



Executive Summary

The Metolius River is located entirely within Jefferson County and primarily within the Deschutes National Forest. Originating from springs that flow from the north base of Black Butte, the river flows 28.6 miles from its headwaters at Metolius Springs and terminates in Lake Billy Chinook. Often referred to as the “crown jewel” of Oregon’s rivers, the Metolius is famed for its beauty, the challenging fishing opportunities it offers, and for its crystal clear, cold water. The river is also renowned for its spectacular water quality and is recognized as one of the two most pristine rivers in Oregon. The Cascade Mountain range provides the river’s western backdrop, with Mt. Jefferson and Three Finger Jack looming over the river. Green Ridge borders the river to the East. The lower 17 miles of the Metolius River border the Warm Springs Reservation.

In 2022, Friends of the Metolius (FOM) and the Northwest Environmental Defense Center (NEDC) submitted a petition to the Oregon Environmental Quality Commission asking the EQC to designate the entire Metolius River an Outstanding Resource Water. The EQC denied the petition. During the public comment process, the Confederated Tribes of the Warm Springs Reservation raised significant concerns about the State of Oregon's authority to regulate water quality within the Warm Springs Reservation, and more broadly how an ORW designation would impact sovereign tribal interests. These are legitimate concerns; it is essential that any new regulation must fully protect the Tribes’ significant interest in the Metolius. FOM and NEDC also believe that the Metolius and its unique coldwater habitat deserves a high level of protection and is ideally suited for a “Tier 2.5” designation, and are hopeful that such a designation can be made while fully honoring tribal sovereignty.

Accordingly, FOM and NEDC are hereby nominating the Metolius River for consideration as a “Tier 2.5” water from its headwaters at the base of Black Butte, downstream for approximately 12 river miles to Candle Creek. *The nominated river section is coextensive with the river miles that are protected by an Oregon Scenic Waterway designation and are entirely upstream of the boundary of the CTWS reservation.* FOM and NEDC request that Oregon DEQ prioritize this nomination during the upcoming triennial review, and that a rulemaking to complete this designation be added to the triennial review work plan.

Oregon does not currently have guidelines for Tier 2.5 waters. However, DEQ can adopt water quality protections for specific water bodies through a rulemaking process¹. In this nomination,

¹ The “Three Basin Rule” for the McKenzie, North Santiam and Clackamas Rivers are an example. See OAR 340-041-0350.

proposed draft rules are included with provisions which we hope will provide important protections for the Metolius, while fully protecting tribal sovereign interests. (See Appendix D.) The proposed draft rules similarly include provisions that are drafted to provide flexibility relative to an Tier 3 ORW designation, notably, to account for the complicated land management in the Metolius Basin, and which clarify that the Tier 2.5 designation will not affect the management of the designated river section by the U.S. Forest Service, or the management and operation of the fish hatchery at Wizard Falls by the Oregon Department of Fish and Wildlife. FOM and NEDC anticipate that the rules that may eventually be adopted in rulemaking may differ from those included with this nomination; the goal is to protect existing water quality and provide more flexibility in balancing existing activities in the basin, complex land management and governance, and regulatory protections.

Outstanding Resource Waters are high quality waters that have extraordinary or unique character or ecological value, or are critical habitat areas, such that they constitute an outstanding state or national resource. Under the Clean Water Act, Oregon must protect the existing special water quality and ecological values of these waters under its antidegradation policy. We believe the Metolius River is uniquely qualified for designation as an ORW. We also recognize that given the size of the watershed and the level of development and activity along the river and within the watershed, a Tier 2.5 designation is appropriate. We urge DEQ to initiate a rulemaking process to protect the high quality of this upper reach of the Metolius River and its unique and special water quality, ecological and recreational values in the upcoming triennial review.

1. Name of Nominating Organizations

- Friends of the Metolius
- Northwest Environmental Defense Center

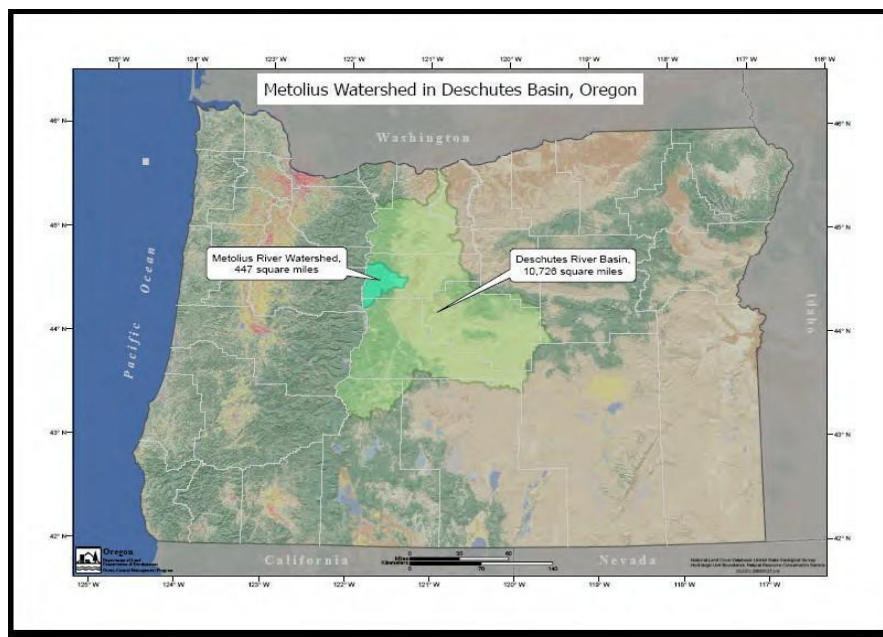
2. Description of Waterbody and Basin

Friends of the Metolius and the Northwest Environmental Defense Center hereby nominate the upper Metolius River (from its headwaters to Candle Creek (approximately River Miles 0 - 12) for consideration as a Tier 2.5 Resource Water. The Metolius River is a unique resource with pristine water quality, important habitat for fish and wildlife, and world-class recreation opportunities. Originating from springs that flow from the north base of Black Butte in Central Oregon, the river flows 28.6 miles from Metolius Springs and terminates in Lake Billy Chinook. Often referred to as the “crown jewel” of Oregon’s rivers, the Metolius is famed for its beauty, the challenging fishing opportunities it offers, and for its crystal clear, cold water.² The Metolius River is surrounded by the Metolius Basin and the Metolius Conservation Area.³

² Byron Dudley, *The Metolius: A River like No Other*, DESCHUTES LAND TRUST (2018), <https://www.deschuteslandtrust.org/news/blog/2018-blog-posts/the-metolius-a-river-like-no-other> (last visited April 15, 2024).

