



P.O. Box 101, Camp Sherman, Oregon 97730

June 27, 2022

Kathleen George, Chair  
Oregon Environmental Quality Commission  
700 NE Multnomah St., Suite 600  
Portland, OR 97232

Richard Whitman, Director  
Oregon Department of Environmental Quality  
700 NE Multnomah St., Suite 600  
Portland, OR 97232

Re: Petition for Designating the Metolius River as an “Outstanding Resource Water of Oregon” by Rule Amendment

Dear Chair George and Director Whitman:

Friends of the Metolius and co-petitioner the Northwest Environmental Defense Center respectfully submit the enclosed Petition pursuant to OAR 137-001-0070 and OAR 340-041-0004(8), requesting promulgation of rule amendments to designate specified portions of the Metolius River as an “Outstanding Resource Water of Oregon.”

Please contact the undersigned if you have any questions regarding this petition or would like more information. Thank you for your consideration.

Sincerely,

Douglas Hancock  
President  
Friends of the Metolius  
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(541) 325-1599

Jonah Sandford  
Executive Director  
Northwest Environmental Defense Center  
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BEFORE THE OREGON ENVIRONMENTAL QUALITY COMMISSION

**Petition for Rule Amendment Designating Specified Portions of the Metolius River, in Jefferson County, as an “Outstanding Resource Water of Oregon”**

June 27, 2022

Pursuant to OAR 137-001-0070 and OAR 340-011-0004(8), and the following supporting facts and arguments, Friends of the Metolius (“FOM”) and the Northwest Environmental Defense Center (“NEDC”) hereby petition the Oregon Environmental Quality Commission (“EQC” or “Commission”) and the Oregon Department of Environmental Quality to adopt rules designating the Metolius River from its headwaters downstream to Monty Campground, in Jefferson County, as an Outstanding Resource Water of Oregon (“ORW”).

**As per OAR 137-001-0070(1), the petitioners are:**

Friends of the Metolius  
P.O. Box 101  
Camp Sherman, Oregon 97730

Northwest Environmental Defense Center  
10101 S. Terwilliger Boulevard  
Portland, Oregon 97219

Interested persons include FOM and NEDC.

## I. Proposed Rule Language to be Adopted

As per OAR 137-001-0070(1)(a), proposed rule amendment language to be adopted:

The complete proposed rule language with the suggested **additions** to the existing Antidegradation rule OAR 340-041-0004, and the suggested **additions** to the existing Basin-Specific Criteria rule OAR 340-041-0135 are listed below:

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### OAR 340-041-0004

#### Antidegradation

(1) Purpose. The purpose of the Antidegradation Policy is to guide decisions that affect water quality such that unnecessary further degradation from new or increased point and nonpoint sources of pollution is prevented, and to protect, maintain, and enhance existing surface water quality to ensure the full protection of all existing beneficial uses. The standards and policies set forth in OAR 340-041- 0007 through 340-041-0350 are intended to supplement the Antidegradation Policy.

(2) Growth Policy. In order to maintain the quality of waters in the State of Oregon, it is the general policy of the Commission to require that growth and development be accommodated by increased efficiency and effectiveness of waste treatment and control such that measurable future discharged waste loads from existing sources do not exceed presently allowed discharged loads except as provided in section (3) through (9) of this rule.

(3) Nondegradation Discharges. The following new or increased discharges are subject to this Division. However, because they are not considered degradation of water quality, they are not required to undergo an antidegradation review under this rule:

(a) Discharges Into Existing Mixing Zones. Pollutants discharged into the portion of a water body that has been included in a previous mixing zone for a permitted source, including the zones of initial dilution, are not considered a reduction in water quality, so long as the mixing zone is established in accordance with OAR 340-041-0053, there are no other overlapping mixing zones from other point sources, and the discharger complies with all effluent limits set out in its NPDES permit.

(b) Water Conservation Activities. An increase in a pollutant concentration is not considered a reduction in water quality so long as the increase occurs as the result of a water conservation activity, the total mass load of the pollutant is not increased, and the concentration increase has no adverse effect on either beneficial uses or threatened or endangered species in the water body.

(c) Temperature. Insignificant temperature increases authorized under OAR 340-041-0028(11) and (12) are not considered a reduction in water quality.

(d) Dissolved Oxygen. Up to a 0.1 mg/l decrease in dissolved oxygen from the upstream end of a

stream reach to the downstream end of the reach is not considered a reduction in water quality so long as it has no adverse effects on threatened and endangered species.

(4) Recurring Activities. Since the baseline for applying the antidegradation policy to an individual source is the water quality resulting from the source's currently authorized discharge, and since regularly-scheduled, recurring activities remain subject to water quality standards and the terms and conditions in any applicable federal and state permits, certifications and licenses, the following activities will not be considered new or increasing discharges and will therefore not trigger an antidegradation review under this rule so long as they do not increase in frequency, intensity, duration or geographical extent:

a) Rotating grazing pastures,

b) Agricultural crop rotations, and

c) Maintenance dredging.

(5) Exemptions to the Antidegradation Requirement. Some activities may, on a short term basis, cause temporary water quality degradation. However, these same activities may also have substantial and desirable environmental benefits. The following activities and situations fall into this category. Such activities and situations remain subject to water quality standards, and must demonstrate that they have minimized adverse affects to threatened and endangered species in order to be exempt from the antidegradation review under this rule:

(a) Riparian Restoration Activities. Activities that are intended to restore the geomorphology or riparian vegetation of a water body, or control invasive species need not undergo an antidegradation review so long as the Department determines that there is a net ecological benefit to the restoration activity. Reasonable measures that are consistent with the restoration objectives for the water body must be used to minimize the degradation;

(b) Emergency Situations. The Director or a designee may, for a period of time no greater than 6 months, allow lower water quality without an antidegradation review under this rule in order to respond to public health and welfare emergencies (for example, a significant threat of loss of life, personal injury or severe property damage); and

(c) Exceptions. Exceptions authorized by the Commission or Department under (9) of this rule.

(6) High Quality Waters Policy: Where the existing water quality meets or exceeds those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, and other designated beneficial uses, that level of water quality must be maintained and protected. However, the Environmental Quality Commission, after full satisfaction of the intergovernmental coordination and public participation provisions of the continuing planning process, and with full consideration of sections (2) and (9) of this rule, and 340-041-0007(4), may allow a lowering of water quality in these high quality waters if it finds:

(a) No other reasonable alternatives exist except to lower water quality; and

(b) The action is necessary and benefits of the lowered water quality outweigh the environmental costs of the reduced water quality. This evaluation will be conducted in accordance with DEQ's "Antidegradation Policy Implementation Internal Management Directive for NPDES Permits and section 401 water quality certifications," pages 27, and 33-39 (March 2001) incorporated herein by reference;

c) All water quality standards will be met and beneficial uses protected; and

d) Federal threatened and endangered aquatic species will not be adversely affected.

(7) Water Quality Limited Waters Policy: Water quality limited waters may not be further degraded except in accordance with section (9)(a)(B), (C) and (D) of this rule.

(8) Outstanding Resource Waters Policy. Where existing high quality waters constitute an outstanding State or national resource such as those waters designated as extraordinary resource waters, or as critical habitat areas, the existing water quality and water quality values must be maintained and protected, and classified as "Outstanding Resource Waters of Oregon."

