

CASCADE RIVER

For designation as a Tier III(A) outstanding resource water, we nominate the Cascade River, from the headwaters of its three forks to the boundary between Mt. Baker-Snoqualmie National Forest and Washington State Department of Natural Resources land, including all named and unnamed tributaries, wetlands, and intermittent and perennial streams (collectively “tributaries”) in those reaches. The Cascade River and named tributaries, which are included in this nomination, comprise approximately 149.8 miles of streams. This total does not include unnamed tributaries, wetlands, or intermittent or perennial streams, but these are also included in this nomination.



Source: Thomas O'Keefe

A. Background

The Wild and Scenic Cascade River flows through one of the most scenic parts of the state: the heart of the North Cascades. It forms from the North, Middle, and South forks of the Cascade River. The North Fork begins at Cascade Pass, the Middle Fork at Middle Cascade Glacier, and the South Fork at South Cascade Lake. The Cascade flows generally northwest, then west, until it joins the Skagit River at the town of Marblemount. The river basin is located entirely in Skagit County.

The Swinomish, Upper Skagit, and Sauk-Suiattle Tribes have historically inhabited the land near the Cascade.¹ The Sauk-Suiattle Tribe fishes, hunts, and gathers food and medicines throughout the area.²

In 1978, Congress designated the Cascade's entire mainstem and the lower reaches of the North and South Forks as "scenic" as part of the Skagit Wild and Scenic River System.³ The nominated reaches of the Cascade and its tributaries occur entirely within wilderness, National Park, or national forest lands. Of those national forest lands, most are Inventoried Roadless Areas.⁴ Impactful land uses are thus largely restricted in each of these areas.

The nominated reaches of the Cascade have several substantial tributaries, including Sibley Creek, Found Creek, Kindy Creek, Sonny Boy Creek, and others. All of these share the attributes that make the Cascade an outstanding resource water.

The lower reaches of the Cascade flow through private land and state land managed by the Department of Natural Resources. This nomination does not seek designation of this reach as an ORW.

The Cascade River's Wild and Scenic River designation provides some protection for the mainstem and lower reaches of the North and South Fork, by providing a tool for managing activities within a quarter mile of those reaches' ordinary high water marks. But it does not protect the undesignated parts of the basin: the Middle Fork or the upper reaches of the North and South Fork, and all tributaries. Moreover, Wild and Scenic status by itself does not provide the same water-quality-based protections as an ORW designation.⁵ With ORW designation, Ecology would grant the nominated reaches of the Cascade and its tributaries the highest level of water quality-based protection under the state Water Pollution Control Act, Ch. 90.48 RCW, and Ecology's antidegradation program.

B. The Cascade River Meets Several ORW Conditions

Because the nominated reaches of the Cascade and its tributaries are pristine and located in protected areas; have both high water quality and regionally unique recreational value; and

¹ Skagit Land Trust, River South II Property, <https://www.skagitlandtrust.org/properties/southcascaderiverii.aspx>.

² Sauk-Suiattle Indian Tribe, 2016 State of Our Watersheds Report: Skagit River Watershed, at 208 https://geo.nwifc.org/SOW/SOW2016_Report/SaukSuiattle.pdf.

³ National Wild and Scenic Rivers, Skagit River, <https://www.rivers.gov/rivers/skagit.php>; Pub. Law 95-625, Nov. 10, 1978.

⁴ Most of the upper mainstem is along FS land that is classified IRA. About half of this land (mainly on the north side of the river) is categorized "IRA, does not allow road construction & reconstruction," while the other half (on south side) is classified "IRA, allows road construction and reconstruction."