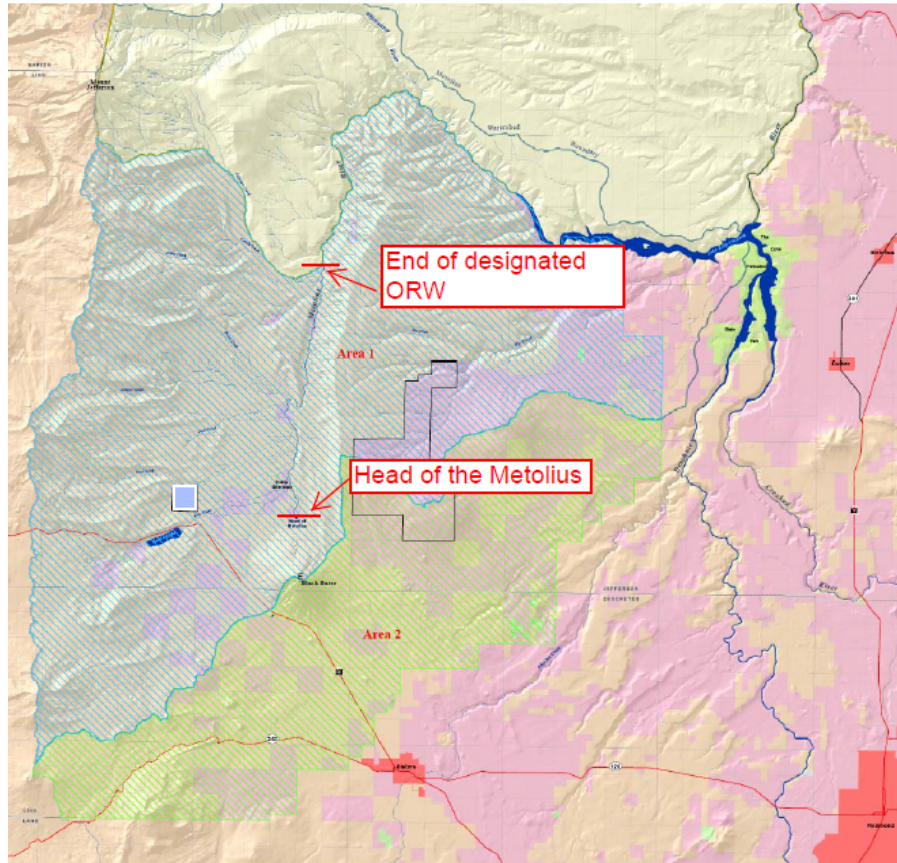
³ *Metolius Basin*, FRIENDS OF THE METOLIUS, <https://friendsofthemetolius.org/metolius-basin/> (last visited April 15, 2024).

The upper Metolius River is located primarily within the Deschutes National Forest and within Jefferson County. While this reach is within the borders of the Deschutes National Forest, it flows through some private land inholdings. The river's watershed extends partially into Deschutes County. The Cascade Mountain range provides the river's western backdrop, with Mt. Jefferson and Three Finger Jack looming over the river. Green Ridge borders the river to the East. The lower 17 miles of the Metolius River border the Warm Springs Reservation, and are not subject to this nomination. The Metolius is within the Upper Deschutes River Basin and in a larger context is part of the Columbia River Basin. The Metolius River joins the Deschutes and Crooked rivers at Lake Billy Chinook above the Pelton and Round Butte dams. The Deschutes outflows from these dams into the Columbia River, and eventually reaches the Pacific Ocean.



Map of Oregon, above, showing the Deschutes River Basin and the Metolius River Watershed

Map showing the nominated stretch of the Metolius River, below



The Metolius River is spring-fed and considered one of the most stable rivers in the world for its size, with notable geological features.⁴ Black Butte generally represents the headwaters of the Metolius River. The rocks that make up Black Butte are basaltic andesite typical of the High Cascades. Water that once flowed overland now percolates downward through the permeable sands and gravels beneath Black Butte and then surfaces again at the lowest point north of Black Butte at the current day Metolius Springs. The Metolius Springs are in the transition zone between the High Cascades geomorphic province to the west and the High Lava Plains to the east. The oldest rocks consist of alternating layers of basaltic-andesite and breccia and agglomerate typical of these types of volcanic centers. These eruptive rocks cover sandstone, diatomite, and pumice typical of the High Lava Plains to the east. The younger rocks in the region are from the High Cascade province made of variable volcanic and glacial-fluvial material.⁵ The Metolius Basin is located on a steep rain gradient on the eastern slope of the

⁴ U.S. FOREST SERV., U.S. DEP'T OF AGRIC., METOLIUS WATERSHED ANALYSIS UPDATE p. Ex-8 (Aug. 2004), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5284637.pdf [hereinafter WATERSHED ANALYSIS UPDATE].

⁵ N.V. Peterson & E.A. Groh, *Geology and Origin of the Metolius Springs, Jefferson County, Oregon*, 34 THE OREGON GEOLOGICAL SURVEY BULLETIN 41, 43 (1972), <https://www.oregongeology.org/pubs/og/OBv34n03.pdf>.

Cascade Mountain range. The unique geology of the Metolius Basin creates springs and highly permeable outwash plains of sand and gravel left by glaciers.⁶

The river provides important fisheries including one of the healthiest bull trout populations in the state, according to the United States Forest Service (“USFS”).⁷ The Metolius River once supported large sockeye and spring chinook runs and significant efforts are being made under the relicensing of the Pelton/Round Butte dams to re-establish those runs.⁸

The Metolius Basin supports a wide variety of wildlife. Large deer and elk populations, combined with the threat of “sagebrush subdivisions,” led Governor Tom McCall to request in 1974 that the Land Conservation and Development Commission consider the Fly Creek portion of the Metolius Basin as an Area of Critical State Concern.⁹ This area also forms the eastern edge of habitat for the Northern spotted owl.

