

BRYAN TELEGIN, OSB # 105253  
Bricklin & Newman, LLP  
1001 4th Ave., Ste. 3303  
Seattle, WA 98154  
Tel: (206) 264.8600  
Fax: (206) 264.9300  
Email: telegin@bnd-law.com

ALLISON LaPLANTE, OSB # 023614  
DANIEL MENSHER, OSB # 074636  
Earthrise Law Center  
10015 SW Terwilliger Blvd.  
Portland, OR 97219  
Tel: (503) 768-6894, (503) 768-6926  
Fax: (503) 768-6642  
Email: laplante@lclark.edu, dmensher@lclark.edu

Attorneys for Plaintiff

UNITED STATES DISTRICT COURT  
DISTRICT OF OREGON  
PORTLAND DIVISION

**NORTHWEST ENVIRONMENTAL  
ADVOCATES**, a non-profit corporation,

**PLAINTIFF,**

v.

**UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY**, a United States  
Government Agency,

**DEFENDANT.**

Civil No.: 3:12-cv-01751-AC

**SECOND AMENDED COMPLAINT FOR  
DECLARATORY AND INJUNCTIVE  
RELIEF**

(Violations of the Clean Water Act, the  
Endangered Species Act, and the  
Administrative Procedure Act)

## INTRODUCTION

1. This is a civil action brought by plaintiff Northwest Environmental Advocates (NWEA) challenging actions and inactions of the United States Environmental Protection Agency (EPA). The claims arise from EPA's actions and inactions concerning Total Maximum Daily Loads (TMDLs) submitted by Oregon to EPA for review under the Federal Water Pollution Control Act, more commonly known as the Clean Water Act (CWA), since 2006. A TMDL is a water quality management device that determines the total amount of pollution that may enter a water body on a daily basis while still meeting all applicable water quality standards. TMDLs are essential components of federal, state, and local programs aimed at ensuring that water quality standards are attained and maintained and that fish, wildlife, and human health are protected. In approving Oregon's TMDLs EPA acted arbitrarily, capriciously, and not in accordance with law, within the meaning of the Administrative Procedure Act (APA). EPA also failed to perform mandatory duties under the CWA and the Endangered Species Act (ESA).

2. NWEA brings its claims pursuant to the right of review provision of the APA, 5 U.S.C. § 702, as well as the citizen suit provisions of the CWA and the ESA, 33 U.S.C. § 1365(a)(2) and 16 U.S.C. § 1540(g)(1)(A).

3. NWEA challenges EPA's actions and inactions in approving Oregon's temperature TMDLs between February 11, 2004 and December 17, 2010. First, section 303(d) of the CWA requires EPA to review and act upon state-submitted TMDLs and to ensure the TMDLs will attain EPA-approved water quality standards, which, for purposes of the CWA and EPA's implementing regulations, are referred to as "applicable" water quality standards. Oregon's temperature TMDLs do not require compliance with applicable water quality standards. Instead, Oregon designed the TMDLs to attain new or revised criteria that the State

developed for the first time during the TMDL process, and that EPA has yet to approve. These new criteria are based on the State's estimate of "natural conditions," i.e. the temperature that each water body would reach absent human activities that substantially raise the temperature of the water. By approving the temperature TMDLs prior to acting on the new or revised criteria, EPA violated section 303(d) of the CWA and acted arbitrarily, capriciously, and not in accordance with the law within the meaning of the APA.

4. Second, section 303(c) of the CWA requires EPA to review and either approve or reject any new or revised water quality standards, and to ensure that the new or revised standards will fully protect fish and other wildlife. As discussed above, in developing its temperature TMDLs Oregon also developed numerous new water quality standards that EPA has yet to review under section 303(c), but that EPA was nonetheless aware of when approving the TMDLs under section 303(d). Thus, in addition to violating section 303(d) of the CWA, EPA also violated the CWA by failing to review and act upon Oregon's new or revised temperature standards under section 303(c). By failing to review and approve or disapprove Oregon's new or revised standards, EPA failed to perform nondiscretionary duties within the meaning of the CWA citizen suit provision, 33 U.S.C. § 1365(a)(2).

5. Third, Oregon's temperature TMDLs do not require attainment of all applicable water quality standards. In general, a state must perform two tasks under section 303(d) of the CWA. First, the state must identify the waters within its regulatory jurisdiction that do not, or cannot without the aid of additional pollution control measures, meet *any single* water quality standard. For purposes of the CWA, these waters are called "water-quality limited" or "impaired" waters. Second, for each pollutant contributing to the impairment the state must develop a TMDL that will allow the water body to meet *all* applicable water quality standards. In

this case, Oregon designed its temperature TMDLs to attain the new criteria established for the first time in the TMDLs themselves. In doing so, Oregon failed to design the TMDLs to attain other temperature standards that apply to those same waters, including temperature standards that require the protection of designated uses. In many cases, the TMDLs also were not designed to attain temperature standards that apply only during certain months of the year, such as the State's standards for salmon and steelhead spawning. By approving TMDLs that were not designed to attain all applicable criteria, EPA acted arbitrarily and capriciously in violation of section 303(d) of the CWA.

6. Fourth, section 303(d) of the CWA requires each TMDL to contain a "margin of safety." The purpose of a margin of safety is to account for any uncertainty about whether the TMDL will actually attain water quality standards. Here, the margins of safety in each temperature TMDL should have addressed the difference between the State's estimate of so-called "natural conditions," that are based on the results of admittedly inaccurate models, and the "biologically-based" numeric temperature criteria that EPA previously approved. The TMDLs do not contain margins of safety that address this uncertainty because Oregon deemed the results of the models to be new replacement criteria. Moreover, Oregon relied on the limitations of its estimates of natural conditions as "conservatisms" that were used as an implied margin of safety, yet these conservatisms incorporate many anthropogenic sources of heat pollution, including, for example, reduced groundwater inflow; decreased streamflow; reduced riparian vegetation; loss of floodplains, wetlands, channel complexity, and hyporheic exchange; stream channelization; and hydroelectric dams. Oregon failed to consider that by incorporating each of these limitations into the new superseding criteria, it promulgated TMDLs with inadequate margins of safety. Thus, by approving TMDLs without an adequate margin of safety EPA again acted arbitrarily,

capriciously, and not in accordance with the CWA and the APA.

7. Fifth, by approving the temperature TMDLs EPA also violated the ESA. The ESA requires each federal agency to determine whether its actions “may affect” threatened or endangered species. If the agency makes such a determination, the agency must then consult with either the National Marine Fisheries Service or the United States Fish and Wildlife Service (together “the Services) to ensure that the action will not jeopardize the continued existence of the species, or destroy or adversely modify designated critical habitat. Here, EPA never determined whether or not its approvals of all but two of Oregon’s temperature TMDLs may affect threatened or endangered species of salmon, steelhead, and trout, nor did it consult with the Services, in violation of its duties under the ESA. Neither did EPA determine whether or not its approval of those temperature TMDLs, insofar as they functioned to change Oregon’s water quality standards, may affect threatened or endangered species of salmon, steelhead, and trout, nor did it consult with the Services for this purpose. In addition, while EPA made a “no effects” determination for Oregon’s Willamette Basin temperature TMDL, EPA did not determine whether the new temperature criteria contained in the TMDL would affect listed species. By ignoring the new temperature criteria established by the TMDL, EPA failed to determine whether its action in approving the TMDL would affect listed species.

8. Sixth, in addition to the temperature TMDLs discussed above, on December 21, 2010 Oregon submitted temperature TMDLs for the Klamath Basin to EPA for review and action under section 303(d) of the CWA. The Klamath Basin temperature TMDLs cover waters in the Upper Klamath and Lost River subbasins. On March 19, 2010 EPA issued a decision declining to either approve or disapprove the TMDLs pending the outcome of litigation between NWEA and EPA. However, section 303(d) of the CWA mandates that within 30 days after submission

by a state, EPA must either approve the TMDL or disapprove the TMDL and establish its own. EPA has violated section 303(d) by failing to make a decision on the Klamath Basin temperature TMDL within the 30-day review and action period, and has therefore failed to perform a non-discretionary duty within the meaning of the CWA citizen suit provision, 33 U.S.C. § 1365(a)(2).

9. Seventh, NWEA challenges EPA's September 29, 2006 approval of Oregon's Willamette Basin mercury TMDL. As with Oregon's temperature TMDLs, the Willamette Basin mercury TMDL was not designed to attain all applicable standards. In particular, Oregon established its Willamette Basin mercury TMDL to attain that portion of the state's water quality standards aimed at the consumption of fish by humans. The State did not, however, establish the mercury TMDL, including the margin of safety included in that TMDL, to meet that portion of the water quality standards aimed at the protection of fish and wildlife, even though, as with human health, fish and wildlife are harmed by mercury contamination. In addition, Oregon failed to ensure that the TMDL would attain that portion of the state's water quality standards designed to protect human consumers of fish, even though that was the alleged goal of the TMDL; Oregon failed to determine the level of pollution reduction needed to meet water quality standards; Oregon failed to calculate the "daily" loading capacity for the affected waters; and Oregon failed to calculate individual load and wasteload allocations of mercury as required by the CWA and EPA's implementing regulations. The TMDL therefore does not meet the requirements of federal law and EPA's approval was arbitrary, capricious, and not in accordance with law, within the meaning of the APA.