⁵ A 2018 paper found that nearly three quarters of the miles of assessed wild and scenic rivers, and at least 44 percent of all wild and scenic rivers, are "impaired" under the Clean Water Act. Interagency Wild and Scenic Rivers Coordinating Council, Evaluation of State Water Quality Assessments and the National Wild and Scenic Rivers System (Oct. 2018).

have statewide ecological significance, the Cascade is an excellent candidate for eligibility under ORW conditions (a), (c), and (d) under WAC 173-201A-330(1):

- (a) The water is in a relatively pristine condition (largely absent human sources of degradation) or possesses exceptional water quality, and also occurs in federal and state parks, monuments, preserves, wildlife refuges, wilderness areas, marine sanctuaries, estuarine research reserves, or wild and scenic rivers; . . .
- (c) The water has both high water quality and regionally unique recreational value; [and]
- (d) The water is of exceptional statewide ecological significance.

1. *Water Quality and Pristine Condition*

The nominated reaches of the Cascade River are pristine, which the regulation defines as “largely absent human sources of degradation.”⁶ Almost unique among rivers in the Skagit basin, and in contrast to logging impacts on those rivers, “[t]here has been little riparian degradation in the Cascade River.”⁷ There has also been no known hydromodification in the upper Cascade.⁸

There are no permitted point sources or outfalls above the mouth of the Cascade at Marblemount. This indicates a lack of point source pollution, consistent with the protected status of the adjacent lands.⁹ There are also no nearby mineral rights or other surface rights, nor any hazardous sites.¹⁰ The only development near the nominated reaches of the Cascade is Mineral Park Campground. Finally, the Forest Service’s forestry mapping tool shows no timber harvests on national forest land in the Cascade Basin.¹¹

Limited water quality data is available for the Cascade. Ecology has not issued a 305(b) report as part of a water quality assessment for the river. Nor has Ecology listed the river as impaired or

⁶ WAC 173-201A-330(1)(a).

⁷ National Marine Fisheries Service, Endangered Species Act (ESA) Section 7(a)(2) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response, at 62 (2018), available at https://archive.fisheries.noaa.gov/wcr/publications/nepa/salmon_steelhead/final_section_7_biological_opinion_s_kagit_rmp_04-10-2018_final_signed_rjw.pdf.

⁸ *Id.* at 63.

⁹ Washington State Department of Ecology, Water Quality Atlas, <https://apps.ecology.wa.gov/waterqualityatlas/wqa/map?lstid=71170> (last accessed April 2021).

¹⁰ United States Forest Service, Land Status and Encumbrances Map, <https://www.fs.fed.us/land/ALPLandStatusandEncumbrance/> (last accessed April 2021).

¹¹ United States Forest Service, Forest Management Map and Data Dashboard, <https://www.arcgis.com/apps/webappviewer/index.html?id=100f81e3161d4cf19175e1c3815f7280> (last accessed April 2021). Private and state-owned lands in the vicinity of the non-nominated lower Cascade reaches are reported to be in active timber production. River South II Property, *supra*.

threatened for any parameter.¹² The lack of any indications of degraded water quality coupled with the pristine condition of the river above the lowest reach suggest that the Cascade has very high water quality.

2. *Public Lands and Protected Areas*

The nominated reaches of the Cascade River are located entirely within the types of protected areas described in the regulation, WAC 173-201A-330(1)(a). The nominated reaches of the river and its tributaries flow through National Park, wilderness, and national forest lands that are administratively protected as either Inventoried Roadless Areas or administrative withdrawals under the Northwest Forest Plan. Much of the mainstem river is a federally designated Wild and Scenic River.

The Cascade mainstem and the lower reaches of the North and South forks are designated as “scenic” within the federal Wild and Scenic Rivers system. These parts of the river were included, along with the Sauk and Suiattle Rivers, in the Skagit Wild and Scenic River System when it was designated in 1978. Wild and Scenic River status preserves and protects rivers in their “free-flowing condition.” To qualify, rivers must be free-flowing and possess at least one “outstandingly remarkable value” (ORV). The outstandingly remarkable values for the Skagit system are fish, wildlife, and scenic quality.¹³

Along the North Fork, Wild and Scenic designation ends at the boundary of North Cascades National Park. The remainder of the North Fork is in North Cascades National Park. Similarly, for the South Fork, Wild and Scenic designation ends at the boundary of Glacier Peak Wilderness. The remainder of the South Fork, and the entire Middle Fork, are in Glacier Peak Wilderness.

