1 | 2 IN THE CIRCUIT COURT 3 OLIVIA CHERNAIK, a minor and 4 resident of Lane County, Oregon; LISA 5 CHERNAIK, guardian of Olivia Chernaik; KELSEY CASCADIA 6 ROSE JULIANA, a resident of Lane county, Oregon and CATIA 7 JULIANA, guardian of Kelsey Juliana; 8 Plaintiffs, 9 ٧. 10 JOHN KITZHABER, in his official capacity as Governor of the State of 11 Oregon; and the STATE OF OREGON, 12 Defendants. 13 14 ///// 15 ///// 16 ///// 17 ///// 18 ///// 19 ///// 20 ///// 21 ///// 22 ///// 23 ///// 24 ///// 25 /////

FOR THE COUNTY OF LANE

Case No. 161109273

## PLAINTIFFS' MOTION FOR PARTIAL SUMMARY JUDGMENT FOR DECLARATORY RELIEF

Hearing scheduled on March 13, 2015 at 10:00 a.m. before the Honorable Karsten H. Rasmussen, Presiding Judge



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#### MOTION

In accordance with the November 17, 2014 Scheduling Order and pursuant to ORCP 47, Plaintiffs respectfully move for an order granting partial summary judgment on Plaintiffs' first claim for declaratory relief under the Public Trust Doctrine. More specifically, Plaintiffs request the following relief:

- 1. A declaration of law that the State of Oregon, as a trustee and sovereign entity, has a fiduciary obligation to manage the atmosphere, water resources, navigable waters, submerged and submersible lands, shorelands and coastal areas, wildlife and fish as public trust assets, and to protect them from substantial impairment caused by the emissions of greenhouse gases in, or within the control of, the State of Oregon and the resulting adverse effects of climate change and ocean acidification;
- 2. A declaration that atmospheric concentrations of carbon dioxide (CO<sub>2</sub>) exceeding 350 parts per million (ppm) constitutes substantial impairment to the atmosphere and thereby the other public trust assets;
- 3. A declaration that to protect these public trust assets from substantial impairment, Oregon must contribute to global reduction in emissions of CO<sub>2</sub> necessary to return atmospheric concentrations of carbon dioxide to 350 ppm by the year 2100; and
- 4. A declaration that Defendants have failed, and are failing, to uphold their fiduciary obligations to protect these trust assets from substantial impairment by not adequately reducing and limiting emissions of carbon dioxide and other greenhouse gases in, or within the control of, the State of Oregon.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> In accordance with ORS 28.080, Plaintiffs intend following entry of the requested declaratory judgment to petition for supplemental relief in the form of an injunction that:

A. Requires Defendants to prepare, or cause to be prepared, a full and accurate accounting of Oregon's greenhouse gas emissions and to do so annually thereafter while this Court retains jurisdiction; and

trust assets.

#### POINTS AND AUTHORITIES

#### I. Introduction

Plaintiffs – two young women and their guardians – come before this Court seeking a declaration that Governor Kitzhaber and the State of Oregon have not upheld their sovereign fiduciary obligations under the Public Trust Doctrine to protect Oregon's essential natural resources from the catastrophic effects of climate change for present and future generations of citizens. Plaintiffs are entitled to summary judgment because the material facts of this case are not in dispute. Climate change and ocean acidification are caused by anthropogenic emissions of greenhouse gases, particularly carbon dioxide. Unchecked, climate change and ocean acidification will cause catastrophic damage to Oregon's natural resources and its economy. The State of Oregon readily admits that it is falling far behind even its own outdated estimates of the emissions reductions necessary to prevent this catastrophic damage.

Based on these indisputable facts, Plaintiffs are entitled to summary judgment and a declaration that the state sovereign is violating their rights as beneficiaries of the public trust. The Public Trust Doctrine dates back to the English common law, and its requirements have been articulated in numerous decisions from the U.S. Supreme Court and Oregon courts. The sovereign state government has an inalienable duty to preserve public trust resources for public uses, including navigation, fishing, recreation and enjoyment and to prevent "substantial impairment" of the corpus of the trust so the corpus may endure for future generations. These resources include navigable waters, submerged and submersible lands, fish and wildlife, Oregon tidelands, beaches and shorelands, and the atmosphere itself. The State of Oregon's failure to take meaningful action in accordance with its fiduciary duties to reduce greenhouse gas emissions threatens each and every one of these irreplaceable public trust resources with substantial impairment and irreparable harm.