10. Last, EPA failed to consult on the full scope of the Willamette Basin mercury TMDL. In particular, the TMDL sets new water quality goals for mercury designed to limit the level of mercury found in fish tissue. Oregon established the new water quality goals based on its

assessment of human health impacts, but did not determine whether the new goals would have an adverse effect on fish and other wildlife. In turn, while EPA reviewed and approved the new goals as part of its review of the TMDL under section 303(d) of the CWA, EPA failed to evaluate whether the new goals would have an effect on listed species. By ignoring that aspect of its action, EPA failed to perform mandatory duties under the ESA within the meaning of the ESA citizen suit provision.

11. NWEA seeks declaratory and injunctive relief and to set aside EPA's actions under the APA. The requested relief is necessary to preserve the status quo, to prevent illegal agency action, and to forestall irreparable injury. NWEA has no other adequate remedy at law.

**JURISDICTION, VENUE, AND BASIS FOR RELIEF**

12. This Court has jurisdiction over this action pursuant to 33 U.S.C. § 1365(a) (CWA citizen suit provision); 16 U.S.C. §§ 1540(c) and (g) (action arising under the ESA and ESA citizen suit provision); 5 U.S.C. §§ 701–706 (the APA); and 28 U.S.C. § 1331 (federal question). Judicial review is authorized by 5 U.S.C. § 706 because NWEA and its members have suffered legal wrong and are adversely affected by final agency action within the meaning of the APA. As required by 33 U.S.C. § 1365(b)(2) and 16 U.S.C. § 1540(g)(2), NWEA furnished EPA with written notice of its violations of the CWA and the ESA more than 60 days prior to filing this complaint. NWEA's first notice letter, dated September 21, 2012, is attached to this complaint as Exhibit 1 and is incorporated by reference. NWEA's second notice letter, dated September 28, 2012 and alleging additional violations of the ESA, is attached to this complaint as Exhibit 2 and is also incorporated by reference.

13. Venue is proper in the District of Oregon pursuant to 28 U.S.C. § 1391(e) and 16 U.S.C. § 1540(g)(3)(A) because a substantial number of the lands and waters that are the subject

of this case are located in Oregon, and a substantial portion of the events and omissions giving rise to the claims occurred in Oregon. Pursuant to LR 3-2(b), divisional venue is proper in the Portland division because a substantial portion of the lands, waters, events, and omissions that form the basis of NWEA's claims are located in, or occurred in, the Portland division.

14. Declaratory relief is appropriate under 5 U.S.C. § 703 and 28 U.S.C. § 2201. Injunctive relief is appropriate under 5 U.S.C. § 703, 28 U.S.C. § 2202, 33 U.S.C. § 1365(a), and 16 U.S.C. § 1540(g)(1).

### **PARTIES**

15. The plaintiff in this action is NORTHWEST ENVIRONMENTAL ADVOCATES. Established in 1969, NWEA is a regional non-profit environmental organization incorporated under the laws of Oregon in 1981, with its principal place of business in Portland, Oregon. NWEA's mission is to work through advocacy and education to protect and restore water and air quality, wetlands, and wildlife habitat in the Pacific Northwest.

16. NWEA and its members use and enjoy the waters of Oregon for recreational, scientific, aesthetic, and commercial purposes. NWEA and its members derive or, but for the threatened and endangered status of salmon, steelhead, and trout, would derive recreational, scientific, aesthetic, and commercial benefits from the existence in the wild of these species through wildlife observation, study, photography, and recreational and commercial fishing within the Columbia and Snake River basins and the Pacific Ocean. NWEA and its members derive or, but for the effects of thermal pollution on populations of fish and amphibians, would derive recreational, scientific, and aesthetic benefits from the existence of these species in the wild. NWEA's members also enjoy or, but for the depressed populations of fish and, in some instances, their status under the ESA, would enjoy eating salmon and other fish caught in Oregon



waters. NWEA's members also enjoy or, but for the presence of toxic pollutants such as mercury in these fish, would enjoy eating salmon and other fish caught in Oregon waters. Some of these members have reduced their fish consumption to limit their exposure to toxic pollutants; other members have stopped consuming fish entirely due to their reasonable concerns about toxic pollutants. NWEA and its members also derive or, but for the effects of toxic pollutants on populations of birds and mammals, would derive recreational, scientific, and aesthetic benefits from the existence of these species in the wild.

17. The aesthetic, conservation, scientific, and health interests of NWEA and its members have been, are being, and unless relief is granted, will continue to be adversely affected and irreparably injured by EPA's failure to comply with the CWA and the ESA. For these same reasons NWEA is also adversely affected and aggrieved by EPA's actions within the meaning of the APA. NWEA's injury-in-fact is fairly traceable to EPA's conduct and would be redressed by the requested relief.

18. Defendant UNITED STATES ENVIRONMENTAL PROTECTION AGENCY is a federal agency charged with the administration of the CWA and other environmental statutes.

## **LEGAL BACKGROUND**

### **The Clean Water Act**

#### ***Water Quality Standards, NPDES Permits, and Nonpoint Source Controls***

19. In 1972 Congress adopted amendments to the CWA in an effort "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The 1972 amendments establish an "interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife." 33 U.S.C. § 1251(a)(2). To these ends the 1972 amendments require states to develop water quality standards that establish, and

then protect, the desired conditions of each water body within the state's regulatory jurisdiction.  
33 U.S.C. § 1313(a).

20. Water quality standards are provisions of state law that consist of designated uses, criteria designed to protect those uses, and an antidegradation policy. 40 C.F.R. § 131.3(i). Designated uses are provisions of state law that specify how waters of the state are used by people, fish, wildlife, and plants. Typical designated uses include swimming and fishing, as well as use of the waters by fish such as salmon, steelhead, and trout for spawning and rearing. Numeric and narrative criteria incorporated in the water quality standards represent qualities of water intended to protect the designated uses. *Id.* at § 131.3(b), (f). In Oregon, designated uses include several species of salmon, steelhead, and trout that are listed as threatened or endangered under the ESA. *See* OAR 340-041-0028(a)–(f). Criteria in Oregon include numeric temperature thresholds designed to protect these species at various life-stages. *Id.* Oregon also has a variety of narrative criteria. *See e.g.* OAR 340-041-0028(4)(d) (requiring “coldwater refugia that are sufficiently distributed so as to allow salmon and steelhead migration without significant adverse effects from higher water temperatures elsewhere in the water body.”); OAR 340-041-0028(5) (narrative criteria for “Unidentified Tributaries.”); OAR 340-041-0028(9)(a) (narrative criteria for “Cool Water Species.”); OAR 340-041-0028(11) (“Protecting Cold Water”).

21. Water quality standards establish the water quality goals for a water body. Water quality standards also serve as the regulatory basis for establishing water quality-based controls over point sources, as required by sections 301 and 306 of the CWA, 33 U.S.C. §§ 1311 & 1316. A point source is a “discernable, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well . . . from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). Point source discharges are regulated under National

Pollutant Discharge Elimination System (NPDES) permits, which require point sources to meet both technology-based effluent limitations and “any more stringent limitation . . . necessary to meet water quality standards.” 33 U.S.C. § 1311(b)(1)(C). Water quality standards are thus integral to the regulation of point source pollution.

22. Finally, water quality standards are used to establish measures to control for nonpoint source pollution. For example, Oregon’s Forest Practices Act requires logging operators to comply with Oregon’s water quality standards. ORS § 527.724. Similarly, the Oregon Department of Agriculture is authorized to establish rules and plans to meet Oregon’s water quality standards. ORS § 568.912(3), ORS § 568.930(1). The federal Coastal Zone Act Reauthorization Amendments (CZARA) also require states to demonstrate that they have management measures to control nonpoint source pollution that are necessary to achieve and maintain applicable water quality standards in order to remain eligible to receive federal grant funds. 16 U.S.C. § 1455b(b)(3).

23. Water quality standards must be reviewed and approved by EPA under section 303(c) of the CWA before the standards become a component of the CWA’s regulatory scheme. 33 U.S.C. § 1313(c). In other words, water quality standards are not “applicable” for purposes of the CWA until EPA approves the standards. 40 C.F.R. § 131.21(c), (d).

24. Section 303(c) of the CWA provides that “whenever the state revises or adopts a new standard, such revised or new standard shall be submitted to the [EPA].” 33 U.S.C. § 1313(c)(1). EPA must then review and approve the new standard within sixty days of submission or disapprove the new standard within ninety days and develop its own substitute standard. *Id.* at § 1313(c)(3); *see also* 40 C.F.R. § 131.5(a). In order to approve a new or revised standard EPA must determine, *inter alia*, that the standard will fully protect the uses designated for the affected

waters. 40 C.F.R. § 131.5(a)(2).

25. Section 505 of the CWA provides that any citizen may sue EPA in federal court “where there is alleged a failure of the Administrator to perform any act or duty under [the CWA] which is not discretionary with the Administrator.” 33 U.S.C § 1365(a)(2). In such a case the district court “shall have jurisdiction . . . to order the Administrator to perform such act or duty.” *Id.*

26. EPA’s duty under section 303(c) to review new or revised water quality standards is nondiscretionary within the meaning of section 505. Thus, any citizen may sue EPA under section 505 for failure to review any new or revised water quality standards and the district court may order EPA to perform 303(c) review and action.