In addition to their Wild and Scenic status, the lower North and South Forks and upper reaches of the mainstem flow through the Mt. Baker-Snoqualmie National Forest. Within the National Forest, most of the lands adjacent to the river are part of the Glacier Peak Roadless Area and the Hidden Lake Roadless Area.¹⁴

The Cascade tributaries, while lacking Wild and Scenic status, also flow through protected areas. Tributaries of the North Fork are located in North Cascades National Park, and tributaries of the South and Middle Forks are located in Glacier Peak Wilderness. Tributaries of the nominated reaches of the mainstem are located in the Mt. Baker-Snoqualmie National Forest, primarily in

¹² The South Fork is listed in Category 3 (insufficient data) for pH and chloride. Ecology, Washington State Water Quality Assessment 303(d)/305(b) List, https://apps.ecology.wa.gov/ApprovedWQA/ApprovedPages/ViewApprovedListing.aspx?LISTING_ID=71170 (pH) and https://apps.ecology.wa.gov/ApprovedWQA/ApprovedPages/ViewApprovedListing.aspx?LISTING_ID=71197 (chloride).

¹³ National Wild and Scenic Rivers System, Skagit River, <https://www.rivers.gov/rivers/skagit.php>.

¹⁴ Forest Service Roadless Area Map, Mt. Baker-Snoqualmie National Forest (2000), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fsmrs_072459.pdf.

Inventoried Roadless Areas, in Glacier Peak Wilderness (e.g. Sonny Boy Creek, Kindy Creek), and in North Cascades National Park (most of Marble Creek, and upper reach of Monogram Creek).

Finally, the Cascade's major tributaries (Sibley, Marble, and Kindy Creeks), its North Fork, and part of its South Fork are protected from hydroelectric development under the Northwest Power and Conservation Council's (NPCC) fish and wildlife program. The NPCC found that these streams contain "fish and wildlife resources of critical importance to the region."¹⁵

Condition (a). In addition to being pristine and having exceptional water quality, the nominated reaches of the Cascade River and its tributaries "occur [] in federal and state parks, monuments, preserves, wildlife refuges, wilderness areas, marine sanctuaries, estuarine research reserves, or wild and scenic rivers." Ecology should conclude that the Cascade River and its tributaries are eligible under condition (a).

3. *Unique recreational value*

In addition to its pristine condition and high water quality, the Cascade River has unique recreational value, particularly for boaters.

The Cascade provides one of the best settings in the state for whitewater kayaking. American Whitewater describes the river:

Located just outside of the North Cascades National Park, the Cascade flows through one of the most beautiful areas in the nation. The Cascade River provides some of the best continuous whitewater in the state. While none of the individual drops on the Cascade are overly difficult, the continuous nature of the run makes it suitable for advanced boaters. A high water run on the Cascade provides one of the best class V big water runs in the state. Lower water runs also give paddlers a great, albeit slower, class IV-V run over countless ledges and through numerous boulder gardens.¹⁶

In addition to its value to boaters, the Cascade is known as a destination to fish for salmon and steelhead, as well as coastal cutthroat and Dolly Varden.¹⁷

¹⁵ Northwest Power and Conservation Council, Protected Areas, <https://www.nwcouncil.org/fish-and-wildlife/fw-topics/protected-areas>.

¹⁶ American Whitewater, Cascade 2, <https://www.americanwhitewater.org/content/River/view/river-detail/2077/main>.

¹⁷ Fishwhatcom.com, Cascade River, <http://fishwhatcom.com/fishing-access/skagit-county/cascade-river/>.