Decisions made today will shape the futures of these youth Plaintiffs in the State of Oregon. Left unchecked, climate change will affect every aspect of their lives in Oregon, from

the air that they breathe, to the food that they eat, to the special places that they use and enjoy for recreation, spiritual fulfillment and retreat. The foremost experts on the impacts of climate change and the unique threats presented to Oregon's natural resources come before this Court to present their professional opinions demonstrating that the stakes could not be higher for these youth Plaintiffs. And the youth Plaintiffs have also described for the Court their unique interests in the resources of this State and how they are being and may be affected by the State sovereign's failure to address the climate change problem. The question presented here is whether youth have any rights under the law to the most fundamental natural resources that serve as the essential foundation for their futures, their freedom, and their own personal fulfillment.

And while the threats posed by climate change and ocean acidification are daunting—and the causes far reaching—there are practical, achievable, real-world solutions at hand. According to the best available science, to avoid the most catastrophic effects of climate change, concentrations of carbon dioxide in the atmosphere must be reduced to 350 ppm by the year 2100. Dr. James Hansen demonstrates in his declaration that these reductions are achievable and will avert the worst of the threats to our natural resources, but time is quickly running out. While Oregon cannot solve this problem on its own, it does have an obligation to contribute its share to this effort, as jurisdictions and sovereign governments all over the world are leaving Oregon behind as they take steps to address this crisis. Plaintiffs seek a declaration that Oregon must achieve reductions of greenhouse gas emissions within the State or within the control of the State that are necessary to achieve atmospheric CO<sub>2</sub> concentrations of 350 ppm by the year 2100.

### II. Standard of Review

The standard of review on the parties' cross-motions for summary judgment is set forth in ORCP 47(C):

The court shall grant the motion if the pleadings, depositions, affidavits, declarations and admissions on file show that there is no genuine issue as to any material fact and that the moving party is entitled to prevail as a matter of law. No genuine issue as to a material fact exists if, based upon the record before the court viewed in a manner most favorable to the adverse party, no objectively reasonable juror could return a verdict for the adverse party on the matter that is subject of the motion for summary judgment. The adverse party has the burden of producing evidence on any issue raised in the motion as to which the adverse party would have the burden of persuasion at trial.

NW Natural Gas Co. v. City of Gresham, 264 Or App 34, 39, 330 P3d 65, 68, rev allowed, 356 Or 516 (2014) (applying the standard in a declaratory judgment action).

## III. Legal Background on the Public Trust Doctrine

Under the Public Trust Doctrine, the State of Oregon, as sovereign trustee, has a fiduciary duty to protect essential natural resources in trust for the beneficiaries of the trust, which include both present and future generations of citizens. See, e.g., Corvallis Sand & Gravel Co. v. State Land Bd., 250 Or 319, 335, 439 P2d 575, 582 (1968) ("[T]he lands underlying the navigable waters of the state are held by the state in trust for the benefit of the whole people of the state.") (quoting Land Bd. v. West.-Pac. Dredg. Corp., 244 Or 184, 186, 416 P2d 667, 668 (1966)); State v. Hume, 52 Or 1, 5, 95 P 808, 810 (1908) (title to fish and wildlife is held "by the state, in its sovereign capacity, in trust for all its citizens"); Morse v. Div. of State Lands, 34 Or App 853, 866, 581 P2d 520, 527 (1978) (holding that statute regulating fill of tidelands is "a codification of the public trust doctrine"); Brusco Towboat v. Oregon, 30 Or App 509, 520, 567 P2d 1037, 1044 (1977), (holding that Art. VIII, Sec. 5(2) of the Oregon Constitution "is a constitutional expression of the jus publicum or public trust aspect of the state's ownership" of submerged and submersible lands), aff'd in part on other grounds, Brusco Towboat Co. v. State, 284 Or 627, 589 P2d 712 (1978).

These inalienable obligations of the trustee date back to the times of Roman Law. "By the law of nature these things are common to mankind – the air, running water, the sea and consequently the shores of the sea." *Institutes of Justinian*, 2.1.1 (J. Moyles trans, 3d ed 1896). The U.S. Supreme Court has also recognized the Public Trust Doctrine in a long line of cases.