The Metolius River is an important recreational resource for the state. The basin attracts a large number of visitors as a result of its unique hydrology, natural beauty, and world-class fishing, hunting, and hiking. According to the USFS, several hundred thousand recreational visitors enjoy the basin every year. There are nine public campgrounds within the basin, and several lodges on the surrounding private lands. The day-use area at the Head of the Metolius River receives 120,000 to 130,000 visits per year.¹⁰

Ninety-five percent of land in the Metolius Basin is public land that is managed by the USFS. The remaining five percent is private land. The basin is renowned for its Ponderosa Pine forests and the river is a central part of this forest ecosystem. There is a wide diversity of fire regimes and vegetation in the Metolius Basin. Under USFS criteria, all five fire regimes are present, although much of the area historically experienced frequent low intensity fire.¹¹ Higher elevations and moisture gradient areas support diverse subalpine, moist, and dry mixed conifer forests.

Camp Sherman provides residential areas, resorts, and campgrounds on the upper Metolius River, and the area has a long history of Native American use and early European settlement. Valued scenic vistas are found throughout the basin, especially at the headwaters of the Metolius River, Black Butte, wilderness trails in the Mt. Jefferson wilderness, and the Camp Sherman Area.

⁶ *Id.*

⁷ *Id.*

⁸ Jennifer Fairbrother & Mark Sherwood, *In Depth on the Deschutes—Part 1: Where We’re At*, NATIVE FISH SOCIETY (Feb. 21, 2018), <https://nativefishsociety.org/news-media/in-depth-on-the-deschutespart-1-where-were-at>.

⁹ Peter Wong, *Brian Clem Wraps Up 15 Years in the Oregon House*, SHERWOOD GAZETTE (Jan. 3, 2022), <https://pamplinmedia.com/sg/77-news/532285-425559-brian-clem-wraps-up-15-years-in-the-oregon-house>.

¹⁰ OR. DEP’T OF LAND CONSERVATION AND DEV., THE METOLIUS AREA OF CRITICAL STATE CONCERN 9 (March 24, 2009), <https://friendsofthemetolius.org/wp-content/uploads/2017/06/metoliusassc-1.pdf> [hereinafter METOLIUS AREA OF CRITICAL STATE CONCERN].

¹¹ WATERSHED ANALYSIS UPDATE, *supra* note 4, at p. Ex-8.

Much of the Metolius River watershed is protected forest and as a result, the health of the river and its aquatic ecosystem is outstanding. Several studies have investigated water quality in the Metolius River and the surrounding area due to the relatively pristine nature of the stream system and the unique geology of the area.¹²

3. Outstanding Water Quality Values and Characteristics to be Protected

The Metolius River is perhaps uniquely qualified to be designated as an Outstanding Resource Water. The river's outstanding characteristics are discussed and summarized below.

3.1 Water Quality

Of all the extraordinary qualities embodied in the Metolius Basin, the centerpiece is the outstanding water quality of the Metolius River. According to DEQ, the Metolius River has had “excellent” water quality at all times since at least 2011, as far back as the department's current data analysis goes.¹³ Additionally, the Metolius is a relatively stable river. The water temperature of the Metolius shows little variability from year to year and the discharge rate is similarly very constant. Realtime and historical temperature and discharge data for the Metolius River is available from the United States Geological Survey gauging station Grandview,¹⁴ which is a few river miles downstream of the headwaters.

Friends of the Metolius (“FOM”) has been monitoring water quality in the Metolius since 1990. In 2011, FOM began a substantial project to compile water quality data for the Metolius from as many different sources as possible.¹⁵ These sources included data from FOM (the most comprehensive collection), USFS, DEQ, Portland General Electric, and the Confederated Tribes of Warm Springs Reservation (“CTWS”). FOM collected the data from all sources and entered into an agreement with Oregon State University's Institute for Water and Watersheds, pursuant to which graduate students at Oregon State standardized the data where appropriate to remove duplicate constituent names or units (e.g., “Phosphorus – Total” and “Total Phosphorus”) and created a comprehensive database. Datasets were grouped for analysis based on location ID, constituent name, and measurement unit with a comprehensive water quality database being generated.

Upon completion of the work by Oregon State, FOM entered into an agreement with Geosyntec Consultants, Inc. to perform a comprehensive analysis of the water quality of the Metolius. In performing the analysis, Geosyntec relied upon the water quality database from Oregon State, and data from DEQ's LASAR database from 1969 to 2013. The work by Geosyntec culminated

¹² See *Id.*; *Water Quality*, FRIENDS OF THE METOLIUS, <https://www.friendsofthemetolius.org/water-quality/> (last visited April 15, 2024).

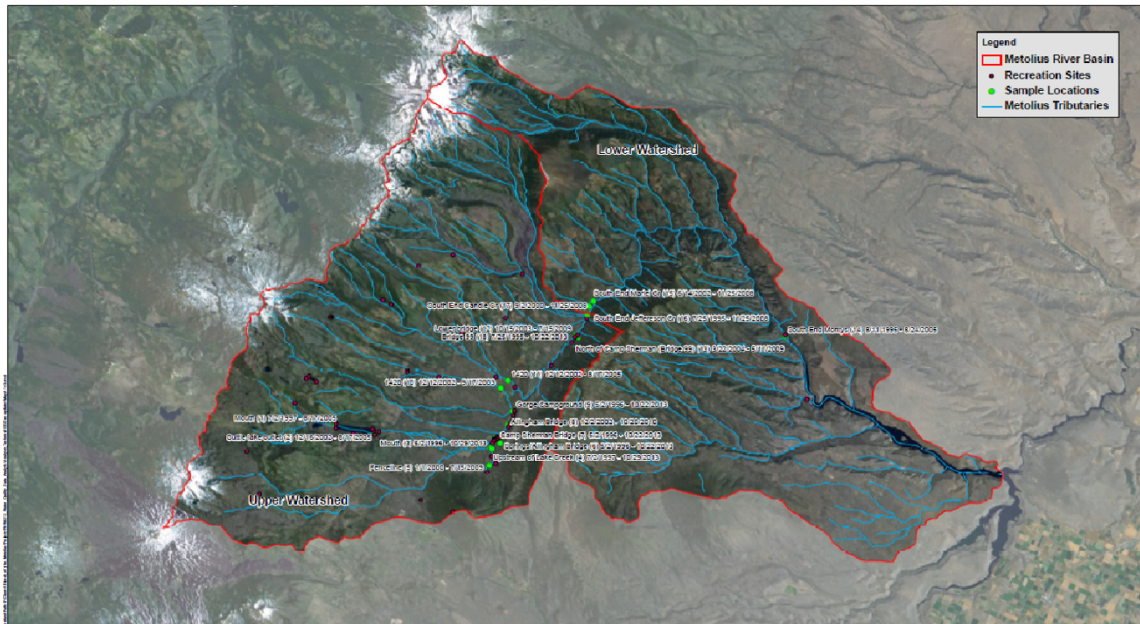
¹³ *Water Quality Index*, OR. DEP'T OF ENV. QUALITY, <https://www.oregon.gov/deq/wq/Pages/WQI.aspx> (last visited April 15, 2024) (relevant data contained in “raw data and historical status and trends” document linked to in webpage).