(a) The Commission may specially designate high quality water bodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those water bodies. The Department will develop a screening process and establish a list of nominated water bodies for Outstanding Resource Waters designation in the Biennial Water Quality Status Assessment Report (305(b) Report). The priority water bodies for nomination include:

(A) Those in State and National Parks;

(B) National Wild and Scenic Rivers;

(C) State Scenic Waterways;

(D) Those in State and National Wildlife Refuges; and

(E) Those in federally designated wilderness areas.

(b) The Department will bring to the Commission a list of water bodies that are proposed for designation as Outstanding Resource Waters at the time of each triennial Water Quality Standards Review; and

(c) When designating Outstanding Resource Waters, the Commission may establish the water quality values to be protected and provide a process for determining what activities are allowed that would not affect the outstanding resource values. After the designation, the Commission may not allow activities that may lower water quality below the level established except on a short term basis to respond to public health and welfare emergencies, or to obtain long-term water quality improvements.

**(d) The following are Outstanding Resource Waters of Oregon:**

(A) The North Fork Smith River and its tributaries and associated wetlands, South Coast Basin. See OAR 340-041-0305(4).

(B) Waldo Lake and its associated wetlands, Willamette Basin. See OAR 340-041-0345(7).

(C) Crater Lake, Klamath Basin. See OAR 340-041-0185(6)

**(D) The Metolius River from its headwaters to Monty Campground, Deschutes Basin. See OAR 340-041-0135(6)**

(9) Exceptions. The Commission or Department may grant exceptions to this rule so long as the following procedures are met:

(a) In allowing new or increased discharged loads, the Commission or Department must make the following findings:

(A) The new or increased discharged load will not cause water quality standards to be violated;

(B) The action is necessary and benefits of the lowered water quality outweigh the environmental costs of the reduced water quality. This evaluation will be conducted in accordance with DEQ's "Antidegradation Policy Implementation Internal Management Directive for NPDES Permits and section 401 water quality certifications," pages 27, and 33-39 (March 2001) incorporated herein by reference; and

(C) The new or increased discharged load will not unacceptably threaten or impair any recognized beneficial uses or adversely affect threatened or endangered species. In making this determination, the Commission or Department may rely upon the presumption that if the numeric criteria established to protect specific uses are met the beneficial uses they were designed to protect are protected. In making this determination the Commission or Department may also evaluate other State and federal agency data that would provide information on potential impacts to beneficial uses for which the numeric criteria have not been set;

(D) The new or increased discharged load may not be granted if the receiving stream is classified as being water quality limited under sub-section (a) of the definition of "Water Quality Limited" in OAR 340-041-0002, unless:

(i) The pollutant parameters associated with the proposed discharge are unrelated either directly or indirectly to the parameter(s) causing the receiving stream to violate water quality standards and being designated water quality limited; or

(ii) Total maximum daily loads (TMDLs), waste load allocations (WLAs) load allocations (LAs), and the reserve capacity have been established for the water quality limited receiving stream; and compliance plans under which enforcement action can be taken have been established; and there

will be sufficient reserve capacity to assimilate the increased load under the established TMDL at the time of discharge; or

(iii) Effective July 1, 1996, in water bodies designated water-quality limited for dissolved oxygen, when establishing WLAs under a TMDL for water bodies meeting the conditions defined in this rule, the Department may at its discretion provide an allowance for WLAs calculated to result in no measurable reduction of dissolved oxygen (DO). For this purpose, "no measurable reduction" is defined as no more than 0.10 mg/L for a single source and no more than 0.20 mg/L for all anthropogenic activities that influence the water quality limited segment. The allowance applies for surface water DO criteria and for Intergravel dissolved oxygen (IGDO) if a determination is made that the conditions are natural. The allowance for WLAs applies only to surface water 30-day and seven- day means; or

(iv) Under extraordinary circumstances to solve an existing, immediate and critical environmental problem, the Commission or Department may, after the completion of a TMDL but before the water body has achieved compliance with standards, consider a waste load increase for an existing source on a receiving stream designated water quality limited under subsection (a) of the definition of "Water Quality Limited" in OAR 340-041-0002. This action must be based on the following conditions:

(I) That TMDLs, WLAs and LAs have been set; and

(II) That a compliance plan under which enforcement actions can be taken has been established and is being implemented on schedule; and

(III) That an evaluation of the requested increased load shows that this increment of load will not have an unacceptable temporary or permanent adverse effect on beneficial uses or adversely affect threatened or endangered species; and

(IV) That any waste load increase granted under subparagraph (iv) of this paragraph is temporary and does not extend beyond the TMDL compliance deadline established for the water body. If this action will result in a permanent load increase, the action has to comply with subparagraphs (i) or (ii) of this paragraph.

(b) The activity, expansion, or growth necessitating a new or increased discharge load is consistent with the acknowledged local land use plans as evidenced by a statement of land use compatibility from the appropriate local planning agency.

(c) Oregon's water quality management policies and programs recognize that Oregon's water bodies have a finite capacity to assimilate waste. Unused assimilative capacity is an exceedingly valuable resource that enhances in-stream values and environmental quality in general. Allocation of any unused assimilative capacity should be based on explicit criteria. In addition to the conditions in subsection (a) of this section, the Commission or Department may consider the following:

(A) Environmental Effects Criteria:

(i) Adverse Out-of-Stream Effects. There may be instances where the non-discharge or limited discharge alternatives may cause greater adverse environmental effects than the increased discharge alternative. An example may be the potential degradation of groundwater from land application of wastes;

(ii) Instream Effects. Total stream loading may be reduced through elimination or reduction of other source discharges or through a reduction in seasonal discharge. A source that replaces other sources, accepts additional waste from less efficient treatment units or systems, or reduces discharge loadings during periods of low stream flow may be permitted an increased discharge load year-round or during seasons of high flow, so long as the loading has no adverse affect on threatened and endangered species;

(iii) Beneficial Effects. Land application, upland wetlands application, or other non-discharge alternatives for appropriately treated wastewater may replenish groundwater levels and increase streamflow and assimilative capacity during otherwise low streamflow periods.

(B) Economic Effects Criteria. When assimilative capacity exists in a stream, and when it is judged that increased loadings will not have significantly greater adverse environmental effects than other alternatives to increased discharge, the economic effect of increased loading will be considered. Economic effects will be of two general types:

(i) Value of Assimilative Capacity. The assimilative capacity of Oregon's streams is finite, but the potential uses of this capacity are virtually unlimited. Thus it is important that priority be given to those beneficial uses that promise the greatest return (beneficial use) relative to the unused assimilative capacity that might be utilized. In-stream uses that will benefit from reserve assimilative capacity, as well as potential future beneficial use, will be weighed against the economic benefit associated with increased loading;

(ii) Cost of Treatment Technology. The cost of improved treatment technology, non-discharge and limited discharge alternatives may be evaluated.