See, e.g., PPL Montana, LLC v. Montana, US , 132 S Ct 1215, 1234-35 (2012) (describing the ancient origins of the doctrine, and the States' ability to define its contours, as distinguished from the equal footing doctrine); United States v. State of Cal., 332 US 19, 40, 67 S Ct 1658, 1669 (1947) (recognizing that the U.S. holds "in trust for all the people" its interests in a three-mile ocean belt, as elsewhere); Utah Power & Light v. United States, 243 US 389, 409, 37 S Ct 387, 391 (1916) (stating that the government holds the public lands in trust for all the people); United States v. Camfield, 167 US 518, 528, 17 S Ct 864, 866-67 (1897) (holding that the government would be "recreant to its duties as trustee for the people of the United States" to permit an individual to prevent public access to the public domain); Ill. Cent. R.R. v. Illinois, 146 US 387, 455, 13 S Ct 110, 119 (1892) ("The ownership of the navigable waters of the harbor, and of the lands under them, is a subject of public concern to the whole people of the state. The trust with which they are held, therefore, is governmental, and cannot be alienated . . . "); United States v. Missouri, K. & T. Ry. Co., 141 US 358, 381, 12 S Ct 13, 21 (1891) ("The public domain is held by the government as part of its trust. The government is charged with the duty and clothed with the power to protect it from trespass and unlawful appropriation . . . ." quoting United States v. Beebe, 127 US 338, 342, 8 S Ct 1083, 1085 (1888)); United States v. Trinidad Coal and Coking Co., 137 US 160, 170, 11 S Ct 57, 61 (1890) (holding that public lands are held "in trust for all the people"); Germania Iron Co. v. United States, 58 F 334, 336 (8th Cir 1893) aff'd, 165 US 379, 17 S Ct 337 (1897) (the public domain is held in trust); see also Martin v. Waddell's Lessee, 41 US (16 Pet) 367, 413-14 (1842) (confirming that the original states' ownership of their public lands was burdened by the same public rights and fiduciary duties to protect those rights that had burdened the King's ownership). This trust obligation has long been held to require the preservation of the trust asset so as to prevent waste of the resource. See Geer v. Connecticut, 161 US 519, 534, 16 S Ct 600,

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606 (1896) overruled on other grounds by Hughes v. Oklahoma, 441 US 322, 99 S Ct 1727

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(1979) ("[T]he ownership of the sovereign authority is in trust for all the people of the state; and hence, by implication, it is the duty of the legislature to enact such laws as will best preserve the subject of the trust, and secure its beneficial use in the future to the people of the state.") (quoting Magner v. People, 97 III 320, 334 (1881)); see also Nat'l Audubon Soc'y v. Superior Court of Alpine Cty., 33 Cal 3d 419, 441, 658 P2d 709, 724 (1983) (holding that the "public trust is more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands . . . ").

As an inherent attribute of sovereignty, the legislative bodies of state government may not abandon or surrender their trust obligation:

The state can no more abdicate its trust over property in which the whole people are interested . . . than it can abdicate its police powers in the administration of government and the preservation of the peace. . . . Every legislature must, at the time of its existence, exercise the power of the state in the execution of the trust devolved upon it.

Ill. Cent. R.R., 146 US at 453, 460; see also In re Water Use Permit Applications, 94 Haw 97, 141, 9 P3d 409, 453 (2000) ("Under the public trust, the state has both the authority and duty to preserve the rights of present and future generations in the water of the state"); Robinson Twp. v. Commonwealth, 83 A3d 901, 957 (Pa 2013) ("As a fiduciary, the Commonwealth has a duty to act towards the corpus of the trust—the public natural resources—with prudence, loyalty, and impartiality"); State v. Cent. Vt. Ry., 153 Vt 337, 346, 571 A2d 1128, 1132 (1989)

<sup>&</sup>lt;sup>2</sup> As the Pennsylvania Supreme Court recently discussed, the obligations of the fiduciary under the Public Trust Doctrine reflect the "inherent and independent rights' of mankind relative to the environment," which are reflected in Constitutional provisions declaring individuals to possess "certain inherent and indefeasible rights." *Id.* at 947 n 35 (referencing Pa Const, Art I, § 1); *see* Or Const, Art I, § 1 ("[A]ll power is inherent in the people, and all free governments are founded on their authority, and instituted for their peace, safety, and happiness."); Or Const, Art VIII, § 5(2) ("The board shall manage lands under its jurisdiction with the object of obtaining the greatest benefit for the people of this state, consistent with the conservation of this resource under sound techniques of land management."); *Brusco Towboat*, 30 Or App at 520 (holding that Article VIII, section 5(2) of the Oregon Constitution "is a constitutional"

("The state's power to supervise trust property in perpetuity is coupled with the ineluctable duty to exercise that power").