¹⁴ *National Water Information System: Web Interface*, U.S. GEOLOGICAL SURVEY (Metolius River near Grandview, OR) (last updated April 15, 2024), <https://waterdata.usgs.gov/nwis/uv?14091500>.

¹⁵ See *Water Quality*, FRIENDS OF THE METOLIUS, <https://www.friendsofthemetolius.org/water-quality/> (last visited April 15, 2024).

with delivery on December 5, 2014 of a final report with a full analysis of the water quality data. The final report is appended hereto in Appendix A, and the report and its appendices are available for download from FOM's website at <https://www.friendsofthemetolius.org/water-quality/>.

A map of the sampling locations analyzed by Geosyntec is presented below:



A summary of water constituents at each sampling location, number of non-detects, total sample size, and temporal extent of the data analyzed is appended in Appendix B. The study as a whole found that there were no critical trends in the river, and that nearly all parameters tested (E. coli, nitrates, phosphorus, pH, turbidity, and dissolved oxygen) met regional standard levels. Nitrates and phosphorus were occasionally higher than regional standards, but the study attributes this to the geology of the region.¹⁶ This study demonstrates that the Metolius River has outstanding water quality.¹⁷ This incredible resource should be conserved and protected by the Commission with an ORW designation.

Appendix C includes spreadsheets with water quality analytical data from the time period subsequent to the Geosyntec report and through the most recent monthly analysis, October 2021.

¹⁶ GEOSYNTec CONSULTANTS, FRIENDS OF THE METOLIUS WATER QUALITY ANALYSIS FINAL REPORT (Dec. 5, 2014) [hereinafter WATER QUALITY FINAL REPORT] at p. 3-3.

¹⁷ *Id.* at p. 3-62.

3.2 *Ecology and Fisheries*

A. Ecology

To develop a sense of the value of the Metolius River, it is important to have a sound understanding of the ecological communities interconnected within the Metolius River Basin.



The Metolius River is one of eight important rivers in Oregon's East Cascades ecoregion.¹⁸ Nestled in the transition zone between the wet and cool east-facing flanks of the Cascades and the dry high desert of Eastern Oregon, the river basin is home to a complex community of unique and interdependent habitats which support a rich biodiversity of flora and fauna.¹⁹ Designation of the Metolius as an ORW would help protect these species, which depend on the river's unique qualities in countless ways.

i. Wildlife

The Metolius River Basin provides habitat for a wide variety of animals common in Central Oregon. The river itself supports a range of fish species, many of which are endemic to the larger watershed. Examples include rainbow trout, bull trout, kokanee salmon, and mountain whitefish. These fish are not only important to the cycles of the Metolius' ecosystem, but are also culturally and recreationally valuable.²⁰

¹⁸ OR. DEP'T OF FISH & WILDLIFE, THE OREGON CONSERVATION STRATEGY: EAST CASCADES 173 (Jan. 2006), [https://www.landcan.org/pdfs/b-eco_ec\(1\).pdf](https://www.landcan.org/pdfs/b-eco_ec(1).pdf) [hereinafter CASCADDES CONSERVATION STRATEGY].

¹⁹ *Id.* at 172.

²⁰ U.S. FOREST SERV., U.S. DEP'T OF AGRIC., METOLIUS WILD AND SCENIC MANAGEMENT PLAN: FINAL ENVIRONMENTAL IMPACT STATEMENT 78 (1996), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5284660.pdf [hereinafter METOLIUS FINAL EIS] (describing importance of fish populations in the Metolius).

Along the banks and among the river’s natural debris—for example, in downed trees—river otters and beavers can be found. The river also supports populations of mule deer and elk, and less commonly, black bears, cougars, and more recently, wolves. The river and adjacent forests also support a plethora of birds, including vulnerable and threatened species such as the northern spotted owl and the bald eagle, and the rare white-headed woodpecker.²¹ Other birds that contribute to and depend on the rich biodiversity of the Metolius include migratory waterfowl, songbirds, shore birds, upland birds, and raptors such as osprey and red-tailed hawks.²²

The river basin is also home to a rich diversity of insects, including species of admiral, swallowtail, hairstreak, arctic, copper, and tortoiseshell butterflies.²³

ii. Plants

From the riparian areas to the forests of ponderosa pines, the impact of the Metolius River is seen beyond its banks in the high diversity of plants adjacent to the river. The Metolius River Basin includes a range of interconnected ecosystems and is home to several rare wildflowers and exceptionally high quality ponderosa pine stands.²⁴

a. Riparian Areas

Much of the land along the Metolius River is classified as riparian. Riparian areas are critical to the health of the Metolius. These areas filter ground water and streams as they enter the river, protecting the water quality. The riparian areas of the Metolius are nutrient-rich, supporting diverse plant life, which in turn prevents erosion, and providing crucial feeding and mating grounds for many animal and insect species.²⁵

In addition to riparian areas, the Metolius supports a mid-elevation fen, or alkaline wetland, which are rarely found on the east side of the Cascades. This groundwater-fed habitat is rich in biological diversity and the peat accumulations help to combat climate change as one of the best natural terrestrial carbon stores.²⁶

b. Rare Plants and Wildflowers

The Metolius River sustains a rich diversity of plant life, including Peck’s penstemon and mountain lady’s slipper—rare wildflowers endemic to the Pacific Northwest. Indeed, 70% of the world’s population of Peck’s penstemon, which is endemic to approximately 485 square miles of

²¹ *Id.* at 83–84.