Stat. Auth.: ORS 468.020, 468B.030, 468B.035 & 468B.048

Stats. Implemented: ORS 468B.030, 468B.035 & 468B.048

Hist.: DEQ 17-2003, f. & cert. ef. 12-9-03; DEQ 2-2007, f. & cert. ef. 3-15-07

## Basin-Specific Criteria

OAR 340-041-0135

### Basin-Specific Criteria (Deschutes): Water Quality Standards and Policies for this Basin

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**(6) Outstanding Resource Waters of Oregon (ORWs): The Metolius River from its headwaters to Monty Campground. The current high water quality and exceptional ecological and recreational values of the ORWs identified in this rule (“these waters”) shall be maintained and protected, except as altered by natural processes or as authorized under (4)(a)-(c), below.**

**(a) No new NPDES discharge or expansion of an existing discharge to these waters shall be allowed.**

**(b) No new NPDES discharge or expansion of an existing discharge to waters upstream of or tributary to these waters shall be allowed if such discharge would degrade the water quality within these waters.**

**(c) No activities shall be allowed that would degrade the existing water quality and ecological characteristics and values of these waters.**

**(d) Any other new discharge to these waters is prohibited if such discharge would degrade the water quality or ecological or recreation values of these waters, except in the following circumstances:**

**(A) As needed to respond to a public health or safety emergency, including but not limited to wildfire response. The water quality impacts from such responses shall be short term and will be mitigated to the extent practicable.**

**(B) As needed in connection with ecological restoration or water quality improvement activities where short term water quality impacts are necessary to obtain long-term restoration or water quality improvements.**

## **II. Facts and Arguments Supporting ORW Designation**

**As per OAR 137-001-0070(1), co-petitioners submit the following facts and arguments:**

### **1. The Metolius River: Introduction and Background**

The Metolius River in Jefferson County, from its headwaters downstream to Monty Campground,<sup>1</sup> should be protected due to its exceptional water quality, the diverse ecosystem it supports, and the unparalleled recreational opportunities it affords. This petition requests that the Environmental Quality Commission (“Commission”) designate the Metolius River as an Outstanding Resource Water (“ORW”) of Oregon to maintain and protect the levels of water quality needed to support the river’s existing beneficial uses and to ensure compliance with the state’s antidegradation policy.

Pursuant to Oregon Administrative Rules (“OAR”) section 137-001-0070(1), petitioners submit the following information in support of this request:

#### **1.1 Outstanding Resource Waters**

Oregon’s water quality standards define three classifications of state waters: water quality limited, high quality, and outstanding resource waters. As stated in OAR 340-041-0004(8) and the associated definition in OAR 340-041-0002(45), ORWs 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.

The ORW designation may only be granted by the Commission through rulemaking. Along with the designation, the rules must also include a policy to protect and maintain the exceptional qualities and values of the waterbody.

#### **1.2 Brief History of ORWs in Oregon**

The first ORW designated in Oregon was the North Fork Smith River. The Commission designated this ORW in 2017 in response to a citizen rulemaking petition.

In April 2019, the Northwest Environmental Defense Center and several co-petitioners submitted a petition to the Commission requesting that the Commission designate Waldo Lake an ORW. In July 2019, the Commission granted the petition and directed the Oregon Department of Environmental Quality (“DEQ”) to initiate a rulemaking process to consider the proposed rules. At the same time, the Commission directed DEQ to include the designation of Crater Lake as an ORW in the rulemaking process. In January 2021, the Commission adopted rules designating

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<sup>1</sup> Located at or about Metolius River Mile 29.20 (lat. 44° 37' 29.28" N., lon. 121° 28' 48.48" W (44.624800021793746, -121.48013430157953)).

both Waldo and Crater Lakes as ORWs. The Metolius River, with its excellent water quality, diverse ecosystem, and outstanding recreational opportunities, deserves the same protections.

## **2. The Metolius River Clearly Meets the Required Criteria for ORW Designation.**

### **2.1 Metolius River Background**

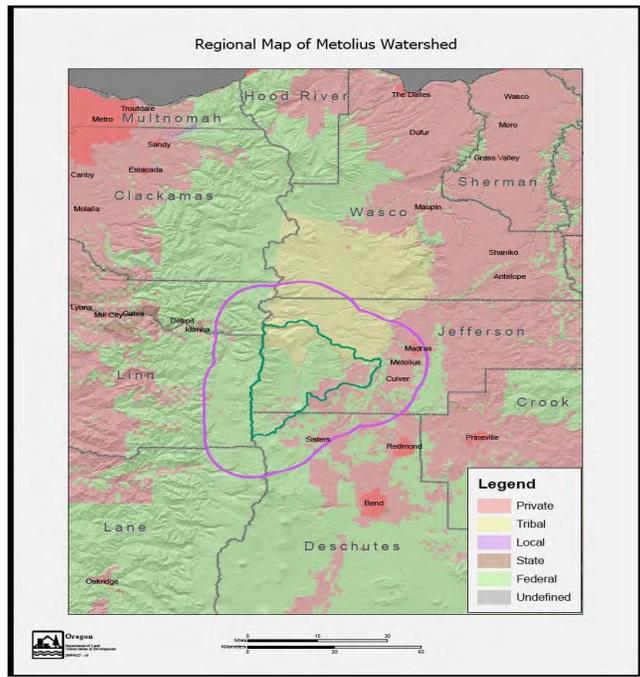
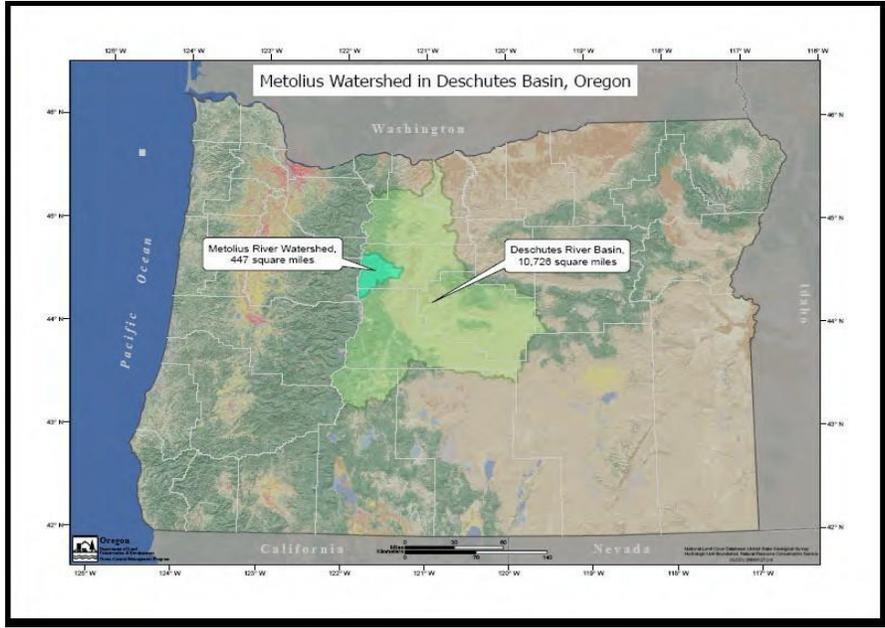
The Metolius River is a unique resource with pristine water quality, important habitat for fish and wildlife, and world-class recreation opportunities. Originating from springs that flow from the north base of Black Butte in Central Oregon, the river flows 28.6 miles from Metolius Springs and terminates 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.<sup>2</sup> The Metolius River is surrounded by the Metolius Basin and the Metolius Conservation Area.<sup>3</sup>

The Metolius River is located entirely within the Deschutes National Forest and within Jefferson County. 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. 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.