The duty placed upon the sovereign is to manage and preserve public trust resources so as to prevent "substantial impairment" of the corpus of the trust. See, e.g., Ill. Central, 146 US at 453 (the State must exercise control of public trust resources to avoid "substantial impairment of the public interest in the lands and water . . ."); Morse, 285 Or at 202–03 (the State may not make a grant to a "private party which results in such substantial impairment of the public's interest as would be beyond the power of the legislature to authorize") (emphasis added); Caminiti v. Boyle, 107 Wash 2d 662, 670, 732 P2d 989, 994–95 (1987) (the court is to determine whether the state has allowed "substantial impairment" of public trust resources); cf. Or. Shores Conservation Coal. v. Or. Fish and Wildlife Com'n, 62 Or App 481, 493, 662 P2d 356, 364, rev den, 295 Or 259 (1983) ("[The S]tate, as trustee for the people, bears the responsibility of preserving and protecting the right of the public to the use of the waters . . . ").<sup>3</sup>

The Public Trust Doctrine continues to be upheld and refined by the courts. As recently as 2012, the U.S. Supreme Court recognized that the Public Trust Doctrine "is of ancient origin" dating back to Roman civil law; that the Public Trust Doctrine is found in state laws throughout our nation; and that federalist principles of our nation affirm the state's rights and duties over public trust resources within their boundaries. *PPL Montana*, *LLC*, \_\_\_US

expression of the jus publicum or public trust aspect of the state's ownership" of submerged and submersible lands).

<sup>&</sup>lt;sup>3</sup> See also G.G. Bogert & G.T. Bogert, The Law of Trusts and Trustees § 582 at 346 (rev 2d ed 1980) ("The trustee has a duty to protect the trust property against damage or destruction. He is obligated to the beneficiary to do all acts necessary for the preservation of the trust res"); Restatement (Third) of Trusts § 76 at 71 (2007) ("The trustee also owes to the beneficiaries a duty to act with prudence – that is, to use reasonable care and skill . . . to preserve trust property. This duty includes the use of reasonable care to protect trust property from loss or damage . . . .") (internal cross reference omitted).

24).

\_\_\_\_\_, 132 S Ct at 1234–35 (citing *Nat'l Audubon Soc'y*, 33 Cal 3d at 433–41, 658 P2d at 718–

## IV. The Scope of the Public Trust Doctrine in Oregon Encompasses Numerous Essential Natural Resources.

Through Oregon's State Constitution, statutes and judicial opinions, this Court can discern the applicability of the Public Trust Doctrine to the unique natural resources of this State, which are essential for the social, economic and spiritual welfare of current and future generations. At the most fundamental level, Oregon's Constitution recognizes that "all power is inherent in the people, and all free governments are founded on their authority, and instituted for their peace, safety, and happiness . . . ." Or Const, Art I, § 1. The Public Trust Doctrine is an inherent obligation on the part of the sovereign to manage essential natural resources in trust for the benefit of the people, and there is nothing in the Constitution indicating that the people have in any way surrendered their rights to these essential natural resources that inherently belong to the public.

More specifically, the Public Trust Doctrine in Oregon applies to traditional trust resources, including the following:

Submerged and submersible lands. Or Const, Art VIII, § 5(2); Brusco Towboat, 30 Or App at 520 (holding that Article VIII, section 5(2) of the Oregon Constitution "is a constitutional expression of the jus publicum or public trust aspect of the state's ownership" of submerged and submersible lands); see also, Coos County Comprehensive Plan, Volume III Part 1 Coquille River Estuary Management Plan Policy #5: Estuarine Fill and Removal (2000) ("Local government shall support dredge and/or fill only if such activities are allowed in the respective management unit, and . . . a need (i.e., a substantial public benefit) is demonstrated and the use or alteration does not unreasonably interfere with public trust rights.") (emphasis added);