²² *Metolius River*, U.S. FOREST SERV., U.S. DEP’T OF AGRIC., <https://www.fs.usda.gov/recarea/deschutes/recreation/hunting/recarea/?recid=71869&actid=62> (last visited April 15, 2024).

²³ *Id.*

²⁴ CASCADES CONSERVATION STRATEGY, *supra* note 18, at 183.

²⁵ METOLIUS FINAL EIS, *supra* note 20, at 16.

²⁶ Sarah Mowry, *Fun Fen Facts*, DESCHUTES LAND TRUST (Oct. 2, 2018), <https://www.deschuteslandtrust.org/news/blog/2018-blog-posts/fun-fen-facts>.

the planet, grows in the Metolius River Basin.²⁷ In addition to these rare wildflowers, a variety of other species can be found through the spring and summer, such as western buttercups, larkspur, serviceberry, Sitka valerian, early blue violets, bigleaf lupine, arrowleaf balsamroot, Indian paintbrush, American brookline, Douglas's spirea, and several species of monkeyflowers.²⁸

c. Trees, Grasses and Shrubs

In the temperate coniferous forests that characterize the eastern slopes of the Cascades, ponderosa pines are the predominant species. The Metolius River area is home to some of the highest quality ponderosa pine forests in the Pacific Northwest region.²⁹ Other trees common to the area include Douglas fir, grand fir, incense cedar, and western larch.³⁰

Common grasses and shrubs in the Metolius River Basin include western needle grass, bitterbrush, bottlebrush squirreltail, and Ross' sedge.³¹

B. Fisheries

The Metolius River is a critical habitat area for bull trout, and maintaining the high quality of the water by designating the river as an ORW is vital to maintaining its currently robust and sustainable population. The ORW designation is also essential to protect critical habitat for native redband trout and to support the continuing viability of Chinook and Sockeye salmon reintroduction programs.

i. *Critical Habitat Area for Bull Trout*

The Metolius River is a critical habitat area for bull trout, and the cold, clean waters of the Metolius have created an important stronghold for this threatened species. Further, the Metolius River's bull trout population is critical to bull trout reintroduction efforts across Oregon, as state and federal programs rely on extractions of healthy fish from the Metolius.

Bull trout (*Salvelinus confluentus*) is a species of char native to the Pacific Northwest. A unique and well-documented facet of bull trout biology is the species' requirement of clean, cold water.³² A primary factor identified as leading to the decline of bull trout populations is habitat degradation, often in the form of elevated water temperatures.³³ Sufficiently low water

²⁷ Maret Pajutee, *Peck's Penstemon: A Wildflower Mystery*, DESCHUTES LAND TRUST (June 14, 2021), <https://www.deschuteslandtrust.org/news/blog/2021-blog-posts/pecks-penstemon-a-wildflower-mystery>.

²⁸ USDA, PACIFIC NORTHWEST REGION VIEWING AREA: METOLIUS RIVER, *AVAILABLE AT* [HTTPS://WWW.FS.USDA.GOV/WILDFLOWERS/REGIONS/PACIFIC_NORTHWEST/METOLIUSRIVER/INDEX.SHTML](https://www.fs.usda.gov/wildflowers/regions/pacific_northwest/metoliusriver/index.shtml).

²⁹ CASCADES CONSERVATION STRATEGY, *supra* note 18, at 183.

³⁰ *Metolius RNA*, PACIFIC NORTHWEST INTERAGENCY NATURAL AREAS NETWORK, <http://www.fsl.orst.edu/rna/sites/Metolius.html> (last visited April 15, 2024).

³¹ *Id.*

³² Dale A. McCullough & Shelley Spalding, Multiple Lines of Evidence for Determining Upper Optimal Temperature Thresholds for Bull Trout 1 (2002), https://critfc.org/wp-content/uploads/2021/08/02_04report.pdf (hereinafter DETERMINING UPPER OPTIMAL TEMPERATURE THRESHOLDS).

³³ *Id.*

temperature is believed to be a critical element in the persistence or recovery of many bull trout populations.³⁴ Although research conducted to date has not produced consensus on a single, optimum water temperature for bull trout, some state and federal agencies have adopted a criterion of 10 °C (50 °F) for water quality and fish management purposes.³⁵ Bull trout populations have been negatively affected by several factors, including habitat and water quality degradation resulting from forest management and agricultural activities.³⁶

Bull trout populations have declined across their native range, and on November 1, 1999, the bull trout was listed as threatened under the federal Endangered Species Act.³⁷ At the state level, ODFW regulations list bull trout as a “Sensitive” species.³⁸

Bull trout in the Deschutes Species Management Unit (“SMU”)³⁹ are native fish sustained by natural production.⁴⁰ Historically, the Deschutes Bull Trout SMU contained eight populations of bull trout, but three are now considered extinct.⁴¹ The five remaining local populations in the lower Deschutes core area are in Shitike Creek, the Warm Springs River, and the three Metolius River population complexes.⁴²

The Jefferson and Jack complexes within the Deschutes SMU, which include the Metolius River and its tributaries, are the most abundant and productive bull trout fisheries in Oregon. Bull trout currently inhabit most of the Metolius River system, including First, Jack, Canyon, Roaring, Brush, Abbot, Candle, and Jefferson creeks, and the Whitewater River.⁴³ Although the overall

³⁴ *Id.*

³⁵ For example, based on an administrative review of literature and data for juvenile bull trout growth and rearing at associated temperatures, in 1997 the United States Environmental Protection Agency established a criterion of 10°C for promulgation of Idaho’s water quality standard, expressed as a consecutive seven-day average of daily maximum temperatures for June, July, August, and September. *Id.* at 6.

³⁶ U.S. FISH & WILDLIFE SERV., CLACKAMAS BULL TROUT REINTRODUCTION IMPLEMENTATION, MONITORING, AND EVALUATION PLAN 4, 8 (June 2011), https://www.fws.gov/oregonfwo/species/data/bulltrout/Documents/ClackamasBT_IME_Plan.pdf [hereinafter CLACKAMAS REINTRODUCTION PLAN].