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<sup>2</sup> 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 June 27, 2022).

<sup>3</sup> *Metolius Basin*, FRIENDS OF THE METOLIUS, <https://metoliusfriends.org/metolius-basin/> (last visited June 27, 2022).



The Metolius River is spring-fed and considered one of the most stable rivers in the world for its size.<sup>4</sup> The Metolius Basin is located on a steep rain gradient on the eastern slope of the Cascade Mountain range. The unique geology of the Metolius Basin creates springs and highly permeable outwash plains of sand and gravel left by glaciers.<sup>5</sup>

The river provides important fisheries including one of the healthiest bull trout populations in the state, according to the United States Forest Service (“USFS”).<sup>6</sup> 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.<sup>7</sup>

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.<sup>8</sup> 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.<sup>9</sup>

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.<sup>10</sup> Higher elevations and moisture gradient areas support diverse subalpine, moist, and dry mixed conifer forests.

Camp Sherman provides residential areas, resorts, and campgrounds, and the area has a long history of Native American use and early European settlement. Valued scenic vistas are found

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<sup>4</sup> 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](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5284637.pdf) [hereinafter WATERSHED ANALYSIS UPDATE].

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> 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>.

<sup>8</sup> 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>.

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

<sup>10</sup> WATERSHED ANALYSIS UPDATE, *supra* note 4, at p. Ex-8.

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.

In 1988, the Oregon legislature designated the upper portion of the Metolius as a State Scenic Waterway.<sup>11</sup> In the same year, Congress described the Metolius as a “remarkable and state treasure,” and designated it as a federal Wild and Scenic River.<sup>12</sup> 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.<sup>13</sup> 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 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 Values<sup>14</sup>

As early as 1997 the U.S. Forest Service recognized that the pristine water quality of the Metolius River made the river a candidate for designation as an ORW. The 1997 U.S. Forest

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<sup>11</sup> OR. REV. STAT. § 390.826 (2021).

<sup>12</sup> 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).

<sup>13</sup> U.S. FOREST SERV., U.S. DEP’T OF AGRIC., METOLIUS WILD AND SCENIC MANAGEMENT PLAN: FINAL ENVIRONMENTAL IMPACT STATEMENT 12 (1996), [https://www.fs.usda.gov/Internet/FSE\\_DOCUMENTS/stelprdb5284660.pdf](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5284660.pdf) [hereinafter METOLIUS FINAL EIS].

<sup>14</sup> 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](https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd501607.pdf) (last visited Jan. 11, 2022) [hereinafter METOLIUS MANAGEMENT PLAN RECORD OF DECISION].

Service, Metolius Wild and Scenic River Plan Record of Decision includes the following statement:

“I am also open to exploring the designation of the Metolius as a Outstanding Water Resource by the Oregon Department of Environmental Quality, as an additional, interagency means of ensuring no water quality degradation will be allowed.”<sup>15</sup>

It has been over 20 years since the U.S. Forest Service made the statement above; it is now time to ensure that the water quality in the Metolius River is protected from degradation through an ORW designation.

In 2009, in response to public outcry for protection of the Metolius River, the Oregon legislature passed the Metolius Protection Act,<sup>16</sup> 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.<sup>17</sup> The U.S. Forest Service has also established the Metolius Conservation Area to ensure the basin, including the wild and scenic corridor, is managed to maintain a natural appearing condition.

The history of the Metolius River as a federal Wild and Scenic River, a state Scenic Waterway, an Area of Critical State Concern, and a designated Conservation Area all distinguish the Metolius as a unique and valuable water resource and an outstanding candidate for ORW designation. The substantial public use of the area and its unique water, wildlife, and scenic resources further demonstrate the importance of conserving the resource values of the Metolius, including its exceptional water quality, for all Oregonians.

## **2.2 The Metolius River is Uniquely Qualified to be Designated as an ORW**

The Commission should designate the Metolius River as an ORW to maintain and protect the levels of water quality needed to support the existing beneficial uses and to ensure compliance with the State’s Antidegradation Policy.<sup>18</sup> While the State of Oregon has many unique rivers that merit protection, the Metolius River may be the most ideally suited for ORW designation. Some of the attributes that weigh heavily in favor of supporting the ORW designation are discussed and summarized below.

The existing beneficial uses of the Metolius are possible due to the river’s exceedingly high water quality and low level of adverse effects from human activities that can cause sources of point and nonpoint source pollution.<sup>19</sup> It is in the public interest to maintain and protect the high quality waters of the Metolius for fish and aquatic life, rare plant habitats, aesthetic values, and recreation and tourism activities.

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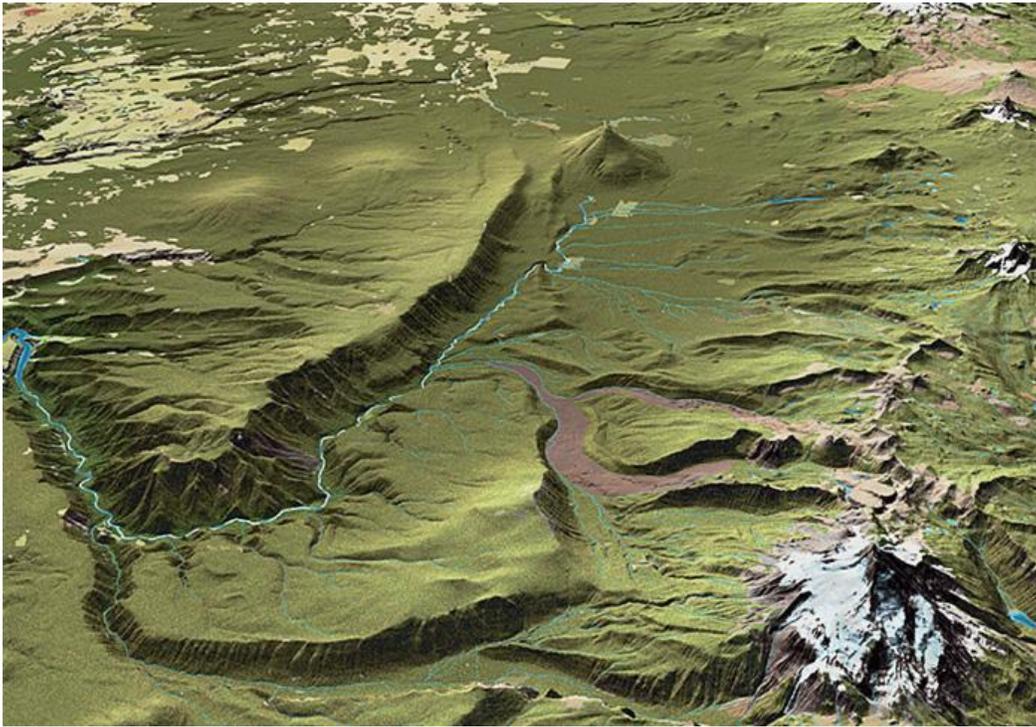
<sup>15</sup> METOLIUS MANAGEMENT PLAN RECORD OF DECISION, PAGE 5.