- Waters of the state. ORS 537.334(2) (recognizing the "public trust" inherent in the "waters of this state"); ORS 537.341 (designating the "Water Resources Department as trustee for the people of the State of Oregon"); Or. Shores Conservation Coal., 62 Or App at 493 ("The state, as trustee for the people, bears the responsibility of preserving and protecting the right of the public to the use of the waters for [navigation, fishing and recreation.]");
- Beaches and Shoreland. While no Oregon case has held explicitly that the Public Trust Doctrine applies to Oregon's iconic beaches, the legislature, in implementing the 1967 Oregon Beach Bill, declared the policy of the state "to forever preserve and maintain the sovereignty of the state heretofore existing over the seashore and ocean beaches of the state . . . so that the public may have the free and uninterrupted use thereof." HB 1601, § 1 (1967) (codified at ORS 390.610(1))<sup>4</sup>; see also State ex Rel. Thornton v. Hay, 254 Or 584, 462 P2d 671 (1969) (holding that the public's right to use the dry sand portion of the coastline existed since before statehood) (citing Shively v. Bowlby, 152 US 1, 14 S Ct 548 (1894)); see also Michael C. Blumm & Erika Doot, Oregon's Public Trust Doctrine: Public Rights in Waters, Wildlife, and Beaches, 42 Envtl L 375 (2012); 5 and

It fulfills the dream of former Governor Oswald West that: "In the administration of this <u>God-given trust</u>, a broad protective policy should be declared and maintained. No selfish interest should be permitted, through politics or otherwise, <u>to destroy or even impair this great birthright</u> of our people."

Statement by Governor Tom McCall on HB 1601, May 15, 1967, available at http://arcweb.sos.state.or.us/pages/records/legislative/legislativeminutes/landmark/beach.html (emphasis added).

<sup>&</sup>lt;sup>4</sup> Upon agreement on the principle terms of the Beach Bill, Governor Tom McCall had this to say:

<sup>&</sup>lt;sup>5</sup> New Jersey similarly recognizes that the Public Trust Doctrine protects the public's right to use the dry sand portions of the coastline. See Raleigh Ave Beach Ass'n v. Atlantis Beach

• Fish and Wildlife. State v. Hume, 52 Or at 5 ("It is a generally recognized principle that migratory fish in the navigable waters of a state, like game within its borders, are classed as animals ferae naturae, the title to which, so far as that claim is capable of being asserted before possession is obtained, is held by the state, in its sovereign capacity in trust for all its citizens").

## V. The Atmosphere is a Public Trust Resource.

The Public Trust Doctrine evolved through the common law, and courts in Oregon, over time, have articulated the scope of the doctrine and the purposes for which the public trust is held by the sovereign. *See*, *e.g.*, *Morse*, 34 Or App at 860 (noting that the trustee's obligation has been extended to include protection of "in more recent cases, recreation"). The "public trust doctrine, like all common law principles, should not be considered fixed or static, but should be molded and extended to meet changing conditions and needs of the public it was created to benefit." *Borough of Neptune City v. Borough of Avon-by-the-Sea*, 61 NJ 296, 309, 294 A2d 47, 54 (1972).

Courts from around the country have noted in recent years the inherent flexibility of the Doctrine – as with other common law principles – as it adapts to modern circumstances. "The public trust by its very nature, does not remain fixed for all time, but must conform to changing needs and circumstances." *In re Water Use Permit Applications*, 94 Haw at 135, 9 P3d at 447. "While the public trust has evolved primarily around the rights of the public with respect to tidelands and navigable waters, the doctrine is not so limited." *Ctr. for Biological Diversity*, 166 Cal App 4th at 1360, 83 Cal Rptr 3d at 595.

Accordingly, since state courts first affirmed the Public Trust Doctrine, many have also

Club, Inc., 185 NJ 40, 42, 879 A2d 112, 113 (2005) (applying the Public Trust Doctrine to upland sand beach property).

