, Klondike and Yukon creeks lie entirely within the Kalmiopsis Wilderness and 75% of the Collier Creek Watershed lies within the Kalmiopsis Wilderness.
- d. *Critical Habitat* the National Wild and Scenic Illinois River and the accessible habitat of its tributaries is Critical Habitat for Southern Oregon/Northern California Coho Salmon.⁴⁸

e. Other designations:

Serpentine Darlingtonia Wetland Conservation Agreement and Strategy, Essential Wetlands - Several Serpentine Darlingtonia Wetlands within the nominated watershed area are subject to a multi-agency Conservation Strategy and recognized as "Essential Wetlands."

Inventoried Roadless Areas - There are all or parts of three Inventoried Roadless Areas within the nominated watershed (North and South Kalmiopsis IRAs and Takelma Mountain IRA).

Forest Service Special Management Areas - There are four Forest Service special management areas to protect rare and sensitive plants and their habitat and one Research Natural Area within the nominated waterbodies (Eight Dollar Mountain Botanical Area, Days Gulch Botanical Area, Game Lake Botanical Area, York Creek Botanical Area, and Hoover Gulch Natural Resource Area). These are subject to stricter standard and guidelines, but none provide any protection from large scale surface mining or associated industrial activities.

Eligible National Wild and Scenic Rivers - Silver Creek and Indigo Creek possess one or more "outstanding remarkable values" making then eligible to be added to the National Wild and Scenic River System upon action by Congress.

⁴⁸ US Dept of Commerce, NOAA, National Marine Fisheries Service, "Designated Critical Habitat Central California and Southern Oregon/Northern California Coasts Coho Salmon," *Federal Register*, Vol. 64, No. 86, May 5, 1999, 24049- 24061.