<sup>16</sup> Bart Wills, *Metolius River*, OREGON ENCYCLOPEDIA (last updated Nov. 20, 2018), [https://www.oregonencyclopedia.org/articles/metolius\\_river/#.Yd2\\_EljMJQI](https://www.oregonencyclopedia.org/articles/metolius_river/#.Yd2_EljMJQI).

<sup>17</sup> 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).

<sup>18</sup> OR. ADMIN. RULES § 340-041-0004 (2021).

<sup>19</sup> WATERSHED ANALYSIS UPDATE, *supra* note 11, at p. Aq-16.



### 2.2.1 Watershed Background

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.<sup>20</sup> Of note are significant historical volcanic events and activity, and a river system fed predominantly by springs rather than surface runoff.

The geology of the Metolius watershed may be summarized as follows. 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.<sup>21</sup>

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

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<sup>20</sup> See *Id.*; *Water Quality*, FRIENDS OF THE METOLIUS, <https://www.metoliusfriends.org/water-quality/> (last visited Jan. 11, 2022).

<sup>21</sup> N.V. Peterson & E.A. Groh, *Geology and Origin of the Metolius Springs, Jefferson County, Oregon*, 34 THE ORE BIN 41, 43 (1972), <https://www.oregongeology.org/pubs/og/OBv34n03.pdf>.

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 relatively small number of campgrounds, recreational sites, and limited residential areas in the basin are likely the sole dischargers of pathogens and other pollutants from anthropogenic sources.<sup>22</sup> It is important to note that for pathogens in particular (typically measured as fecal coliform or *E. coli* as an indicator) any warm-blooded animal can release pathogens to the environment. For this reason, true sources of pathogens are difficult to identify without bacterial source tracking (such as DNA fingerprinting). Anthropogenic sources could include, but are not limited to, leaking septic systems, dispersed camp latrines, pet waste, trash, and roadway pollution. Given that there are no other major anthropogenic sources of pathogens identified in the basin (e.g., wastewater plant discharges), these sources, though limited in number and size, are of interest as potential contaminators to this pristine river system.<sup>23</sup>

### 2.2.2 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.<sup>24</sup> 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,<sup>25</sup> 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.<sup>26</sup> 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.

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<sup>22</sup> GEOSYNTEC CONSULTANTS, FRIENDS OF THE METOLIUS WATER QUALITY ANALYSIS FINAL REPORT p. 3-2 (Dec. 5 2014) [hereinafter WATER QUALITY FINAL REPORT].

<sup>23</sup> *Id.* at p. 3-3.

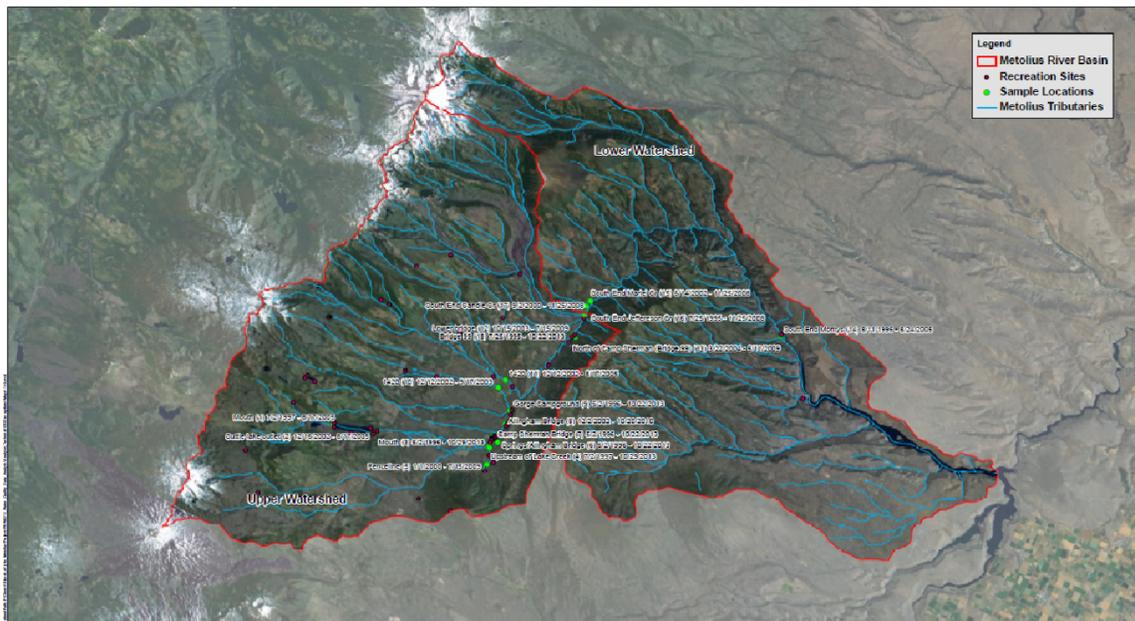
<sup>24</sup> *Water Quality Index*, OR. DEP’T OF ENV. QUALITY, <https://www.oregon.gov/deq/wq/Pages/WQI.aspx> (last visited Jan. 26, 2022) (relevant data contained in “raw data and historical status and trends” document linked to in webpage).

<sup>25</sup> *National Water Information System: Web Interface*, U.S. GEOLOGICAL SURVEY (Metolius River near Grandview, OR) (last updated Jan. 11, 2022), <https://waterdata.usgs.gov/nwis/uv?14091500>.

<sup>26</sup> *See Water Quality*, FRIENDS OF THE METOLIUS, <https://www.metoliusfriends.org/water-quality/> (last visited Dec. 27, 2021).

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 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.metoliusfriends.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.<sup>27</sup> This study demonstrates that the Metolius River has outstanding water quality.<sup>28</sup> 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.

<sup>27</sup> WATER QUALITY FINAL REPORT, *supra* note 26, at p. 3-3.

<sup>28</sup> *Id.* at p. 3-62.

## 2.2.3 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.<sup>29</sup> 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.<sup>30</sup> 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.<sup>31</sup>

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

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<sup>29</sup> 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 *CASCADES CONSERVATION STRATEGY*].

<sup>30</sup> *Id.* at 172.

<sup>31</sup> *See* METOLIUS FINAL EIS AT 78 (describing importance of fish populations in the Metolius).

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.<sup>32</sup> 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.<sup>33</sup>

The river basin is also home to a rich diversity of insects, including species of admiral, swallowtail, hairstreak, arctic, copper, and tortoiseshell butterflies.<sup>34</sup>

## *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.<sup>35</sup>

### *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.<sup>36</sup>

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.<sup>37</sup>

### *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 the planet, grows in the Metolius River Basin.<sup>38</sup> In addition to these rare wildflowers, a variety of other species can be found through the spring and summer, such as western buttercups, larkspur,

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<sup>32</sup> *Id.* at 83–84.

<sup>33</sup> *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 Jan. 17, 2022).

<sup>34</sup> *Id.*

<sup>35</sup> CASCADES CONSERVATION STRATEGY, *supra* note 33, at 183.

<sup>36</sup> METOLIUS FINAL EIS, *supra* note 13, at 16.

<sup>37</sup> Sarah Mowry, *Fun Fen Facts*, DESCHUTES LAND TRUST (Oct. 2, 2018), <https://www.deschuteslandtrust.org/news/blog/2018-blog-posts/fun-fen-facts>.