<sup>&</sup>lt;sup>6</sup> See also Ctr. for Biological Diversity v. FPL Group, 166 Cal App 4th 1349, 1359, 83 Cal Rptr 3d 588, 595 (Cal App 1 Dist 2008) (holding that the Public Trust Doctrine "applies to wildlife, including raptors and other birds").

expanded its application to natural resources that were not historically recognized as public trust assets. See, e.g., Baxley v. Alaska, 958 P2d 422, 434 (Alaska 1998) (minerals); Nat'l Audubon Soc'y, 33 Cal 3d at 437, 658 P2d at 721 (nonnavigable waterways); Marks v. Whitney, 6 Cal 3d 251, 491 P2d 374 (1971) (tidelands); Ctr. For Biological Diversity, 166 Cal App 4th at 1359–64, 83 Cal Rptr 3d at 595–99 (wildlife); In re Water Use Permit Applications, 94 Haw at 133–35, 9 P3d at 445–47 (groundwater); Friends of Van Cortlandt Park v. City of New York, 95 NY2d 623, 750 NE2d 1050 (2001) (parklands); Just v. Marinette County, 56 Wisc 2d 7, 201 NW2d 761 (1972) (shorelands above waterline). Among the considerations these courts have used to determine the scope of the Public Trust Doctrine are whether particular natural resources are "of inestimable value to the community as a whole" or are "transient" in nature, Ctr. for Biological Diversity, 166 Cal App 4th at 1359–64, 83 Cal Rptr 3d at 595–99, or whether they are of "vital importance . . . to the public welfare." In re Water Use Permit Applications, 94 Haw at 135, 9 P3d at 447.

By any test, the atmosphere is a public trust resource that is so essential to public welfare as to warrant placing upon the sovereign the authority and duty to protect and preserve that asset in perpetuity for present and future generations. The air, synonymous with our atmosphere, from the days of the English common law, has always been considered a public resource in which all of the people are interested. 2 William Blackstone, *Commentaries on the Laws of England 4* (1766) ("There are some few things which, notwithstanding the general introduction of continuance of property, must still unavoidably remain in common . . . Such (among others) are the elements of light, air, and water . . . . "); *Nat'l Audubon Soc'y*, 33 Cal 3d at 435, 658 P2d at 719 (recognizing tidelands of Mono Lake, as a trust asset, "favorably affect[ing] the scenery and climate of the area"); *Matthew v. Bay Head Imp. Ass'ns*, 95 NJ 306, 317–18, 471 A2d 355, 361 (1986) (common property includes the air). Support for the proposition can be found in the doctrine's ancient roots. *See Institutes of Justinian*, 2.1.1 (J. Moyle trans, 3d ed 1896) ("The things which are naturally everybody's are: air, the flowing

water, the sea, and the seashore.").

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Moreover, as discussed in detail below, to preserve all other public trust assets—from the tidelands on the Oregon coast to the fresh water that runs off Oregon's mountain landscapes into its world-class salmon and trout streams—the sovereign must protect the integrity of the atmosphere. Each and every public trust asset recognized by courts in Oregon is dependent upon a balanced atmosphere and is threatened by the impairment of that resource, which is currently unfolding as a result of the atmosphere being used as a dumping ground for carbon dioxide pollution. The Oregon legislature has already found that climate change "poses a serious threat to the economic well-being, public health, natural resources and environment of Oregon." ORS 468A.200(3); see also 468A.200(4) ("Oregon relies on snowpack for summer stream flows to provide energy, municipal water, watershed health and irrigation. Also, a potential rise in sea levels threatens Oregon's coastal communities. Reduced snowpack, changes in the timing of stream flows, extreme or unusual weather events, rising sea levels, increased occurrences of vector-borne diseases and impacts to forest health could significantly impact the economy, environment and quality of life in Oregon"); ORS 468A.010(1)(a) ("[I]t is declared to be the public policy of the State of Oregon [to] restore and maintain the quality of the resources of the State in a condition as free from air pollution as is practicable."). The atmosphere is arguably the most essential public trust resource because the health and endurance of the other trust resources already recognized by Oregon courts are inextricably dependent upon the integrity of the atmosphere.

Other states, through their case law and constitutional provisions, have thus recognized the atmosphere as a public trust resource. See Her Majesty the Queen in Right of the Province of Ontario v. City of Detroit, 874 F2d 332, 337 (6th Cir 1989) (public trust includes air, water and other natural resources); Robinson Twp., 83 A3d at 913; Bonser-Lain v. Texas Comm'n on Envtl. Quality, 2012 WL 3164561 (Tex Dist, Aug 2, 2012), rev'd on jurisdictional grounds, 438 SW3d 887 (Tex App 2014); Haw Const, Art. XI, § 1 (stating, "[T]he State and all its

political subdivisions shall conserve and protect Hawaii's natural beauty and all natural resources, including land, water, air, minerals, and energy source . . . . All public natural resources are held in trust by the State for the benefit of the people."); Pa Const, Art I, § 27 (declaring public trust duty to conserve natural resources, and expressing citizen's right to clean air).