#### ***Total Maximum Daily Loads***

27. In addition to serving as the regulatory basis for NPDES permits and non-point source controls, water quality standards are the benchmarks by which the quality of a water body is measured. In particular, water bodies that do not meet applicable water quality standards, or cannot meet applicable standards after the imposition of technology-based effluent limitations on point sources, are deemed to be “water quality limited” or “impaired” and placed on the section 303(d) list. *See* 33 U.S.C. § 1313(d)(1)(A); 40 C.F.R. § 130.2(j). States must then develop TMDLs for all 303(d)-listed waters in order to establish the scientific basis for cleaning up water pollution that exceeds water quality standards.

28. A TMDL is the total daily loading of pollutants for a particular water body or segment, and “shall be established at a level necessary to implement the applicable water quality standards with seasonal variation and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.” 33

U.S.C. § 1313(d)(1)(C). As a consequence of this requirement, TMDLs must be set at levels necessary to attain EPA-approved, i.e. “applicable,” water quality standards. *See* 40 C.F.R. § 131.21(c), (d). EPA cannot approve a TMDL based on standards that EPA has yet to review under section 303(c). *Id. See also* 33 U.S.C. § 1313(d)(1)(C).

29. Further, while a water body is deemed to be water quality-limited or impaired if it will violate “*any water quality standard*,” 33 U.S.C. § 1313(d)(1)(A) (emphasis added), TMDLs for the water body must be set at a level necessary to attain all “applicable water quality standards,” 33 U.S.C. § 1313(d)(1)(C) (emphasis added). As a consequence, once a state determines that a water body will not or cannot meet *any single* water quality standard after the imposition of technologically-based effluent limitations on point sources, the state must design each subsequent TMDL to meet *all* water quality standards that apply to the impaired water body.

30. A TMDL consists of both load allocations and wasteload allocations for point and nonpoint sources of pollution respectively. 40 C.F.R. § 130.2(i). A wasteload allocation is “[t]he portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution.” *Id.* at § 130.20(h). A load allocation is “[t]he portion of a receiving water’s loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources.” *Id.* at § 130.20(f).

31. Unlike point source pollution, nonpoint source pollution is generally considered to be any pollution that cannot be traced to a single discrete conveyance. Examples include runoff from agricultural or forestry lands and increased solar radiation caused by the loss of riparian vegetation. The purpose of load and wasteload allocations is to allocate the total amount of pollution that may enter a water body between all individual sources of pollution, including

both point and nonpoint sources of pollution, thereby restricting pollution inputs sufficiently to attain and maintain water quality standards.

32. As with water quality standards, states must submit TMDLs to EPA for approval or disapproval under section 303(d) of the CWA. *See* 33 U.S.C. § 1313(d)(2). In turn, section 303(d) requires that within 30 days after submission EPA must either approve the TMDLs or disapprove them and establish its own TMDLs for the affected water bodies. *Id.*

33. Like EPA's duty to review new or revised water quality standards under section 303(c), EPA's duty to either approve or disapprove the TMDLs within 30 days of submission is a non-discretionary duty within the meaning of section 505 of the CWA.

34. Once EPA approves a TMDL, all future NPDES permits must be consistent with the TMDL's wasteload allocations for point sources. 40 C.F.R. § 130.2. As well, the approved load allocations serve as the basis for state and local programs for controlling nonpoint source pollution, including state programs that receive federal funds under section 319 of the CWA, 33 U.S.C. § 1329. Once EPA approves a TMDL, the state must also incorporate the TMDL into its "continuing planning process" under section 303(e) of the CWA. 33 U.S.C. § 1313(e)(3)(C).

### **The Endangered Species Act**

35. Congress enacted the ESA in 1973 to "provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." 16 U.S.C. § 1531(b). The two goals of the ESA are to prevent extinction of imperiled species and to facilitate the recovery of imperiled species so that they no longer require protection under the ESA.

36. To achieve the two goals of survival and recovery, the ESA directs the Secretaries of Commerce and the Interior, who in turn act through the National Marine Fisheries Service and the United States Fish and Wildlife Service respectively, to determine which species of plants

and animals are “threatened” or “endangered.” *Id.* § 1533. An endangered species is currently on the brink of extinction throughout all or a significant portion of its range. *Id.* at § 1532(6). A threatened species is a species likely to become endangered within the foreseeable future. *Id.* at § 1532(20). The ESA also charges the Services with designating “critical habitat,” which is defined as those areas “essential to the conservation of the species.” *Id.* at §§ 1533(a) (3), 1532(5)(A) & (B).

37. Section seven of the ESA requires each federal agency to ensure that its actions are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of designated critical habitat. *Id.* § 1536(a)(2).

38. To avoid jeopardizing listed species or destroying or adversely modifying critical habitat, section seven establishes an interagency consultation process under which “[e]ach Federal agency shall review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat.” 50 C.F.R. § 402.14(a). An action may affect a listed species if the action will have *any* affect on the species, including both negative and beneficial effects. *Endangered Species Consultation Handbook*, March 1998, at xvi, 2-6.

39. If an agency determines that an action may affect a listed species the agency must engage in formal consultation with the Services. 50 C.F.R. § 402.14(a). The result of formal consultation is a biological opinion issued by the Services expressing the agencies’ views on the likelihood of jeopardy and destruction or adverse modification of critical habitat. *See* 16 U.S.C. § 1536(b)(3)(A).

40. If an agency determines that its action may affect a listed species, then the agency may avoid formal consultation only if the agency obtains the written concurrence of the Services, either through “informal consultation” or the preparation of a biological assessment, that the

action is “not likely to adversely affect” the species. 50 C.F.R. § 402.14(b). An action is not likely to adversely affect a species only if the action will have no adverse effect. *Endangered Species Consultation Handbook* at xv. On the other hand formal consultation is required if there would be any adverse effect on the species, even if the overall effect of the action is beneficial. *Id.*

41. Section 11 of the ESA provides a private cause of action allowing any person to sue an agency of the United States that is alleged to be in violation of the requirements outlined above. *See* 16 U.S.C. § 1540(g)(1)(A). In such a case the district court has jurisdiction to order compliance with the above procedures. *Id.*

### **The Administrative Procedure Act**

42. Section 702 of the Administrative Procedure Act, 5 U.S.C. §702, provides a private cause of action to any person “suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute.” Under section 706 of the APA, 5 U.S.C. § 706(2)(A), a court “shall . . . hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”

### **FACTUAL BACKGROUND**

#### **Oregon’s 2004 Water Quality Standards Revisions**

43. In 2004 Oregon adopted major revisions to its water quality standards for temperature. Among the 2004 revisions, Oregon adopted new designated uses that represent several species of threatened and endangered salmon, steelhead, and trout. For example the new uses include “bull trout spawning and juvenile rearing,” and “salmon and steelhead spawning.” The 2004 revisions also included new numeric temperature criteria to protect these new



designated uses. For example, Oregon established a criterion of 12.0°C for the protection of waters designated for bull trout spawning and juvenile rearing, and it established a criterion of 13.0°C for waters designated for salmon and steelhead spawning. The new uses and criteria adopted in 2004 are now codified at division 41 of Oregon’s administrative rules and are set forth in Table 1.

***Table 1***  
***Designated Uses and Criteria Adopted in 2004***

Bull trout spawning and juvenile rearing.....	12.0°C
Salmon and steelhead spawning .....	13.0°C
Core cold water habitat <sup>1</sup> .....	16.0°C
Salmon and trout rearing and migration .....	18.0°C
Migration corridors <sup>2</sup> .....	20.0°C
Lahontan Cutthroat trout and Redband trout .....	20.0°C

44. Based on the actual distribution of the species, Oregon also designated one or more of the uses and criteria listed in Table 1 for virtually every water body in the State. *See* OAR Div. 41, Figures 130A–340B. As a result, virtually every water body in the State is associated with criteria ranging from 12.0°C to 20.0°C. *See id.*

45. The criteria listed in Table 1 are referred to as Oregon’s “biologically-based” criteria because they were calculated to reflect the biological needs of the species. *See* OAR 340-

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<sup>1</sup> Under Oregon’s administrative rules, “‘Core Cold-Water Habitat Use’ means waters that are expected to maintain temperatures within the range generally considered optimal for salmon and steelhead rearing, or that are suitable for bull trout migration, foraging, and sub-adult rearing that occurs during the summer.” OAR 340-041-0002(13).

<sup>2</sup> Under Oregon’s administrative rules, “‘Migration Corridors’ mean those waters that are predominantly used for salmon and steelhead migration during the summer.” OAR 340-041-0002(37). The 20°C numeric criterion is accompanied by narrative criteria that require, “[i]n addition, these water bodies must have coldwater refugia that are sufficiently distributed so as to allow salmon and steelhead migration without significant adverse effects from higher water temperatures elsewhere in the water body. Finally, the seasonal thermal pattern in Columbia and Snake Rivers must reflect the natural seasonal thermal pattern.” OAR 340-041-0028(4)(d).

041-0002(4), -0028(4). Table 2 lists the threatened and endangered species protected by Oregon’s biologically-based numeric criteria.