<sup>38</sup> 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>.

serviceberry, Sitka valerian, early blue violets, bigleaf lupine, arrowleaf balsamroot, Indian paintbrush, American brookline, Douglas's spirea, and several species of monkeyflowers.<sup>39</sup>

*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.<sup>40</sup> Other trees common to the area include Douglas fir, grand fir, incense cedar, and western larch.<sup>41</sup>

Common grasses and shrubs in the Metolius River Basin include western needle grass, bitterbrush, bottlebrush squirreltail, and Ross' sedge.<sup>42</sup>

**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.

The ORW designation will also provide significant economic benefits to the surrounding communities by maintaining world-class recreational fishing opportunities for visitors.

*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.

*a. Overview of Bull Trout in the Metolius River*

Bull trout (*Salvelinus confluentus*) is a species of char native to the Pacific Northwest that requires cold, clean water in complex stream habitats. Bull trout populations have been negatively affected by several factors, including habitat and water quality degradation resulting from forest management and agricultural activities.<sup>43</sup>

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<sup>39</sup> PACIFIC NORTHWEST VIEWING AREA, *supra* note 16.

<sup>40</sup> CASCADES CONSERVATION STRATEGY, *supra* note 33, at 183.

<sup>41</sup> *Metolius RNA*, PACIFIC NORTHWEST INTERAGENCY NATURAL AREAS NETWORK, <http://www.fsl.orst.edu/rna/sites/Metolius.html> (last visited Jan. 17, 2022).

<sup>42</sup> *Id.*

<sup>43</sup> U.S. FISH & WILDLIFE SERV., CLACKAMAS BULL TROUT REINTRODUCTION IMPLEMENTATION, MONITORING, AND EVALUATION PLAN 4, 8 (June 2011),

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.<sup>44</sup> At the state level, ODFW regulations list bull trout as a “Sensitive” species.<sup>45</sup>

Bull trout in the Deschutes Species Management Unit (“SMU”)<sup>46</sup> are native fish sustained by natural production.<sup>47</sup> Historically, the Deschutes Bull Trout SMU contained eight populations of bull trout, but three are now considered extinct.<sup>48</sup> 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.<sup>49</sup>

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.<sup>50</sup> Although the overall 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.<sup>51</sup>

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.<sup>52</sup> 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.<sup>53</sup> Maintaining a healthy bull trout population in the

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[https://www.fws.gov/oregonfwo/species/data/bulltrout/Documents/ClackamasBT\\_IME\\_Plan.pdf](https://www.fws.gov/oregonfwo/species/data/bulltrout/Documents/ClackamasBT_IME_Plan.pdf) [hereinafter CLACKAMAS REINTRODUCTION PLAN].

<sup>44</sup> *Id.*

<sup>45</sup> 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](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.*

<sup>46</sup> SMU is the listing unit for fish, per Oregon’s Native Fish Conservation Policy. *Id.* at 2; OR. ADMIN. RULES § 535-007-0504(6).

<sup>47</sup> 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 Jan. 19, 2022).

<sup>48</sup> *Id.* at 124.

<sup>49</sup> 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](https://www.fws.gov/pacific/bulltrout/PCH_04/Fact%20Sheets/chapter_7.pdf) (last visited Jan. 19, 2022).

<sup>50</sup> 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%20Deschutes.pdf](https://www.fws.gov/pacific/bulltrout/RP/Chapter_7%20Deschutes.pdf) [hereinafter BULL TROUT RECOVERY PLAN].

<sup>51</sup> *Bull Trout SMU*, *supra* note 51, at 125.

<sup>52</sup> CLACKAMAS REINTRODUCTION PLAN, *supra* note 47, at 5.

<sup>53</sup> *Bull Trout SMU*, *supra* note 51, at 125.

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.<sup>54</sup>

#### *b. Water Quality and Bull Trout Biology*

A unique and well-documented facet of bull trout biology is the species' requirement of clean, cold water.<sup>55</sup> A primary factor identified as leading to the decline of bull trout populations is habitat degradation, often in the form of elevated water temperatures.<sup>56</sup> Sufficiently low water temperature is believed to be a critical element in the persistence or recovery of many bull trout populations.<sup>57</sup> 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.<sup>58</sup>

The primary contributors to bull trout extirpation in the Deschutes SMU include forest management practices, livestock grazing, and agricultural practices.<sup>59</sup> Although these contributors have had less-severe or partially-mitigated impacts on the Metolius River, their effects on other rivers have been extreme. Bull trout habitat degradation in the Crooked River is so severe, for example, that it has been described as the “most degraded river in the state.”<sup>60</sup> In the Crooked River, the most significant effects of habitat degradation are the result of water quality problems, including high temperatures; water temperatures in headwater streams often exceed 21 °C (70 °F), and can reach 28 °C (83 °F).<sup>61</sup> The proposed rule will help ensure that these same water quality issues do not occur in the Metolius River.

#### *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

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<sup>54</sup> *Id.*

<sup>55</sup> 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](https://critfc.org/wp-content/uploads/2021/08/02_04report.pdf) (hereinafter DETERMINING UPPER OPTIMAL TEMPERATURE THRESHOLDS).

<sup>56</sup> *Id.*

<sup>57</sup> *Id.*

<sup>58</sup> 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.

<sup>59</sup> BULL TROUT RECOVERY PLAN, *supra* note 55, at 11.

<sup>60</sup> *Id.* at 15.

<sup>61</sup> *Id.*

Fraser river drainages east of the Cascade Mountain Range and in several other Pacific Northwest basins.<sup>62</sup>

Redband trout are listed as a species of concern under the Endangered Species Act.<sup>63</sup> The ODFW lists redband trout as a “Sensitive-Critical” species.<sup>64</sup> 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. 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.<sup>65</sup> 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.<sup>66</sup> 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.<sup>67</sup>

In 2005, PGE and the CTWS received a new operating license which made restoring fish passage at the dams its centerpiece.<sup>68</sup> 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.<sup>69</sup>

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<sup>62</sup> 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](https://westernnativetrout.org/wp-content/uploads/2019/07/final_report_great_basin_redband_genetics_4-24-15.pdf) [hereinafter GENETIC ASSESSMENT].

<sup>63</sup> *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](https://westernnativetrout.org/wp-content/uploads/2018/08/InteriorRedband_WesternNativeTroutStatusReport_UpdatedAugust2018.pdf).

<sup>64</sup> *Sensitive Species List FAQ*, *supra* note 49, 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.*

<sup>65</sup> GENETIC ASSESSMENT, *supra* note 70, at 4.

<sup>66</sup> *Funding Salmon and Steelhead Reintroduction in the Deschutes Basin*, DESCHUTES RIVER CONSERVANCY (Sep. 28, 2012), <https://www.deschutesriver.org/blog/pge-funding-salmon-steelhead/>.

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> *Id.*

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.