For all of these reasons, Plaintiffs request that the Court declare that the atmosphere is among the public trust resources under the care of the sovereign government in the State of Oregon.

# VI. The State of Oregon Has Failed to Uphold its Duty to Protect Public Trust Assets, Including the Atmosphere, From Substantial Impairment as a Result of Climate Change.

Based on the pleadings and the expert declarations presented by the Plaintiffs, they are entitled to declarations that the atmosphere is substantially impaired so long as concentrations of carbon dioxide are more than 350 ppm and that the State of Oregon is failing in its fiduciary obligation to protect the atmosphere and other public trust resources from impairment. As discussed below, the parties are in agreement that anthropogenic emissions of carbon dioxide are causing global climate change, that global climate change is already causing and will continue to cause extreme degradation of natural resources in Oregon and harm to these Plaintiff beneficiaries, and that Oregon is falling far behind its own targets for reductions in greenhouse gas emissions. Plaintiffs are therefore entitled to summary judgment as a matter of law.

## A. The State of Oregon Admits The Great Majority of Plaintiffs' Factual Allegations as to the Causes of Climate Change and the Predicted Impacts to Public Trust Resources in Oregon.

Partial summary judgment is appropriate in this case because the State admits all of the material facts that are set forth in the amended complaint necessary for a declaration that the State has failed to uphold its fiduciary duty under the Public Trust Doctrine. The State

concedes that climate change is caused by anthropogenic emissions of carbon dioxide and greenhouse gases and that the impacts of climate change will have severe adverse consequences for public trust assets and for all Oregonians. And the State also concedes that it is failing to achieve the reductions in greenhouse gas emissions that are necessary to avoid the catastrophic effects of climate change.

More specifically, the State has admitted to the following factual allegations, which are quoted from the amended complaint.

## 1. (Amended Complaint)

Plaintiffs are children and their families who live in Oregon, and their personal and economic well-being is directly dependent upon the health of the State's natural resources held in trust for the benefit of its citizens, including water resources, submerged and submersible lands, coastal lands, forests, and wildlife. All of these resources or assets, and therefore the future of the children, are currently threatened by the impacts of climate change.

## 1. (Answer)

In response to paragraph 1, Defendants admit that Plaintiffs are children and their families who live in Oregon, and that their personal and economic well-being is dependent upon the health of natural resources in this State including water resources, submerged and submersible lands, coastal lands, forests, and wildlife. . . . Defendants further admit that these natural resources are currently threatened by the impacts of global climate change.

## 2. (Amended Complaint - Admitted in Full)

Plaintiffs are Oregon youth and their families whose personal and economic well-being is and will continue to be threatened with injury from climate change due to increasing temperatures and excessive heat, rising sea levels, loss of water resources, diseases and pests, loss of agricultural and soil

productivity, changes in precipitation patterns, extreme weather events, and other consequences of climate change.

## 20. (Amended Complaint)

For more than 200 years, the burning of fossil fuels, such as coal and oil, together with massive deforestation caused a substantial increase in the atmospheric concentrations of heat-trapping greenhouse gases. These gases prevent heat from escaping to space, like the glass panels of a greenhouse. The extent of these gases in the atmosphere have changed and fluctuated over geologic time but have reached an equilibrium – Earth's safe climate-zone – which is necessary for life as we know it. However, as the concentrations of these gases continue to increase in the atmosphere, the Earth's temperature is climbing above Earth's safe climate-zone.

#### 20. (Answer)

The terms "safe climate-zone" and "life as we know it" in paragraph 20 are undefined and Defendants are thus unable to respond to those allegations; however, to the extent a response is required they are denied. Defendants admit that anthropogenic greenhouse gas emissions have caused, and are causing, global climate change. Defendants further admit that the extent of greenhouse gases in the atmosphere has changed and fluctuated over geologic time, but has been at a point of equilibrium sufficient to sustain life for at least thousands of years. Defendants further admit that global climate change is causing, and is likely to continue to cause, significant adverse effects such as disruption of natural ecosystems, displacement or disappearance of some animal species, increases in the frequency and intensity of storm events and other extreme weather events, increases in the frequency and severity of droughts in some areas, warmer and more frequent periods of intense heat, rising sea levels,

decreased agricultural productivity in some areas, sea level rise and coastal erosion. Except as specifically admitted, Defendants are without knowledge or information sufficient to form a belief as to the balance of paragraph 20.