**Table 2**  
***ESA-Listed Species Protected by the 2004 Revisions***

Snake River Fall Chinook salmon .....	Threatened
Snake River Spring/Summer Chinook salmon .....	Threatened
Snake River sockeye salmon .....	Endangered
Snake River steelhead .....	Threatened
Upper Columbia River spring Chinook salmon.....	Endangered
Upper Willamette River Chinook salmon.....	Threatened
Columbia River chum salmon .....	Threatened
SONCC coho salmon .....	Threatened
Oregon Coast coho salmon .....	Threatened
Middle Columbia River steelhead .....	Threatened
Lower Columbia River steelhead.....	Threatened
Upper Willamette River steelhead .....	Threatened
Upper Columbia River steelhead .....	Endangered
Bull trout .....	Threatened
Lahontan cutthroat trout.....	Threatened

46. In addition to the biologically-based numeric criteria set forth above, in 2004 Oregon also adopted a provision known as the Natural Conditions Criterion (NCC), codified at OAR 340-041-0028(8). The NCC allows Oregon to set new numeric or narrative water quality criteria whenever the State determines that water temperatures would naturally have been warmer than the State’s biologically-based numeric criteria. The NCC provides as follows:

Where the department determines that the natural thermal potential of all or a portion of a water body exceeds the biologically-based criteria . . . the natural thermal potential temperatures supersede the biologically-based criteria, and are deemed to be the applicable temperature criteria for that water body.

OAR 340-041-0028(8).<sup>3</sup>

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<sup>3</sup> For purposes of the natural conditions criterion, “‘Natural Thermal Potential’ means the determination of the thermal profile of a water body using best available methods of analysis and  
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47. Oregon's rationale for adopting the NCC was that before humans drastically altered the thermal profile of Oregon's rivers, the threatened and endangered species listed in Table 2 were abundant and healthy. Thus, Oregon assumed that waters that would have naturally been hotter than the biologically-based numeric criteria might still reasonably be assumed to fully protect those same species today, even though the species are now critically imperiled and are less tolerant to environmental stresses.

48. At the time it adopted the NCC, Oregon planned to make its determinations about natural thermal potential, and establish new numeric or narrative temperature criteria based on the NCC, during the TMDL process. Before establishing any TMDLs for any given water body Oregon planned first to determine whether the waters would naturally have exceeded the biologically-based numeric criteria. If so, the state would identify new criteria based on the NCC, superseding the biologically-based numeric criteria, and calculate its TMDLs to attain the new criteria.

49. Although the NCC allows Oregon to establish new numeric or narrative criteria during the TMDL process rather than the triennial review of water quality standards required by the CWA, the NCC provision does not require Oregon to submit the new criteria to EPA for approval under section 303(c) before extinguishing the EPA-approved biologically-based numeric criteria. Thus, the NCC does not require EPA to ensure, as required under section 303(c), that the new superseding criteria will actually protect designated uses, including the threatened and endangered species listed above.<sup>4</sup>

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the best available information on the site-potential riparian vegetation, stream geomorphology, stream flows, and other measures to reflect natural conditions." OAR 340-041-0002(41).

<sup>4</sup> By allowing Oregon to change its water quality standards without submitting the new or revised standards to EPA under section 303(c), the NCC differs from the State's rule allowing

50. On March 2, 2004 EPA approved Oregon's water quality standards revisions under section 303(c). As a result, the biologically-based numeric criteria and designated uses applied throughout Oregon's water bodies as a matter of federal law, and those criteria were the "applicable" water quality standards for purposes of the CWA. However, the NCC, which EPA also approved, left open the possibility that Oregon could alter the biologically-based numeric criteria at any time, without subjecting the new standards to EPA for review pursuant to 303(c), without EPA's first determining that the new criteria would continue to protect threatened and endangered salmonids, and without EPA's consulting with the Services to ensure the new criteria would not pose jeopardy to those species.

#### **Prior Litigation between NWEA and EPA**

51. In 2005 NWEA sued EPA under the APA to, *inter alia*, set aside EPA's approval of the NCC. In part NWEA argued that the provision was illegal because it allowed Oregon to adopt new or revised numeric water quality criteria without submitting them to EPA for review and action under section 303(c).

52. On February 28, 2012 this Court granted summary judgment in favor of NWEA, holding that EPA's approval of the NCC was arbitrary and capricious. *See Nw. Env'tl. Advocates v. U.S. Env'tl. Prot. Agency*, Case No. 3:05-cv-01876-AC (D. Or. Feb. 28, 2012) (slip op. at 27).<sup>5</sup>

53. The Court held that the NCC clearly violated section 303(c) of the CWA because the provision "supplants rather than supplements the numeric criteria by allowing Oregon to

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the creation of site-specific criteria. *See* OAR 340-041-0028(13). Oregon's rule for site-specific criteria allows the State to adopt new or revised criteria for a particular water body while at the same time complying with the CWA.

<sup>5</sup> After granting summary judgment to NWEA, the Court's opinion of February 28, 2012 directed the parties to confer regarding remedies. To date, the Court has not issued a final judgment in Case No. 3:05-cv-01876-AC.

replace the numeric criteria (determined to be protective of salmonids) with a new numeric standard during the TMDL process.” *Id.* at 26. The Court further explained that the provision “violates the CWA’s § 303(c) water quality standards review” by not requiring EPA’s approval prior to Oregon’s adoption of new standards. *Id.* (citing *Ohio Valley Env’tl. Coal. v. Horinko (OVEC)*, 279 F. Supp. 2d 732, 764 (S.D. W.Va. 2003)).

54. The Court also found that Oregon’s rationale for adopting the NCC, and EPA’s rationale for approving it, was seriously flawed. EPA erroneously assumed, as did Oregon, that simply because historic temperature conditions supported healthy salmonid populations in the past, similar temperatures would support current populations that are now clinging to survival. *Id.* at 27. The Court further held that Oregon’s process for estimating natural conditions was “rife with uncertainty.” *Id.*

### **Oregon’s Temperature TMDLs**

55. Between 2004 and 2010, largely during NWEA’s seven-year and ongoing lawsuit to set aside EPA’s approval of the NCC, Oregon submitted numerous temperature TMDLs to EPA for review and action under CWA section 303(d).<sup>6</sup> EPA approved each of those TMDLs between February 11, 2004 and December 17, 2010. Table 3 contains a list of the temperature TMDLs and EPA’s approval dates.

*Table 3*  
*Temperature TMDLs and EPA Approval Dates*

Rogue Basin, Applegate Subbasin.....Feb. 11, 2004

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<sup>6</sup> As discussed above, a TMDL sets the pollutant loading rate for a single water body or water body segment and is calculated by pollutant or parameter. *See* 40 C.F.R. § 130.2(i) and (j). However, Oregon’s temperature TMDLs apply to all perennial and intermittent streams, impaired or not, in a given basin or subbasin. Therefore, for purposes of this complaint NWEA refers to “TMDLs” as the documents submitted to EPA for approval under section 303(d) of the CWA, each of which contains numerous TMDLs as counted by segment/parameters.

Snake River, Hells Canyon .....	Sept. 9, 2004
Sandy Basin .....	April 14, 2005
Umatilla Basin, Walla Walla Subbasin.....	Sept. 29, 2005
Willamette Basin <sup>7</sup> .....	Sept. 29, 2006
Umatilla Basin, Willow Creek Subbasin .....	Feb. 19, 2007
Umpqua Basin.....	April 12, 2007
Rogue Basin, Middle Rogue Subbasin & Bear Creek Watershed .....	Oct. 2, 2007
Willamette Basin, Molalla Pudding Subbasin .....	Dec. 31, 2008
Rogue Basin .....	Dec. 29, 2008
Middle Columbia/Hood, Miles Creek Subbasin.....	Feb. 5, 2009
Grande Ronde, Lower Grande Ronde Subbasin.....	Sept. 24, 2010
Malheur Basin.....	Dec. 3, 2010
John Day Basin .....	Dec. 17, 2010

56. In each TMDL document listed in Table 3 Oregon impliedly or explicitly determined the waters of the various basins would naturally have exceeded the State's biologically-based numeric criteria. Oregon identified new numeric and/or narrative criteria based on its own estimation of natural conditions and pursuant to the NCC. Oregon then established load and wasteload allocations designed to attain the new superseding criteria. EPA did not, however, review these new superseding criteria under section 303(c) of the CWA or determine whether the new criteria would fully protect designated uses as required by 40 C.F.R. § 131.11(a). Table 4 contains a list of some of Oregon's new natural thermal potential criteria and the water bodies to which the new criteria apply.

***Table 4***  
***Some New Numeric Criteria Established in Oregon's Temperature TMDLs***

Applegate River, Rogue Basin.....	18.65°C
Snake River, Snake River/Hell's Canyon.....	>17.8°C
Sandy River, Sandy Basin.....	22°C

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<sup>7</sup> The Willamette Basin TMDL contains TMDLs for the Lower Willamette, Clackamas, Middle Willamette, North Santiam, South Santiam, Upper Willamette, McKenzie, Middle Fork Willamette, and Coast Fork Willamette subbasins.