*iii. Extraordinary and Unique Character and Ecological Value of the Fisheries*

Ensuring that the Metolius River maintains its superior water quality will provide significant economic benefits from recreational fishing to the 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.”<sup>70</sup>

In 2008, ODFW undertook a comprehensive study designed to document the economic significance of fishing, hunting, wildlife viewing, and shellfish harvest in Oregon.<sup>71</sup> The study found that freshwater anglers in Jefferson County spent over \$5 million annually in connection with day and overnight fishing trips.<sup>72</sup> 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.<sup>73</sup> Maintaining the extraordinarily high water quality of the Metolius River is essential for maintaining these economic benefits for communities in the basin.

#### **2.2.4 Current Economic Activity**

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.<sup>74</sup> Today, the nearby community of Camp Sherman 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.<sup>75</sup>

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<sup>70</sup> METOLIUS FINAL EIS, *supra* note 13, at 20.

<sup>71</sup> 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).

<sup>72</sup> *Id.* at 18–19.

<sup>73</sup> 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/>.

<sup>74</sup> *Metolius River Preserve*, DESCHUTES LAND TRUST, <https://www.deschuteslandtrust.org/protected-lands/metolius-river-preserve> (last visited Jan. 17, 2022).

<sup>75</sup> *Metolius River, Oregon*, NATIONAL WILD AND SCENIC RIVER SYSTEM, <https://www.rivers.gov/rivers/metolius.php> (last visited Jan. 17, 2022).

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.<sup>76</sup> Permanent residents of Camp Sherman have been providing lodging for visiting outdoorsmen for over 100 years.<sup>77</sup> 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.<sup>78</sup>

Beyond fly-fishing, miles of scenic hiking trails, 11 campgrounds, and several small resorts comprising over 100 recreational cabins surround the river.<sup>79</sup> The river basin is home to an abundance of birds that inspire birdwatchers to visit each summer, such as a variety of hummingbirds and woodpeckers. The Camp Sherman store, built in 1918, is a resource for community members and travelers alike, where visitors can grab a meal, stock up on camping gear they may have forgotten, browse fly-fishing equipment and get the fishing report from a local.<sup>80</sup>

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.<sup>81</sup> Because the river basin is designated as an Area of Critical State Concern, no large resorts may be built within the watershed.<sup>82</sup> 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.

### **3. Existing Protections and Related Processes**

In addition to the Metolius Area of Critical State Concern legislation detailed above, several state regulatory programs apply to the Metolius River, along with Oregon's Statewide Land Use Planning Program and the Jefferson County Comprehensive Plan. The majority of lands in the Metolius basin are managed by the USFS pursuant to several management regimes. Designation of the Metolius as an ORW would further many of the goals of these existing protections.

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<sup>76</sup> *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>.

<sup>77</sup> *Metolius River Preserve*, *supra* note 88.

<sup>78</sup> *Metolius River, Oregon*, *supra* note 89.

<sup>79</sup> CAMP SHERMAN COMMUNITY ASSOCIATION, <https://www.campsherman.us> (last visited Jan. 17, 2022).

<sup>80</sup> Camp Sherman Store Website, <https://www.campshermanstore.com>, (last visited Jan. 17, 2022).

<sup>81</sup> 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](https://npgallery.nps.gov/NRHP/GetAsset/NRHP/03000070_text).

<sup>82</sup> Bart Wills, *Metolius River*, OREGON HISTORICAL SOCIETY (last updated Nov. 20, 2018), [https://www.oregonencyclopedia.org/articles/metolius\\_river/#.YeXT7ljMI-Q](https://www.oregonencyclopedia.org/articles/metolius_river/#.YeXT7ljMI-Q).

### 3.1 Oregon Water Resources Department (“OWRD”)

OWRD is responsible for administering the Deschutes Ground Water Mitigation Program, which was developed to provide for new ground water uses while maintaining scenic waterway and instream water right flows in the Deschutes Basin.<sup>83</sup> The goals of the Deschutes Mitigation Program are to:

- Maintain flows for Scenic Waterways and senior water rights, including instream water rights;
- Facilitate restoration of flows in the middle reach of the Deschutes River and related tributaries; and
- Sustain existing water uses and accommodate growth through new ground water development.

Every five years the Water Resources Commission (“WRC”) is required to evaluate the effectiveness of the mitigation program.<sup>84</sup> The purpose of this evaluation is to ensure that scenic waterway and instream water right flows continue to be met on an equivalent or more frequent basis compared to flows within a representative base period.

### 3.2 Oregon Department of Environmental Quality

DEQ is responsible for water quality issues in the state of Oregon, which includes Total Maximum Daily Load (“TMDL”) and Water Quality Management Plan (“WQMP”) documents prepared for water bodies in Oregon designated as water quality limited on the state’s 303(d) list.<sup>85</sup> Some streams within the Metolius Basin are water quality limited. The main sources of water quality problems in the basin are nutrients from septic systems, and nonpoint sources associated with roads and forest uses. Widespread fires in the Metolius basin have raised some concerns regarding sedimentation and temperature.<sup>86</sup>

### 3.3 Oregon Parks and Recreation Department (“OPRD”)

OPRD implements programs designed to protect state scenic waterways, including the Metolius River.<sup>87</sup> Administrative rules pertaining to the Metolius River Scenic Waterway describe segments of the river designated as “Recreational River Areas,” as well as a “River Community Area.”<sup>88</sup> The rules provide guidance for construction and standards for locating new structures, road and facility placement, and timber harvesting and other similar uses.<sup>89</sup>

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<sup>83</sup> OR. REV. STAT. § 537.746 (2021); OR. H. B. 3494 (2005). The program is implemented by OR. ADMIN. RULES §§ 690-505 and 690-521 (2021).

<sup>84</sup> OR. ADMIN. RULES § 690-505-0500(2) (2021).

<sup>85</sup> A TMDL is the calculated pollutant amount that a waterbody can receive and still meet Oregon water quality standards.

<sup>86</sup> WATER QUALITY FINAL REPORT, *supra* note 26, at p. 3-3.

<sup>87</sup> OR. ADMIN. RULES § 736-040-0056 (2021).

<sup>88</sup> OR. ADMIN. RULES §§ 736-040-0056(1)–(2) (2021).

<sup>89</sup> *Id.*

### **3.4 Oregon Department of Fish and Wildlife**

The ODFW co-manages fish and wildlife resources in the Metolius area along with the USFS and the CTWS.<sup>90</sup> ODFW regulates hunting and angling activities and has a keen interest in activities that can affect fish and wildlife habitat.<sup>91</sup>

### **3.5 Oregon Department of Forestry (“ODF”)**

ODF’s Private Forests Program regulates forest operations on private, nonfederal forestland. The department guides forest landowners and operators on how to conduct forest operations and activities so they are in compliance with the Forest Practices Act (“FPA”) and its administrative rules. FPA rules apply to harvesting, reforestation, road construction and repair, slash disposal (treetops, branches, brush and tree limbs left on the ground after a logging operation), chemical use and stream, lake and wetland protection. Sensitive resource sites, such as bird nesting and roosting locations and threatened and endangered species sites are also protected under the rules. ORW designation for the Metolius would further protect these sites by limiting additional water pollution nearby.