³⁷ *Id.*

³⁸ This designation refers to “fish and wildlife that are facing one or more threats to their populations and/or habitats.” OR. DEP’T OF FISH & WILDLIFE, *Sensitive Species List, Frequently Asked Questions* 1 (2021), https://www.dfw.state.or.us/wildlife/diversity/species/docs/Sensitive_Species_List.pdf Sensitive_Species_List.pdf [hereinafter *Sensitive Species List FAQ*]. “Consistent with OAR 635-100-0040(2), ‘Sensitive Species’ are defined as having small or declining populations, are at-risk, and/or are of management concern.” *Id.*

³⁹ SMU is the listing unit for fish, per Oregon’s Native Fish Conservation Policy. *Id.* at 2; OR. ADMIN. RULES § 535-007-0504(6).

⁴⁰ U.S. FISH & WILDLIFE SERV., *Oregon Native Fish Status Report: Deschutes Bull Trout SMU* 125, <https://www.dfw.state.or.us/fish/onfsr/docs/final/10-bull-trout/bt-summary-deschutes.pdf> [hereinafter *Bull Trout SMU*] (last visited April 15, 2024).

⁴¹ *Id.* at 124.

⁴² U.S. FISH & WILDLIFE SERV., BULL TROUT DRAFT RECOVERY PLAN (summary) 3, https://www.fws.gov/pacific/bulltrout/PCH_04/Fact%20Sheets/chapter_7.pdf (last visited Jan. 19, 2022).

⁴³ U.S. FISH & WILDLIFE SERV., BULL TROUT (*SALVELINUS CONFLUENTUS*) DRAFT RECOVERY PLAN CH. 7: DESCHUTES RECOVERY UNIT, OREGON 7 (2002), https://www.fws.gov/pacific/bulltrout/RP/Chapter_7%20Deshutes.pdf [hereinafter BULL TROUT RECOVERY PLAN].

Deschutes SMU is classified as “potentially at risk,” the Metolius River population of bull trout is currently healthy enough to be considered “not at risk” under federal and state guidelines.⁴⁴

The Metolius River bull trout population is considered healthy enough to support, with low population risk, the extraction of individuals for translocation to the Clackamas River in connection with state and federal bull trout reintroduction programs.⁴⁵ Although the Deschutes River (Metolius River Subbasin) bull trout population decreased during 2009–2011, the cross-agency Clackamas River Bull Trout Working Group considered this population to be the least at risk of all potential donor stocks in Oregon.⁴⁶ Maintaining a healthy bull trout population in the Metolius River is therefore not only critical for this specific river, but also to ensure that efforts to reintroduce this species in its other historical river habitats can continue across the state.

Notwithstanding the relatively healthy state of bull trout in the Metolius River, Oregon maintains significant protections in its angling regulations. Bull trout fishing is limited to fly fishing only with barbless hooks from the river’s headwaters to the crossing at Lower Bridge road. All tributaries of the Metolius River below Lake Creek are permanently closed to angling.⁴⁷

ii. *Critical Habitat Area for Other Fish Species*

A. Redband Trout

The Metolius River is critical habitat area for redband trout. Redband trout (*Oncorhynchus mykiss ssp.*) are a subspecies of rainbow trout that are generally found in the Columbia and Fraser river drainages east of the Cascade Mountain Range and in several other Pacific Northwest basins.⁴⁸

Redband trout are listed as a species of concern under the Endangered Species Act.⁴⁹ The ODFW lists redband trout as a “Sensitive-Critical” species.⁵⁰ In 1996, pursuant to its Wild Fish Management Policy, ODFW ended its hatchery stocking program on the Metolius River and began managing the river to protect and encourage wild redband trout populations.

⁴⁴ *Bull Trout SMU*, *supra* note 40, at 125.

⁴⁵ CLACKAMAS REINTRODUCTION PLAN, *supra* note 36, at 5.

⁴⁶ *Bull Trout SMU*, *supra* note 40, at 125.

⁴⁷ *Id.*

⁴⁸ U.S. FISH & WILDLIFE SERV., GREAT BASIN REDBAND TROUT GENETIC STATUS ASSESSMENT FINAL REPORT 4 (April 2015), https://westernnativetrout.org/wp-content/uploads/2019/07/final_report_great_basin_redband_genetics_4-24-15.pdf [hereinafter GENETIC ASSESSMENT].

⁴⁹ *Interior Redband Trout*, U.S. FISH & WILDLIFE SERV. (last updated Sep. 8, 2015), <https://www.fws.gov/pacific/fisheries/IntRedbandTrout.cfm>. Redband trout are considered a species of special concern by the American Fisheries Society and the U.S. Fish & Wildlife Service in most states where the subspecies historically existed, and are classified as a sensitive species by the U.S. Forest Service and U.S. Bureau of Land Management. *Western Native Trout Status Report, Redband Trout*, WESTERN NATIVE TROUT ii (July 2018), https://westernnativetrout.org/wp-content/uploads/2018/08/InteriorRedband_WesternNativeTroutStatusReport_UpdatedAugust2018.pdf.

⁵⁰ *Sensitive Species List FAQ*, *supra* note 38, at 1. “Sensitive-Critical” species have current or legacy threats that are significantly impacting their abundance, distribution, diversity and/or habitat, and may decline to the point of qualifying for threatened or endangered status if conservation actions are not taken. *Id.*

Increasing water temperatures and changing hydrologic regimes associated with climate change are predicted to have negative impacts on redband trout, including habitat loss and reduced reproductive success.⁵¹ The proposed rule will help mitigate water quality issues that could potentially threaten redband trout in the Metolius River.

B. Chinook and Sockeye Salmon

The Metolius River provides critical habitat area for the reintroduction of extirpated Chinook and Sockeye Salmon. Historically, salmon and steelhead migrated from the Columbia River up the Deschutes River and into the Crooked River, Metolius River, and Whychus Creek.⁵² In 1964, Portland General Electric (“PGE”) completed the construction of Round Butte Dam on the lower Deschutes River, which attempted unsuccessfully to provide fish passage facilities to promote continued migration.⁵³

In 2005, PGE and the CTWS received a new operating license which made restoring fish passage at the dams its centerpiece.⁵⁴ To solve the fish barrier issue, PGE and the CTWS partnered to construct a \$100 million dollar Fish Passage System, which has seen the first returns of salmon and steelhead making their way through the facility and into the Upper Deschutes Basin, including to the Metolius River.⁵⁵

Like bull trout and redband trout, salmon require cold, clean water to support a healthy, naturally-reproducing population. The proposed rule will help mitigate water quality issues that could potentially threaten the reintroduction of salmon in the Metolius River.