Little Sandy River, Sandy Basin.....	19°C
Lower Bull Run River, Sandy Basin.....	19°C
Salmon River, Sandy Basin .....	18.5°C
Walla Walla River, Umatilla Basin .....	24°C
Mosby Creek, Willamette Basin.....	24.1°C
Mohawk River, Willamette Basin.....	24°C
Little North Santiam River, Willamette Basin.....	24.5°C
Crabtree Creek, Willamette Basin .....	24°C
Thomas Creek, Willamette Basin .....	27°C
Coyote Creek, Willamette Basin.....	25°C
Luckiamute River, Willamette Basin.....	24°C
Willamette River, Willamette Basin.....	24°C
Willow Creek, Umatilla Basin.....	26°C
Jackson Creek, Umpqua Basin .....	23°C
Canton Creek, Umpqua Basin.....	22°C
Cow Creek, Umpqua Basin.....	26.6°C
Olalla-Lookingglass Creek, Umpqua Basin .....	32.5°C
South Umpqua River, Umpqua Basin.....	28.5°C
Lake Creek, Umpqua Basin .....	21°C
North Umpqua River, Umpqua Basin.....	16.5°C
Steamboat Creek, Umpqua Basin .....	24.3°C
Rock Creek, Umpqua Basin.....	22°C
Cavitt Creek, Umpqua Basin .....	24.5°C
Little River, Umpqua Basin .....	24.5°C
North Umpqua River, Umpqua Basin.....	23.5°C
Calapooya Creek, Umpqua Basin .....	28.5°C
Elk Creek, Umpqua Basin.....	28.3°C
Umpqua River, Umpqua Basin.....	27.5°C
Smith River, Umpqua Basin .....	19.5°C
Bear Creek, Rogue Basin.....	19.8°C
Molalla River, Willamette Basin .....	21.1°C
Pudding River, Willamette Basin .....	21.6°C
Antelope Creek, Rogue Basin.....	18.5°C
Elk Creek, Rogue Basin.....	22°C
Evans Creek, Rogue Basin.....	25°C
South Fork Little Butte Creek, Rogue Basin .....	23°C
Rogue River, Rogue Basin.....	27°C
Fifteen Mile Creek, Middle Columbia/Hood Subbasin .....	20.5°C

Wallowa River, Grande Ronde Basin .....	23°C
Middle Fork River, John Day Basin .....	26°C
North Fork River, John Day Basin .....	26°C
John Day River, John Day Basin .....	27.5°C

The superseding natural thermal potential criteria listed in Table 4 are, in most cases, set out in graphs found in the TMDLs that contain additional superseding criteria.

57. All of the numeric superseding criteria listed in Table 4 are less protective than the biologically-based numeric criteria that were in effect prior to EPA’s approval of the TMDLs. *Compare* Table 4 with OAR Div. 41, Figures 130A–340B. Many of the new criteria in Table 4 represent temperatures that EPA has determined will harm or kill ESA-listed salmonids, and EPA would not have approved the superseding criteria had Oregon submitted them for review under section 303(c) of the CWA. *See* EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards, April 2003, at 16. For example, in its guidance on water quality standards for the Pacific Northwest, EPA recommended that states should not adopt temperature criteria greater than 18°C for salmonid rearing, and should not adopt temperature criteria as high as 20°C for salmonid migration without also adopting an additional “provision to protect and, where feasible, restore the natural thermal regime.” *Id.* at 25, 28-30.

58. In addition to the superseding numeric criteria, such as those listed in Table 4, that are applicable to waters for which Oregon ran models to generate the new numeric criteria, Oregon also used the temperature TMDLs to change the criteria applicable to waters that were not modeled. Oregon explained in some of its temperature TMDLs that the NCC would still supersede and effectively erase the prior, biologically-based numeric criteria in those waters for which the State did not calculate new numeric criteria. *See, e.g.* Lower Grande Ronde Subbasins TMDLs, September 2010, at 2-2 (“DEQ has determined that the natural conditions criterion is the primary warm season target throughout the Lower Grande Ronde Subbasins.”). Similarly,

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Oregon established new narrative criteria based on the NCC in its TMDLs for the Snake River and Malheur Basin, as well as its TMDLs for the Clackamas, Middle Willamette, and Middle Fork Willamette Subbasins of the Willamette River Basin. As with the new numeric criteria listed above, Oregon's new narrative criteria in these TMDLs effectively erased the existing biologically-based numeric criteria.

59. After Oregon established new numeric and narrative criteria in the TMDLs, Oregon then designed the TMDLs to attain the new criteria. However, Oregon did not design the TMDLs to attain other applicable water quality standards left unaltered by the new criteria. These include the State's water quality standards requiring protection of designated and existing uses such as OAR 340-041-0004(1), -0271(1), -0121(1), -0286(1), 0310(1), -0340(1), -0320(1), -0151(1), -0201(1), and -0170(1), the State's narrative provision for cold-water refugia, OAR 40-041-0028(4)(d), as well as the State's seasonal temperature standards such as the State's temperature criteria for salmon and steelhead spawning, OAR 340-041-0028(4)(a). As a consequence, the TMDLs were not designed to attain all applicable water quality standards as required by CWA § 303(d)(1)(C).

60. Last, the State's new superseding numeric and narrative criteria do not reflect the true thermal profile of Oregon's waters prior to human disturbance, and therefore represent temperatures much higher than salmonids would have experienced under truly natural conditions. For example, Oregon's temperature TMDLs fail to account for anthropogenic changes that have reduced the amount of groundwater entering Oregon's waters, despite that this groundwater historically had a substantial cooling effect. The temperature TMDLs do not account for or fully account for, among other anthropogenic influences, reduced shading and other temperature influences on tributaries entering Oregon's major rivers, and reduced channel

complexity, stream flows, and hyporheic flow, all of which also had a cooling effect on Oregon's waters prior to human disturbance. Likewise, the TMDLs do not account or fully account for loss of floodplains and wetlands, hyporheic exchange and groundwater losses, watershed development, bank armoring, flows, channelization, hydroelectric dams, streamside dikes, and aggregate mining. For example, in Oregon's Willamette Basin TMDL, the State did not account for the severely reduced channel complexity of the Willamette River or the warming effects of dams. For this reason Oregon's TMDL for the Willamette Basin itself explains that the State's new superseding criteria are "admittedly a poor representation of the natural condition" of the Willamette River. The models that Oregon used to determine natural thermal potential fail to fully account for these conditions that historically cooled Oregon's water bodies. As a result of these deficient models, the new superseding criteria do not represent truly natural conditions.

61. In establishing its temperature TMDLs Oregon not only relied upon the results of inadequate models to determine superseding natural thermal potential criteria under the NCC but also relied on the models' inadequacies for the required margin of safety. Oregon relied on various alleged conservatisms to establish an implicit margin of safety, such as assuming less riparian vegetation overhang, less groundwater, low or no wind speed, and higher natural disturbances than might eventually exist. Oregon deemed these conservative assumptions to be a margin of safety because it expects that those cooling effects that were not included in its model will actually result in cooler waters than predicted. However, Oregon failed to consider that it was also using the model results to establish new superseding criteria and therefore its estimates of natural conditions that ignored or failed to fully account for many anthropogenic sources of heat pollution and thus generated higher superseding temperatures did not result in a margin of safety but, rather, a failure to include a required margin of safety.

### **EPA's Determinations under the ESA Regarding the Temperature TMDLs**

62. For the majority of the TMDLs listed in Table 3, EPA never conferred with the Services or otherwise determined whether the TMDLs “may affect” threatened or endangered species of salmon, steelhead, or trout. Nor did EPA obtain written confirmation from the Services that the TMDLs were “not likely to adversely affect” the species.

63. Nonetheless, the TMDLs listed in Table 3 may affect threatened and endangered species of salmon, steelhead, and trout. For example, the TMDLs may have negative effects on the species by failing to require attainment of applicable water quality standards, failing to adopt adequate margins of safety, and/or inappropriately setting waste load and load allocations for point and nonpoint sources of pollution. The TMDLs are also likely to adversely affect ESA-listed species by having the effect of establishing new criteria that supersede Oregon's otherwise applicable biologically-based numeric criteria, resulting in warmer waters than would occur absent Oregon's new natural thermal potential criteria. Alternatively, through the alleged attainment of water quality standards the TMDLs may have beneficial effects on the listed species.

64. Of the TMDLs listed in Table 3, EPA made effects determinations and conferred with the Services regarding only the Snake River and Willamette Basin TMDLs, which EPA approved on September 9, 2004 and September 29, 2006 respectively. However, even with those TMDLs, EPA did not make effects determinations or confer with the Services regarding the effects of Oregon's new natural conditions criteria.

65. In particular, EPA issued a “no effects” determination for the Willamette Basin temperature TMDL on September 25, 2006. In its no effects determination, EPA analyzed whether the load and wasteload allocations in the TMDL would have an effect on listed species,

but did not consider whether Oregon's new natural thermal potential criteria established in the TMDL pursuant to the NCC would have a negative impact on listed species by altering the applicable water quality standards. This is despite that EPA reviewed Oregon's new natural thermal potential criteria as part of its approval of the TMDL under section 303(d) of the CWA, and was therefore required to determine whether that action would have an effect on listed species.

66. In addition, EPA failed to consult on Oregon's adoption of new natural thermal potential criteria in the TMDL despite that EPA had the authority to disapprove Oregon's new natural thermal potential criteria under section 303(c) of the CWA, as well as the authority to disapprove the TMDL under section 303(d) of the CWA.

#### **Oregon's Temperature TMDL for the Klamath Basin**

67. On December 21, 2010 Oregon submitted a temperature TMDL for the Klamath Basin for EPA's review under section 303(d). The TMDL covers waters in the Upper Klamath and Lost River subbasins.