### **3.6 United States Forest Service, Deschutes National Forest**

The vast majority of lands within and adjacent to the basin are part of the Deschutes National Forest and are managed for the public by the United States Forest Service (USFS or Forest Service). The Forest Service has responsibility under the federal Wild and Scenic Rivers Act to prevent diminishment of the ORVs of the Metolius River. These include fisheries, water quality and quantity, wildlife, geology, scenery, cultural resources and recreation.<sup>92</sup>

In 1990 the Forest Service established the Metolius Conservation Area. Within the 86,000-acre conservation area is the designation of ten management areas, including the Metolius Wild and Scenic River Corridor.<sup>93</sup> The Deschutes National Forest 2004 Metolius Watershed Analysis Update is an important source of information concerning current land management challenges in the basin and possible management strategies.<sup>94</sup>

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<sup>90</sup> METOLIUS FINAL EIS, *supra* note 13, at 21.

<sup>91</sup> *See About Us*, OR. DEP’T OF FISH & WILDLIFE, <https://www.dfw.state.or.us/agency/> (last visited Jan. 18, 2022) (stating ODFW’s mission).

<sup>92</sup> METOLIUS MANAGEMENT PLAN RECORD OF DECISION, *supra* note 14, at 15.

<sup>93</sup> METOLIUS FINAL EIS, *supra* note 13, at 5, 95.

<sup>94</sup> *See WATERSHED ANALYSIS UPDATE*, *supra* note 11.

### **III. Asserted Propositions of Law**

**As per OAR 137-001-0070(1)(c), asserted propositions of law:**

40 CFR 131.12(a)(3) - Antidegradation Policy:

“Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.”

OAR 340-013-0005 - Wilderness, Recreational, and Scenic Area Rules - Environmental Standards for Wilderness Areas:

“Therefore, it is declared to be the policy and purpose of the Department of Environmental Quality to maintain the environment of wilderness areas essentially in a pristine state and as free from air, water, and noise pollution as is practically possible and to permit its alteration only in a manner compatible with recreational use and the enjoyment of the scenic beauty and splendor of these lands by the citizens of Oregon and of the United States.”

OAR 340-041-0002(44) – Definition:

“‘Outstanding Resource Waters’ means waters designated by the EQC where existing high quality waters constitute an outstanding state or national resource based on their extraordinary water quality or ecological values or where special water quality protection is needed to maintain critical habitat areas.”

OAR 340-041-0004(1) – Antidegradation Purpose:

“The purpose of the Antidegradation Policy is to guide decisions that affect water quality such that unnecessary further degradation from new or increased point and nonpoint sources of pollution is prevented, and to protect, maintain, and enhance existing surface water quality to ensure the full protection of all existing beneficial uses. The standards and policies set forth in OAR 340-041-0007 through 340-041-0350 are intended to supplement the Antidegradation Policy.”

OAR 340-041-0004(6) - High Quality Waters Policy:

“Where the existing water quality meets or exceeds those levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, and other designated beneficial uses, that level of water quality must be maintained and protected.”

OAR 340-041-0004(8) - Outstanding Resource Waters Policy:

“Where existing high quality waters constitute an outstanding State or national resource such as those waters designated as extraordinary resource waters, or as critical habitat areas, the existing water quality and water quality values must be maintained and protected, and classified as

"Outstanding Resource Waters of Oregon".

OAR 340-041-0004(8)(a)(B, E) - Outstanding Resource Waters:

“(a) The Commission may specially designate high quality water bodies to be classified as Outstanding Resource Waters in order to protect the water quality parameters that affect ecological integrity of critical habitat or special water quality values that are vital to the unique character of those water bodies. The Department will develop a screening process and establish a list of nominated water bodies for Outstanding Resource Waters designation in the Biennial Water Quality Status Assessment Report (305(b) Report).

ORS 468B.015(5) – Water Quality, Public Health and Safety, Water Pollution Control – Policy:

“To cooperate with other agencies of the state, agencies of other states and the federal government in carrying out these objectives.

[Formerly 449.077 and then 468.710; 2009 c.248 §1]”

#### **IV. Comments on Amendments to an Existing Rule**

##### **As per OAR 137-001-0070(2), petitioner requests amendments to existing rules:**

This Petition requests that the Commission add rule language to OAR 340-041-0004 and OAR 340-041-0135 and does not propose to revise or delete any current rule language. The Petition does not dispute the continued need for the existing rules. Rather, the proposed rule additions seek to implement the existing rules by designating “Outstanding Resource Waters of Oregon.” The existing rule allowing designation of waters as ORWs fulfills state responsibilities under the Federal Clean Water Act and is consistent with federal regulations.

##### **a. As per OAR 137-001-0070(2)(a), options to reduce negative economic impact on business:**

The economy of Jefferson County is in part based on maintaining the current high water quality of the Metolius River. This is discussed above regarding recreational activities in and around the Metolius River. Therefore, adopting this Petition will provide positive economic impacts.

##### **b. As per OAR 137-001-0070(2)(b), continued need for the existing rules:**

The existing rules are based on the Federal Clean Water Act. An August 8, 2013 USEPA letter and document to the Oregon DEQ regarding the Federal Antidegradation Policy gave a favorable opinion of the existing rules.

##### **c. As per OAR 137-001-0070(2)(c), complexity of the existing rules:**

The existing rules are not overly complex and similar rule versions have been successfully implemented in many states. For example, the North Fork Smith River and associated tributaries, Waldo Lake and associated wetlands, and Crater Lake were successfully designated as ORWs.

##### **d. As per OAR 137-001-0070(2)(d), extent to which the existing rules overlap, duplicate, or conflict with other state or federal rules and with local government regulations:**

The Metolius river is surrounded by Deschutes National Forest. An ORW designation would be compatible with the National Forest objectives. Additionally, an ORW designation would be compatible with the state and local regulations identified in section II.3, above.

##### **e. As per OAR 137-001-0070(2)(e), degree to which technology, economic conditions, and other factors have changed in the subject area:**

Development and economic conditions in the Metolius River basin area are discussed above. The natural conditions of the watershed support local economies, and given the restrictions on large scale development local economic conditions have seen little change in the past several decades. The numerous protection plans that overlay the Metolius River and how those protection plans benefit the economy of the Metolius River basin are discussed above.

## **V. The Metolius River Warrants ORW Designation**

The Commission should designate the Metolius River, from its headwaters to Monty Campground, as an ORW because of its exceptional water quality, the unique coldwater habitat and ecosystem it supports, and the outstanding recreational opportunities it provides to the people of Oregon. Consistent with the Commission's previous ORW designations of the North Fork Smith River and Waldo and Crater Lakes, a Metolius River ORW designation will protect a distinct aquatic ecosystem, invaluable natural waters, and a treasured place for outdoor tourism in Central Oregon. With substantial public support for additional protections, the Metolius River is an ideal candidate for the Commission to designate as an ORW as part of its work to protect Oregon's high-quality waters and beneficial uses as required under state and federal law.

The Metolius River unequivocally meets the requirements to be designated as an ORW. Its pristine waters support a world-class fishery and a diverse ecosystem, including critical habitat for threatened bull trout and other native freshwater species. These cool, clear waters also support a world-class recreational area, drawing visitors from around the world. The Metolius River is a federally designated Wild and Scenic River, an Oregon Scenic Waterway, and lies at the heart of the Metolius Basin, which the Oregon legislature has designated as the state's only Area of Critical Concern. An ORW designation would complement and strengthen these existing protections, and ensure that the Metolius River's remarkable qualities are protected for generations to come.