Condition (c). The Cascade River’s unique recreational value for paddlers and anglers, together with its high water quality, should make it eligible for ORW designation under condition (c).

4. Statewide ecological significance

As the most pristine river in the Skagit Basin and a key river for salmon production, the Cascade River has statewide ecological significance.

Part of the reason for the Skagit Wild and Scenic River system’s “scenic” classification is its value as crucial fish habitat.¹⁸ The Skagit designation was the first time an entire river system was protected based on the needs of anadromous fish.¹⁹ The Skagit River system “contains essential habitat for anadromous salmonids, including several species that are listed as threatened under the Endangered Species Act.”²⁰ It provides habitat for Chinook, chum, coho, sockeye, and pink salmon.²¹ Chinook salmon are the primary food source for the endangered Southern Resident orca.²² An American Rivers’ report found that the river “is synonymous with winter steelhead and its watershed contains one of the healthiest and important populations of bull trout in the Western U.S.”²³

However, “like the rest of Puget Sound’s rivers, salmon and steelhead populations in the Skagit River are struggling compared to historic returns.”²⁴ This is because aquatic habitat in the Skagit basin as a whole is degraded, mainly due to forestry activities. The Sauk-Suiattle Tribe observed in a 2016 report: “The forestry practices that constitute the primary land use within the basins over the last 150 years have resulted in the degradation of salmon habitat. Spawning and rearing habitat is being degraded by fine sediment from surface erosion and mass wasting due to timber harvest and access roads.”²⁵

In contrast to the lower Skagit basin, the Cascade subbasin is relatively pristine. With their protected statuses, the upper Cascade and tributaries have not suffered the negative effects of forestry in recent decades. The Cascade instead has relatively cold water and low turbidity,

¹⁸ Stumpf, Jonathan, American Rivers, Fifty Years of Wild and Scenic Rivers in Washington: The Skagit River and Illabot Creek (Feb. 12, 2019), <https://www.americanrivers.org/2019/02/fifty-years-of-wild-and-scenic-rivers-in-washington-the-skagit-river-and-illabot-creek/>.

¹⁹ *Id.*

²⁰ Mostovetsky, Anna, et al., Sauk-Suiattle Indian Tribe, Skagit and Sauk Tributary Stream Temperature Monitoring: 2008-2013 Results and Interpretation, at 3 (2015), *available at* <http://skagitcoop.org/wp-content/uploads/SRSC-Stream-Temperature-Report-2008-2013.pdf>.

²¹ Stumpf, *supra*.

²² Washington Wild, WA Wild Coordinates Letter to Protect the Cascade River (Aug. 31, 2020), <https://wawild.org/wa-wild-coordinates-letter-to-protect-the-cascade-river/>.

²³ Stumpf, *supra*.

²⁴ Stumpf, *supra*.

²⁵ Sauk-Suiattle Watershed Report, *supra*, at 205.

making it excellent habitat for salmonids. The river and its small tributaries provide “important spawning and rearing opportunities for anadromous salmonids.”²⁶

Numerous species of salmon and steelhead are present in the Cascade and its tributaries, according to the WDFW’s Salmonscape database:

Table 1. Salmonid species presence

Spring Chinook (threatened)	Documented spawning in upper mainstem as far as lower South Fork. (Cascade has a wild, unique spring Chinook stock that regularly returns 200-400 fish. ²⁷)
Summer Chinook (threatened)	Spawning in lower mainstem.
Coho (species of concern)	Rearing and spawning in entire mainstem and tributaries; presence in lower South Fork (and upper SF accessible).
Fall Chum	Rearing in lowermost reach (rest of mainstem, part of SF accessible).
Winter Steelhead (threatened)	Spawning in mainstem as far as lower South Fork; presence in tributaries (upper SF accessible).
Summer Steelhead (threatened)	Spawning in center mainstem (and accessible in upper mainstem); presence in tributaries.
Sockeye	Presence in lower and center mainstem.
Pink Salmon (odd year)	Spawning in lower and center mainstem (accessible in upper mainstem and SF).
Bull Trout (threatened)	Rearing in mainstem; spawning in tributaries and SF.