68. Like the other TMDLs listed in Table 3, the Klamath Basin TMDL contains new temperature criteria based on the State's estimation of natural conditions. For example, the TMDL sets new criteria for Jenny Creek (23°C) and Miller Creek (30°C) that are higher than the previously-approved biologically-based numeric criteria.

69. Oregon's submission of the Klamath Basin temperature TMDL triggered EPA's nondiscretionary duty under the CWA to either approve or disapprove the TMDL within 30 days after submission.

70. On March 19, 2012 EPA issued a decision document stating it would not take action on the Klamath Basin temperature TMDL until the court issued a final order in the case

*Nw. Env'tl. Advocates v. U.S. Env'tl. Prot. Agency*, Case No. 3:05-cv-01876-AC (D. Or. Feb. 28, 2012), wherein NWEA challenged EPA's approval of Oregon's NCC.

71. To date, EPA has taken no action on Oregon's Klamath Basin temperature TMDL for the Upper Klamath and Lost River Subbasins.

### **Oregon's Willamette Basin Mercury TMDL**

72. On September 21, 2006 Oregon submitted its Willamette Basin mercury TMDL to EPA for review and approval under section 303(d) of the CWA.<sup>8</sup> A key characteristic of water-born mercury pollution is that mercury bioaccumulates and "biomagnifies" in fish and other organisms, in turn harming both wildlife and humans who consume contaminated fish tissue. Wildlife that may be harmed by feeding on contaminated fish tissue include piscivorous birds and mammals such as eagles, peregrine falcon, terns, mink, and river otters as well as other fish and other aquatic life.

73. Oregon established its Willamette Basin mercury TMDL to attain the State's narrative water quality standard then-codified at OAR 340-041-0340(1), which provided "[w]ater quality in the Willamette Basin . . . must be managed to protect the designated beneficial uses shown in Table 340A [of Oregon's administrative rules]." In turn, Table 340A of Oregon's administrative rules for the Willamette Basin listed several designated uses that may be harmed by mercury pollution, including "Fish & Aquatic Life," "Fishing," and "Wildlife & Hunting." Other water quality standards applicable to the Willamette Basin at the time of Oregon's submission included OAR 340-041-0033(1), which provided as follows:

Toxic substances may not be introduced above natural background levels in waters of the state in amounts, concentrations, or combinations that may be harmful, may chemically change to harmful forms in the environment, or may

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<sup>8</sup> Oregon submitted its Willamette Basin mercury TMDL to EPA along with several of the temperature TMDLs discussed above and listed in Table 3.

accumulate in sediments or bioaccumulate in aquatic life or wildlife to levels that adversely affect public health, safety, or welfare or *aquatic life, wildlife*, or other designated beneficial uses.

(emphasis added).

74. While Oregon established the Willamette Basin mercury TMDL to implement OAR 340-041-0340(1), which requires the protection of all designated uses, the State's TMDL is established exclusively to protect fish for purposes of human consumption. For example, Oregon did not establish the TMDL to attain water quality standards aimed at the protection of wildlife, including the designated use of "Wildlife & Hunting" codified at Table 340A of Oregon's administrative rules, and OAR 340-041-0033(1), which expressly precludes the discharge of mercury at levels that may bioaccumulate in the food web and harm piscivorous birds and mammals. Nor did Oregon establish the TMDL at levels that would ensure the protection of populations of threatened and endangered fish despite the designated uses contained within the general description of "Fish & Aquatic Life," the designated uses listed at OAR Div. 41, Figures 340A and 340B, and OAR 340-041-0033(1), which also protect aquatic life from bioaccumulation and other toxic effects.

75. In calculating the mercury TMDL, Oregon also failed to protect the designated use of fishing as required by OAR 340-041-0340(1) and OAR 340-041-0033(1). First, Oregon calculated the mercury TMDL to protect persons in the general population who are expected to eat, on average, 17.5 grams of fish per day. To protect those people, and to partially implement OAR 340-041-0340(1), Oregon established the Willamette mercury TMDL with the goal of achieving mercury concentrations of no more than 0.92 nanograms per liter (ng/l) in Willamette Basin waters. However, Oregon failed to determine whether the goal of 0.92 ng/l would also protect communities where people eat, on average, substantially more than 17.5 grams of fish per day, such as Native Americans who Oregon subsequently determined consume on average 175

grams of fish per day. In doing so Oregon failed to determine whether the TMDL would attain OAR 340-041-0340(1), OAR 340-041-0033(1), and the designated use of fishing. Second, Oregon included a margin of safety in the Willamette Basin mercury TMDL designed to protect the average consumer of fish. That margin of safety consisted of adopting a 0.3mg/kg guidance value used in issuing fish consumption advisories, but Oregon did not determine whether the margin of safety would ensure compliance with standards intended to protect fish consumers who eat substantially more fish than those for whom the guidance value was designed, or whether the margin of safety would ensure compliance with standards designed to protect fish and wildlife including threatened and endangered species.

76. Similarly, Oregon failed to determine whether the goal of reducing mercury levels to 0.92 ng/l would protect the average fish consumer. In particular, the TMDL describes Oregon's goal of reducing mercury pollution to 0.92 ng/l as an "interim" attempt to meet water quality standards. The TMDL further explains that after additional research Oregon would "revise" this estimate to reflect the actual level of pollution reduction needed to meet water quality standards.<sup>9</sup> Thus, the Willamette Basin mercury TMDL is not set "at a level necessary to implement applicable water quality standards," as required by section 303(d) of the CWA, 33 U.S.C. § 1313(d)(1)(C), but instead represents an interim study.

77. Likewise, Oregon also did not calculate the "daily" loading capacity of mercury for the waters covered in the Willamette Basin mercury TMDL. Instead, the State calculated an "annual" loading capacity based on the State's interim estimate of the annual level of pollution reduction needed to meet water quality standards.

78. Last, Oregon failed to calculate individual load and wasteload allocations for

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<sup>9</sup> The Willamette Basin mercury TMDL states that Oregon planned to revise its interim water quality goal of 0.92 ng/l by 2011. To date, Oregon has not done so.

individual point and nonpoint sources of pollution. Instead, the load and wasteload allocations in the TMDL apply to “source categories.” Without specific wasteload allocations to individual point sources, Oregon permit writers cannot establish effluent limits in NPDES permits that will assure those sources will not cause or contribute to violations of mercury standards.

79. EPA approved Oregon’s Willamette Basin mercury TMDL on September 29, 2006. EPA did not, however, determine whether the mercury TMDL would attain applicable water quality standards for the protection of fish and wildlife, including OAR 340-041-0340, OAR 340-041-0033(1), and the designated uses listed in Table 340A of Oregon’s administrative rules. EPA also did not determine whether the TMDL would protect Native Americans or other fish consumers who eat, on average, more than 17.5 grams of fish per day. EPA did not determine whether Oregon’s interim goal of 0.92 ng/l would meet applicable water quality standards to protect human health from fish consumption. EPA approved Oregon’s use of an “annual” loading capacity in lieu of the daily loading capacity required by section 303(d) of the CWA. And EPA approved Oregon’s use of “category” load and wasteload allocations in lieu of load and wasteload allocations for individual sources of pollution. In sum, EPA approved a TMDL that has none of the characteristics of a TMDL or the benefits that are contemplated by the statute.

#### **EPA’s Determination under the ESA for the Willamette Basin Mercury TMDL**

80. On September 25, 2006 EPA issued a “no effects” determination for the Willamette Basin Mercury TMDL, which EPA issued in the same decision document as its no effects determination for the Willamette Basin temperature TMDL. As with the no effects determination for the Willamette Basin temperature TMDL, EPA’s determination for the Willamette Basin mercury TMDL covered the load and wasteload allocations in the TMDL but



did not review new water quality goals contained in the TMDL.

81. In the TMDL, Oregon determined that the concentration of mercury in fish tissue should not exceed 0.3 mg/kg. Oregon then used this figure to calculate the 0.92 ng/l water-column target discussed above. In doing so, Oregon determined that both the new 0.3mg/kg fish-tissue goal and the new 0.92 ng/l water-column goal would be protective of human health, but did not evaluate whether the new water quality goals would also protect fish and wildlife.

82. In turn, EPA's no effects determination for the mercury TMDL did not evaluate whether the new goals would have an effect on listed species. This is despite that EPA approved the new fish-tissue goal and the new water-column goal in its decision document under section 303(d) of the CWA, and was therefore required to determine whether that action would have an effect on listed species.

83. EPA also failed to determine whether Oregon's new water quality goals would have an effect on listed species despite that EPA retained discretion to disapprove the new goals under sections 303(c) and 303(d) of the CWA.

### **CLAIMS FOR RELIEF**

84. NWEA incorporates by reference all of the preceding paragraphs into each claim for relief below.

#### **FIRST CLAIM FOR RELIEF<sup>10</sup>**

##### **Approval of Temperature TMDLs Calculated to Attain Standards that EPA Has Not Yet Approved under Section 303(c) of the CWA**

##### **(Pursuant to the APA, 5 U.S.C. § 702)**

85. Section 303(d) of the CWA requires each TMDL to be set at a level necessary to implement "applicable water quality standards." 33 U.S.C. § 1313(d)(1)(C). In turn, EPA's

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<sup>10</sup> This claim does not apply to TMDLs that EPA approved prior to September 27, 2006. See 28 U.S.C. § 2401(a).

implementing regulations provide that a water quality standard is not “applicable” for purposes of the CWA unless and until EPA approves the standard under section 303(c) of the CWA. 40 C.F.R. § 131.21(c), (d).