4. Information Addressing Applicable Screening Criteria

- 1 & 2. The waterbody has several outstanding qualities and features, including water quality, temperature, ecology, fisheries, wildlife, and recreational values. This nomination provides evidence for these values. For more information please see Section 3 above.
3. The Metolius River meets water quality standards related to these outstanding values. Please see Section 3.1 for more information.
4. The Metolius River habitat supports wild, native populations, including rare and threatened species such as bull trout. Please see Section 3.2 for more information.
5. The waterbody has extremely high quality and highly productive habitat, including rare coldwater habitat necessary for bull trout and other coldwater dependent species. Please see Section 3.2(B) for more information.

⁵¹ GENETIC ASSESSMENT, *supra* note 48, at 4.

⁵² *Funding Salmon and Steelhead Reintroduction in the Deschutes Basin*, DESCHUTES RIVER CONSERVANCY (Sep. 28, 2012), <https://www.deschutesriver.org/blog/pge-funding-salmon-steelhead/>.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

6. The Metolius provides rare habitat and other characteristics that are critical for the survival of bull trout and other species. Please see Section 3.2 for more information.
7. The outstanding habitat of the Metolius River supports several sensitive, threatened or endangered species, including bull trout, redband trout, and Chinook and sockeye salmon. Please see Section 3.2(B) for more information.
8. There are several residents with cabins along the Metolius River who use water directly from the river as a drinking water source.
9. Does the waterbody provide a source of food or water for an economically disadvantaged community?
10. The Metolius River has other designations and protections, as described in Section 5,, including:
 - Federal Wild and Scenic River
 - State Scenic Waterway
 - Area of Critical State Concern
 - Metolius Conservation Area

5. Current Designations or Protections for the Waterbody or Watershed

A. Wild and Scenic River

In 1988, Congress described the Metolius as a “remarkable and state treasure,” and designated it as a federal Wild and Scenic River.⁵⁶ Under this federal designation, the river is classified “recreational” from near the headwaters to Bridge 99, and “scenic” from Bridge 99 to Lake Billy Chinook.

Integral to designation as a Wild and Scenic River is the existence of one or more Outstandingly Remarkable Values (ORVs): river characteristics or conditions that are unique or important on a regional or national scale. The federal management plan for the river identifies a number of ORVs in the Metolius River, including its relatively stable year-round flow of extremely clean and cold water, and the fishery supported by the river.⁵⁷ Water Quality was identified as an ORV for the Metolius because of the extremely high quality of the water over the length of the river, and the stability of flows and water temperatures. The River Management Plan associated with

⁵⁶ The purpose of the Wild and Scenic River designation is to ensure that:

. . . certain selected rivers of the Nation, which with their environments, possess outstandingly remarkable scenic, recreation, geologic fish and wildlife, historic, cultural, or other similar values shall be preserved in free-flowing condition, and that they and their immediate environs shall be protected for the benefit and enjoyment of present and future generations. 16 U.S.C. § 1271 (2021).

⁵⁷ METOLIUS FINAL EIS, *SUPRA* NOTE 20, AT 12

the Wild and Scenic River designation was designed to protect and enhance the high water quality in perpetuity.

Other ORVs for the Metolius that serve as the basis for management of the wild and scenic corridor area of the river include:

- Geologic Features (interplay of faults, volcanism, and groundwater hydrology)
- Hydrologic Values (extremely high water quality, and unique drop in water temperature from the headwaters down the river)
- Ecology (transition zone from Cascades to high desert and unique plant species)
- Fisheries (bull trout and historic chinook fisheries)
- Wildlife (northern spotted owl, mule deer and elk)
- Scenic Resources
- Heritage Resources and Recreation Values⁵⁸

B. State Scenic Waterway

In 1988, the Oregon legislature designated the upper portion of the Metolius as a State Scenic Waterway. The State Scenic Waterway designation terminates at Candle Creek, upstream of the southernmost border of the Confederated Tribes of Warm Springs reservation lands.

C. Metolius Protection Act / Area of Critical State Concern

In 2009, in response to public outcry for protection of the Metolius River, the Oregon legislature passed the Metolius Protection Act,⁵⁹ prohibiting resort development in the area and providing a management plan for the region. The act also designated the Metolius and its surrounding basin as an Area of Critical State Concern in Oregon, the only such designation in the state.⁶⁰

D. Metolius Conservation Area

The U.S. Forest Service has established the Metolius Conservation Area to ensure the basin, including the wild and scenic corridor, is managed to maintain a natural appearing condition.

6. Landowners and Managers Affected by the Protection Rules

The following landowners and managers may be affected by the protection rules:

- The Confederated Tribes of Warm Springs
- Betsy Johnson
- Metolius River Forest Homeowners

⁵⁸ U.S. FOREST SERV., METOLIUS WILD AND SCENIC RIVER MANAGEMENT PLAN RECORD OF DECISION 15 (1997), https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd501607.pdf (last visited Jan. 11, 2022) [hereinafter METOLIUS MANAGEMENT PLAN RECORD OF DECISION].

⁵⁹ Bart Wills, *Metolius River*, OREGON ENCYCLOPEDIA (last updated Nov. 20, 2018), https://www.oregonencyclopedia.org/articles/metolius_river/#.Yd2_EljMJQI.

⁶⁰ OR. REV. STAT. § 197.416 (2021). *See also* OR. ADMIN. RULES § 660-043-0100 (2021) (detailing management plan for the Metolius Area of Critical State Concern).