Resident coastal cutthroat trout are also present in the mainstem and South Fork.²⁸

According to the NPCC’s fish and wildlife protected areas program, Sibley and Kindy Creeks contain critical anadromous fish resources, Marble Creek contains critical anadromous and resident fish resources, and the North and South Forks contain critical wildlife resources.²⁹

The Cascade and its tributaries also support a rich web of terrestrial species. Priority habitat types include, in addition to riverine habitat, freshwater emergent wetland and freshwater

²⁶ Hinton, Steve, et al., Skagit River System Cooperative Skagit River Basin Habitat Status & Trends for Freshwater Rearing Targets, at 15 (March 28, 2018), available at

http://skagitcoop.org/wp-content/uploads/2017-Freshwater-Indicator-Report_Final_.pdf.

²⁷ Wash. Dept. of Fish and Wildlife, Conservation – Cascade Chinook,

https://fortress.wa.gov/dfw/score/score/species/population_details.jsp?stockId=1072.

²⁸ WDFW, Priority Habitats and Species on the Web, <https://geodataservices.wdfw.wa.gov/hp/phs/> (last accessed April 2021).

²⁹ Northwest Power and Conservation Council, Protected Areas Mapper,

<https://psmfc.maps.arcgis.com/apps/webappviewer/index.html?id=f4a9bf13f2014b259d63c8eb03e1f7af> (last accessed June 2021).

forested and shrub wetland.³⁰ The basin is home to old growth forests, northern spotted owl, and marbled murrelet.³¹ Numerous other priority species (endangered species and other species of concern) may occur in the basin, including grizzly bear, lynx, and wolverine.³²

Table 2. Species of Greatest Conservation Need and Priority Habitat Types

Reach	Number of SGCN found in and near reach	Priority habitat types found in and near reach
South Fork Cascade	15	Freshwater Forested/Shrub Wetland; Riverine
North Fork Cascade	14	Riverine
Upper mainstem Cascade	17	Freshwater Emergent Wetland; Freshwater Forested/Shrub Wetland; Riverine
Irene Creek	10	Freshwater Emergent Wetland
Found Creek	12	Freshwater Emergent Wetland; Freshwater Forested/Shrub Wetland
Other upper mainstem Cascade tributaries	13	Freshwater Emergent Wetland; Freshwater Forested/Shrub Wetland

³⁰ Priority Habitats and Species on the Web, *supra*.

³¹ Washington Wild, *supra*.

³² Priority Habitats and Species on the Web, *supra*. The Priority species list includes [Species of Concern](#)—species that are designated Threatened, Endangered or Sensitive under state law—as well as other species on the WDFW list of Species of Greatest Conservation Need (SGCN). WDFW, State Listed Species (2019), available at <https://wdfw.wa.gov/sites/default/files/2019-06/threatened%20and%20endangered%20species%20list.pdf>. SGCN include, in addition to Species of Concern, other species thought to need conservation attention. SGCN are the basis of the State Wildlife Action Plan (SWAP). WDFW, 2015 State Wildlife Action Plan, at 3-2 (2015), available at https://wdfw.wa.gov/sites/default/files/publications/01742/5_Chapter3.pdf.

Condition (d). The Cascade River and its tributaries form a pristine riverine ecosystem within one of the state’s most critical river basins for salmonids. Ecology should find that the Cascade and its tributaries are eligible for ORW designation under condition (d), as a water “of exceptional statewide ecological significance.”

C. Conclusion

The Cascade River and its tributaries are an excellent example of an Outstanding Resource Water, and designation would benefit the state’s people, its economy, its wildlife, and its salmon.