86. The temperature TMDLs listed in Table 3 were not designed to implement the applicable, biologically-based criteria that EPA approved in March of 2004. Instead Oregon designed the TMDLs to implement new or revised criteria based on the Oregon’s Natural Conditions Criterion, established for the first time and therefore not approved by EPA, during the TMDL process.

87. EPA approved each of the TMDLs listed in Table 3 under section 303(d) of the CWA despite that EPA never approved Oregon’s new criteria under section 303(c) or otherwise determined that the new criteria would protect designated uses, including the threatened and endangered species listed in Table 2.

88. EPA’s actions in approving the TMDLs listed in Table 3 were therefore arbitrary, capricious, and not in accordance with the CWA and the APA, within the meaning of 5 U.S.C. § 706(2)(A).

## **SECOND CLAIM FOR RELIEF**

### **Failure to Review New Temperature Criteria under Section 303(c) of the CWA**

#### **(Pursuant to the CWA, 33 U.S.C. Section 1365(a)(2))**

89. Section 303(c) of the CWA requires EPA to review new or revised water quality standards and to approve the new or revised standards within 60 days of submission, or to disapprove them within 90 days of submission. 33 U.S.C. § 1313(c). EPA’s duty to either approve new or revised standards within 60 days of submission, or to disapprove them within 90 days of submission, is a non-discretionary duty within the meaning of the CWA citizen suit provision, 33 U.S.C. § 1365(a)(2).

90. The natural thermal potential temperatures in Oregon's temperature TMDLs are new or revised water quality standards within the meaning of section 303(c) of the CWA, and Oregon's submission of the TMDLs to EPA for review and approval under 303(d) triggered EPA's non-discretionary duty to review and approve or disapprove the new standards under section 303(c).

91. EPA did not review the new natural thermal potential criteria under section 303(c) or otherwise determine whether the new criteria would protect designated uses, including the threatened and endangered species listed in Table 2.

92. In failing to review the new standards established by the Oregon TMDLs under section 303(c) of the CWA, and to take action within either 60 or 90 days of their submission, EPA failed to perform nondiscretionary duties within the meaning of the CWA citizen suit provision, 33 U.S.C. § 1365(a)(2).

### **THIRD (ALTERNATIVE) CLAIM FOR RELIEF<sup>11</sup>**

#### **Arbitrary and Capricious Determination that Oregon's TMDLs Did Not Require Review under Section 303(c) of the CWA**

##### **(Pursuant to the APA, 5 U.S.C. § 702)**

93. In the alternative to NWEA's Second Claim for Relief, NWEA alleges as follows.

94. Section 303(c) of the CWA requires EPA to review and either approve or disapprove all new or revised water quality standards. 33 U.S.C. § 1313(c).

95. The natural thermal potential temperatures in Oregon's temperature TMDLs, and the new narrative provisions of the TMDLs, are new or revised water quality standards within the meaning of section 303(c) of the CWA. Thus, Oregon's submission of the TMDLs to EPA

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<sup>11</sup> This claim does not apply to TMDLs that EPA approved prior to September 27, 2006. See 28 U.S.C. § 2401(a).

for review and approval under 303(d) triggered EPA's duty to review the new standards under section 303(c).

96. EPA did not review the new natural thermal potential criteria under section 303(c) or otherwise determine whether the new criteria would protect designated uses, including the threatened and endangered species listed in Table 2, despite EPA's knowing that Oregon was using the TMDL process to establish new numeric and narrative criteria.

97. By deciding to not review the new numeric and narrative criteria under 303(c) of the CWA, EPA acted arbitrarily, capriciously, and not in accordance with the CWA or the APA, 5 U.S.C. § 706(2)(A).

#### **FOURTH CLAIM FOR RELIEF**

##### **Approval of Temperature TMDLs Not Designed to Meet All Standards**

##### **(Pursuant to the APA, 5 U.S.C. § 702)**

98. Section 303(d) of the CWA requires that each TMDL must be set at a level that will attain all "applicable water quality standards." 33 U.S.C. § 1313(d)(1)(C).

99. The temperature TMDLs listed in Table 3 were designed to attain the State's new numeric and narrative criteria established pursuant to the NCC. However, the temperature TMDLs listed in Table 3 were not designed to attain other standards that also apply to the water bodies, including the State's water quality standards requiring the protection of designated uses such as OAR 340-041-0271(1), -0121(1), -0286(1), 0310(1), -0340(1), -0320(1), -0151(1), -0201(1), and -0170(1). In many cases, the temperature TMDLs also were not designed to attain the State's seasonal temperature standards, such as the criteria for salmon and steelhead spawning, OAR 340-041-0028(4)(a), and, where applicable, the State's narrative criteria requiring cold-water refugia, OAR 340-041-0028(4)(d). As a consequence, the TMDLs were not

designed to attain all applicable water quality standards as required by CWA § 303(d)(1)(C).

100. By approving temperature TMDLs that would not result in the attainment of all applicable criteria, EPA acted arbitrarily, capriciously, and in violation of the CWA and the APA, 5 U.S.C. § 706(2)(A).

### **FIFTH CLAIM FOR RELIEF<sup>12</sup>**

#### **Approval of Temperature TMDLs that Do Not Contain Adequate Margins of Safety**

##### **(Pursuant to the APA, 5 U.S.C. § 702)**

101. Section 303(d) of the CWA requires each TMDL to include “a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.” 33 U.S.C. § 1313(d)(1)(C). The purpose of this requirement is to account for uncertainty in the data and analysis underlying the TMDL as well as the level of pollution-reduction necessary to meet water quality standards. In virtually all of the TMDLs listed in Table 3, Oregon relied on its estimates of natural conditions as implicit margins of safety. In others the State identified alternative margins of safety intended to compensate for Oregon’s inability to accurately calculate natural conditions but not to achieve Oregon’s numeric temperature criteria or other applicable standards.

102. The State’s estimates of natural conditions do not contain adequate margins of safety because those estimates ignore or fail to account for several factors relevant to the attainment of water quality standards and deficiencies in estimating natural conditions are not conservative for purposes of establishing a margin of safety.

103. By failing to ensure that the temperature TMDLs contain adequate margins of safety, EPA acted arbitrarily, capriciously, and not in accordance with the CWA, within the

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<sup>12</sup> This claim does not apply to TMDLs that EPA approved prior to September 27, 2006. See 28 U.S.C. § 2401(a).

meaning of the APA, 5 U.S.C. § 706(2)(A).

### **SIXTH CLAIM FOR RELIEF<sup>13</sup>**

#### **Failure to Consult before Approving Oregon's Temperature TMDLs**

##### **(Pursuant to the ESA, 16 U.S.C. § 1540(g)(1)(A))**

104. The regulations implementing the ESA require each federal agency to determine whether its actions may affect listed species. 50 C.F.R. § 402.14(a). If an agency determines that its actions may affect a listed species, then the agency must formally consult with the Services, must engage in informal consultation with Services, or must prepare a biological assessment. *Id.* at § 402.14(b).

105. EPA's approvals of the TMDLs listed in Table 1 are "actions" within the meaning of the ESA. *See* 40 C.F.R. § 402.02. EPA's approvals of the TMDLs may affect, either negatively or beneficially, some or all of the species listed in Table 2. EPA's approvals of the TMDLs are also likely to adversely affect some or all of the species listed in Table 2 through the establishment of new temperature criteria that are less protective than Oregon's biologically-based criteria.

106. Aside from the Willamette Basin and Snake River TMDLs, EPA did not engage in consultation with the Services before approving the TMDLs listed in Table 3. EPA did not engage in formal or informal consultation or prepare biological assessments. Last, EPA did not make any "no effects" determinations within the meaning of the ESA and 50 C.F.R. § 402.14(a).

107. EPA's actions in approving the balance of TMDLs listed in Table 3 were therefore in violation of the ESA within the meaning of the ESA's citizen suit provision, 16 U.S.C. § 1540(g)(1)(A).

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<sup>13</sup> This claim does not apply to Oregon's Snake River TMDL or the Willamette Basin TMDLs.

## SEVENTH CLAIM FOR RELIEF

### Failure to Consult on the Full Scope of the Willamette Basin Temperature TMDL

#### (Pursuant to the ESA, 16 U.S.C. § 1540(g)(1)(A))

108. The regulations implementing the ESA require each federal agency to determine whether its actions may affect listed species. 50 C.F.R. § 402.14(a). If an agency determines that its actions may affect a listed species, the agency must formally consult with the Services, must engage in informal consultation with Services, or must prepare a biological assessment. *Id.* at § 402.14(b). For purposes of the ESA, “actions” include “all activities or programs of any kind authorized, funded, carried out, in whole or in part, by Federal agencies in the United States.” *Id.* at § 402.02.

109. EPA’s approval of the Willamette Basin temperature TMDL was an “action” for purposes of the ESA, and the action encompassed EPA’s approval of those portions of the TMDL containing new natural conditions criteria. Moreover, EPA had the discretion to approve or disapprove the new natural thermal potential criteria in the TMDL under sections 303(c) and 303(d) of the CWA, by reviewing and disapproving the criteria under section 303(c) and/or by disapproving the TMDL under section 303(d).