- US Forest Service
- Oregon Department of Fish and Wildlife
- House on the Metolius Resort
- The Corbett Family
- Lindley Morton and Corine Oishi
- The Woods Family

7. Potential Environmental, Social, and Economic Benefits and Impacts of ORW Designation

The Metolius River Basin has been a hub for social and economic activity for thousands of years, beginning with the Wasco, Paiute, and Warm Springs tribes' use of the vibrant river to fish, hunt, and trade.⁶¹ The Confederated Tribes of Warm Springs are a federally-recognized, sovereign Indian Tribe under a Treaty dating from 1855. The Treaty reserves the Warm Springs Reservation for the Tribe's exclusive use and occupation, and the south bank of the Metolius River forms much of the southern boundary of the Warm Springs Reservation. In addition, the entire Metolius Basin is located within the Tribe's Treaty-ceded area where it holds substantial off-reservation treaty-reserved rights, interests and management authority. The nearby community of Camp Sherman, upstream of the Warm Springs Reservation hosts thousands of visitors each year who travel to the area from across the nation to experience all that the river and surrounding environment offer.⁶²

In the early 1900s, Camp Sherman began as a summer retreat for wheat farmers looking to escape the intense heat of Sherman County in the cool, spring-fed waters of the Metolius.⁶³ Permanent residents of Camp Sherman have been providing lodging for visiting outdoorsmen for over 100 years.⁶⁴ The temperate climate of the area allows for visitors year-round and for a variety of recreational activities. While considered a challenging river, it is a favorite of anglers nationwide because of its unique offerings and beautiful scenery.⁶⁵

Ensuring that the Metolius River maintains its superior water quality will provide significant economic benefits from recreational fishing to Camp Sherman and other surrounding communities. The Metolius River is recognized as a world-class fly fishing destination that attracts national and international anglers. The 1996 USFS Wild and Scenic Rivers Management Plan for the Metolius River found that “[t]he rich diversity and timing of the insect populations are important parts of the river’s ecology and offer quality fly fishing opportunities.”⁶⁶

⁶¹ *Metolius River Preserve*, DESCHUTES LAND TRUST, <https://www.deschuteslandtrust.org/protected-lands/metolius-river-preserve> (last visited April 15, 2024).

⁶² *Metolius River, Oregon*, NATIONAL WILD AND SCENIC RIVER SYSTEM, <https://www.rivers.gov/rivers/metolius.php> (last visited April 15, 2024).

⁶³ *Deschutes National Forest: Forest Facts*, U.S. DEP’T OF AGRIC. & U.S. DEP’T OF INT. (Aug. 2003), <https://www.fs.fed.us/projects/hfi/2003/august/documents/deschutes-fact-sheet.pdf>.

⁶⁴ *Metolius River Preserve*, *supra* note 61.

⁶⁵ *Metolius River, Oregon*, *supra* note 62.

⁶⁶ METOLIUS FINAL EIS, *supra* note 20, at 20.

In 2008, ODFW undertook a comprehensive study designed to document the economic significance of fishing, hunting, wildlife viewing, and shellfish harvest in Oregon.⁶⁷ The study found that freshwater anglers in Jefferson County spent over \$5 million annually in connection with day and overnight fishing trips.⁶⁸ Over 66% of Oregon resident anglers, and over 46% of non-resident anglers, reported that they participated in overnight (multiple day) visits in Jefferson County to fish for trout. Anglers in all of Central Oregon, including Jefferson County, reported participating in over 400,000 trout fishing trips in 2008.

Although more-recent data on recreational fishing expenditures in Jefferson County is currently unavailable, in 2019 outdoor recreation generally (including fishing) contributed over \$138 million to the economy of Jefferson County.⁶⁹ Maintaining the extraordinarily high water quality of the Metolius River is essential for maintaining these economic benefits for communities in the basin.

The Camp Sherman Store, other local businesses, and the 150 families that live and work in the Metolius Basin rely on the recreation and tourism opportunities offered by the pristine environment.⁷⁰ Because the river basin is designated as an Area of Critical State Concern, no large resorts may be built within the watershed.⁷¹ Thus, the community is reliant on the unspoiled waters of the Metolius River for continued viability. Tourism in the area also benefits Jefferson County significantly, through tax revenues from visitors staying at resorts in Camp Sherman.

The river's reputation as a pristine and unique environment offers locals and tourists a place to recreate and will continue to drive new tourism in Central Oregon, but this economic activity is dependent on the river maintaining its outstanding qualities. The Metolius River has been a destination for outdoor recreation for generations and a designation as an ORW will protect the river's water quality and recreational values for generations to come.

8. Outreach Efforts Done as Part of Nomination

The nominators have contacted the following groups and individuals with information about the current nomination of the Metolius River:

- The Confederated Tribes of Warm Springs
- Metolius River Forest Homeowners
- US Forest Service
- Oregon Department of Fish and Wildlife

⁶⁷ Dean Runyon Associates, *Fishing, Hunting, Wildlife Viewing, and Shellfishing in Oregon 2008, State and County Expenditure Estimates* [hereinafter *ODFW 2008 Survey*] (copy available from Bret Campbell, Friends of the Metolius).

⁶⁸ *Id.* at 18–19.

⁶⁹ Johnny Mojica, et al., *Economic Analysis of Outdoor Recreation in Oregon*, EARTH ECONOMICS 16 (Jan. 2021) <https://industry.traveloregon.com/resources/research/oregon-outdoor-recreation-economic-impact-study/>.

⁷⁰ Application for the “Camp Sherman Community Hall” for the National Register of Historic Places, U.S. DEP’T OF INT. sec. 8, pg. 1 (July 25, 2002), https://npgallery.nps.gov/NRHP/GetAsset/NRHP/03000070_text.

⁷¹ Bart Wills, *Metolius River*, OREGON HISTORICAL SOCIETY (last updated Nov. 20, 2018), https://www.oregonencyclopedia.org/articles/metolius_river/#.YeXT7ljMI-Q_.

- The Corbett Family
- Lindley Morton and Corine Oishi
- The Woods Family
- Central Oregon Landwatch
- Deschutes River Alliance
- Upper Deschutes Watershed Council
- Center for Biological Diversity
- American Rivers
- Pew Charitable Trusts
- Trout Unlimited
- Rod Bonacker
- Maret Pajute

The nominators will be reaching out to numerous other groups and individuals who supported the ORW petition filed in 2022 in the coming months.

9. List of Groups and Individuals Supporting the Nomination

- Deschutes River Alliance
- Trout Unlimited
- Central Oregon Landwatch
- Lindley Morton and Corine Oishi
- Rod Bonacker
- Maret Pajute

Consistent with the support that DEQ received during the public comment period for the 2022 ORW for the Metolius River – over 96% of the public were in support of the petition – the nominators anticipate similar support for the present nomination.