110. In approving the Willamette Basin temperature TMDL, EPA failed to determine whether the new criteria established in the TMDL will have an effect on listed species.

111. By failing to determine whether the new criteria will have an effect on listed species, EPA’s action in approving the Willamette Basin temperature TMDL violated the ESA within the meaning of the ESA’s citizen suit provision, 16 U.S.C. § 1540(g)(1)(A).

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## **EIGHTH CLAIM FOR RELIEF**

### **Failure to Review the Klamath Basin Temperature TMDL Under CWA Section 303(d)**

#### **(Pursuant to the CWA, 33 U.S.C. § 1365(a)(2))**

112. Section 303(d) requires EPA to either approve or disapprove TMDLs within thirty days after submission by a state. If EPA disapproves a TMDL, EPA must establish its own TMDL for the affected water body. EPA's duty to act on TMDLs within thirty days of submission is a nondiscretionary duty within the meaning of section 505 of the CWA, 33 U.S.C. § 1365(a)(2).

113. More than 30 days have elapsed since Oregon submitted the Klamath Basin temperature TMDL for EPA's review. To date, EPA has neither approved nor disapproved the Klamath Basin temperature TMDL under section 303(d) of the CWA.

114. In failing to either approve or disapprove the Klamath Basin temperature TMDL under section 303(d) of the CWA, EPA failed to perform a nondiscretionary duty within the meaning of the CWA citizen suit provision, 33 U.S.C. § 1365(a)(2).

## **NINTH CLAIM FOR RELIEF**

### **Arbitrary and Capricious Approval of the Willamette Basin Mercury TMDL**

#### **(Pursuant to the APA, 5 U.S.C. § 702)**

115. Section 303(d) of the CWA requires that each TMDL must be set at a level that will attain all "applicable water quality standards." 33 U.S.C. § 1313(d)(1)(C). Each TMDL must calculate the amount of pollution that can enter the water on a "daily" basis and still meet water quality standards. *Id.* Each TMDL must include a "margin of safety," as required by the statute. And each TMDL must include load and wasteload allocations for all individual point and nonpoint sources of pollution. 40 C.F.R. § 130.2(f), (h), (i).

116. Oregon's Willamette Basin TMDL is not set at a level that will attain all



applicable water quality standards, including standards for the protection of aquatic life, wildlife, and fishing at OAR 340-041-0340(1) and OAR 340-041-0033(1), and the designated uses listed in Table 340A of Oregon's administrative rules. When EPA approved Oregon's Willamette Basin TMDL it failed to determine whether the TMDL will attain all applicable water quality standards and failed to ensure that the margin of safety would result in compliance with standards designed for the protection of humans, fish, and wildlife.

117. Oregon's Willamette Basin mercury TMDL fails to determine the amount of mercury pollution that can enter basin waters on a daily basis and still meet water quality standards. Instead, the TMDL is based on an annual loading capacity.

118. EPA also failed to determine whether the margin of safety in the TMDL will ensure compliance with standards designed for the protection of all humans who consume fish, as well as other standards for the protection of fish and wildlife.

119. Last, Oregon's Willamette Basin mercury TMDL fails to set load and wasteload allocations for all individual point and nonpoint sources of pollution. Instead, the load and wasteload allocations in the TMDL are divided among various "general source categories," in violation of the CWA and its implementing regulations.

120. EPA acted arbitrarily, capriciously, and not in accordance with the CWA and the APA, 5 U.S.C. § 706(2)(A) by, *inter alia*, failing to determine whether Oregon's Willamette Basin mercury TMDL will attain all applicable water quality standards; by failing to ensure that the margin of safety will protect all humans, fish, and wildlife; by approving a TMDL based on other than daily limits; by approving an interim study as if it were a TMDL; and by approving of load and wasteload allocations established for broad source categories of pollution rather than individual sources.

## TENTH CLAIM FOR RELIEF

### Failure to Consult on the Full Scope of the Willamette Basin Mercury TMDL

#### (Pursuant to the ESA, 16 U.S.C. § 1540(g)(1)(A))

121. The regulations implementing the ESA require each federal agency to determine whether its actions may affect listed species. 50 C.F.R. § 402.14(a). If an agency determines that its actions may affect a listed species, the agency must formally consult with the Services, must engage in informal consultation with Services, or must prepare a biological assessment. *Id.* at § 402.14(b). For purposes of the ESA, “actions” include “all activities or programs of any kind authorized, funded, carried out, in whole or in part, by Federal agencies in the United States.” *Id.* at § 402.02.

122. EPA’s approval of the Willamette Basin mercury TMDL was an “action” for purposes of the ESA, and the action encompassed EPA’s approval of those portions of the TMDL containing new water quality goals. Moreover, EPA had discretion to approve or disapprove the new water quality goals in the TMDL under sections 303(c) and 303(d) of the CWA, either by reviewing and disapproving them under section 303(c), or by determining under section 303(d) that they would not meet water quality standards including full support of designated uses.

123. In approving the Willamette Basin temperature TMDL, EPA failed to determine whether the new water quality goals contained in the TMDL will have an effect on listed species.

124. By failing to determine whether the new water quality goals will have an effect on listed species, EPA’s action in approving the Willamette Basin mercury TMDL violated the ESA within the meaning of the ESA’s citizen suit provision, 16 U.S.C. § 1540(g)(1)(A).

**PRAYER FOR RELIEF**

WHEREFORE, NWEA respectfully requests the following relief.

1. A declaratory judgment that in approving the temperature TMDLs listed in Table 3 subsequent to September 27, 2006, EPA violated the requirements of section 303(d) of the CWA, 33 U.S.C. §1313(d).
2. An order vacating EPA's approvals of the TMDLs listed in Table 3 that EPA approved subsequent to September 27, 2006.
3. A declaratory judgment that by failing to review the new numeric and narrative criteria in Oregon's temperature TMDLs, EPA violated section 303(c) of the CWA, 33 U.S.C. § 1313(c).
4. In the alternative, a declaratory judgment that in approving the temperature TMDLs listed in Table 3 subsequent to September 27, 2006, EPA acted arbitrarily and capriciously within the meaning of the APA, 5 U.S.C. § 706, by deciding not to review Oregon's new numeric and narrative criteria under section 303(c) of the CWA, 33 U.S.C. § 1313(c).
5. An order directing EPA to review the new numeric and narrative criteria contained in Oregon's temperature TMDLs pursuant to section 303(c) of the CWA, 33 U.S.C. § 1313(c).
6. A declaratory judgment that EPA violated section seven of the ESA, 5 U.S.C. § 1525, and the Services' implementing regulations, 50 C.F.R. part 402, by failing to evaluate whether its actions may affect ESA-listed species or otherwise consult with the Services before approving Oregon's temperature TMDLs.
7. A declaratory judgment that EPA violated section seven of the ESA, 5 U.S.C. § 1525, and the Services' implementing regulations, 50 C.F.R. part 402, by failing to evaluate

whether the new criteria contained in the Willamette Basin temperature TMDL will have an effect on listed species.

8. An order directing EPA to evaluate whether its approvals of the temperature TMDLs and Oregon's new numeric and narrative criteria may affect ESA-listed species in accordance with section seven of the ESA and 50 C.F.R. part 402.

9. A declaratory judgment that EPA violated the CWA by not approving or disapproving the Klamath Basin temperature TMDL under section 303(d) of the CWA, 33 U.S.C. § 1313(d), within 30 days after Oregon submitted the TMDL to EPA.

10. An order directing EPA to either approve the Klamath Basin temperature TMDL, or disapprove the TMDL and establish its own substitute TMDL for the affected waters, as required by section 303(d) of the CWA, 33 U.S.C. § 1313(d).

11. A declaratory judgment that in approving Oregon's Willamette Basin mercury TMDL, EPA violated the requirements of section 303(d), 33 U.S.C. § 1313(d).

12. An order vacating EPA's approval of Oregon's Willamette Basin Mercury TMDL.

13. A declaratory judgment that EPA violated section seven of the ESA, 5 U.S.C. § 1525, and the Services' implementing regulations, 50 C.F.R. part 402, by failing to evaluate whether the new water quality goals in the Willamette Basin mercury TMDL would have an effect on listed species.

14. An order directing EPA to determine whether its approval of the new water quality goals in the Willamette Basin mercury TMDL may affect ESA-listed species in accordance with section seven of the ESA and 50 C.F.R. part 402.

15. An order awarding NWEA its reasonable attorneys' fees and costs pursuant to the Equal Access to Justice Act, 28 U.S.C. § 2412; the CWA, 33 U.S.C. § 1365(d); and the ESA, 16 U.S.C. § 1540(g)(4).

16. Such further relief as this Court deems just and equitable.

Respectfully submitted this 28th day of November, 2012.

s/ Bryan Telegin

Bryan Telegin (OSB # 105253)

Tel: (206) 264.8600

Email: telegin@bnd-law.com

Allison LaPlante (OSB # 023614)

Daniel Mensher (OSB # 074636)

Tel: (503) 768-6894, (503) 768-6926

Email: laplante@lclark.edu, dmensher@lclark.edu

Attorneys for plaintiff NWEA