## 21. (Amended Complaint - Admitted in full)

According to data from the National Oceanic and Atmospheric Administration ("NOAA") and the National Aeronautics and Space Administration ("NASA"), the Earth's average surface temperature has increased by about 0.8°C (1.4°F) in the last 100-150 years. The eight warmest years on record (since 1850) have all occurred since 1998. Coupled with the increase in the temperature of the earth, other aspects of the climate are also changing, such as rainfall patterns, snow and ice cover, and sea levels.

## 22. (Amended Complaint - Admitted in full)

Human-caused fossil fuel burning and the resulting climate change are already contributing to numerous adverse impacts to public health, including increased rates of asthma, cancer, cardiovascular disease and stroke, heat-related morbidity and mortality, food borne diseases, and neurological diseases and disorders.

## 23. (Amended Complaint - Admitted in full)

Climate changes are currently occurring faster than even the most pessimistic scenarios presented in the 2007 Intergovernmental Panel on Climate Change. A variety of studies conclude that a further increase of average annual temperatures of 2° C (3.6° F) above current levels would cause severe, widespread and irreversible impacts. Depending on the future rate of greenhouse gas emissions, the future is likely to bring increases of 3 to 11 degrees Fahrenheit above current levels.

## 24. (Amended Complaint - Admitted in full)

If the atmosphere passes certain thresholds or tipping points of energy imbalance and planetary heating, the existing climatic conditions that exist today cannot be restored. These thresholds include the melting of ice sheets and the thawing of tundra and permafrost. Each of these events has catastrophic consequences on its own, such as the consequent rise in sea level after ice sheets melt. Each of these events also spurs further events with negative climatic effects. When sea ice melts the refractive capacity of the ice is lost and the heat energy is absorbed by the ocean. The thawing of permafrost will result in the release of large quantities of the greenhouse gas methane, which eventually converts into carbon dioxide in the atmosphere. Current estimates place the amount of carbon sequestered in permafrost at around 900 gigatons worldwide. Release of such a large store would more than double the current amount of carbon in the atmosphere, resulting in further rapid warming and consequent effects.

## 25. (Amended Complaint)

A failure to take appropriate action will result in the severe alteration and potentially the collapse of the earth's natural systems leaving a planet that is largely unfit for human life.

## 25. (Answer)

In response to paragraph 25, Defendants note that the term "appropriate action" is vague, and impossible to respond to; however, to the extent a response is required and not expressly admitted, they are denied. Defendants admit that taking no action globally to address global climate change may result in the consequences and potential consequences laid out in paragraph 25.

## 26. (Amended Complaint)

There is still time to curb and reduce carbon dioxide emissions to avoid irrevocable changes to the atmosphere. To limit average surface heating to no more than 1° C (1.8° F) above pre-industrial temperatures, and to protect Oregon's public trust assets, the best available science concludes that concentrations of atmospheric carbon dioxide cannot exceed 350 parts per million or "ppm." As of 2011, atmospheric carbon dioxide concentrations are at least 390 ppm and are projected to exceed 400 ppm by 2020. Current atmospheric greenhouse gas concentrations are the highest in at least 650,000 years.

## 26. (Answer)

In response to paragraph 26, Defendants admit the first, third and fourth sentences. They further respond that the nature, existence and extent of the State's public trust assets, and what is needed to protect them, states a legal conclusion to which no response is required or provided, and that they are without knowledge or information sufficient to form a believe as to the balance of the second sentence.

## 29. (Amended Complaint)

The impacts in Oregon of human caused climate change are predicted to be severe if carbon dioxide emissions are not curtailed in the near term. The OCCRI, in its most recent Climate Assessment Report, predicted that increases in average annual temperatures of .2-1° F per decade would likely cause a wide range of adverse impacts that threaten Oregon's economy and environment, including, *inter alia*:

- a. A reduction of Cascade snow packs by 50 percent by mid-century along with reduced summer precipitation will result in significant decreases in summer stream flows and water supply;
- b. Impacts to Oregon's \$1.6 billion per year agricultural industry, including drought, disease and limitations on the availability, quality and costs of irrigation water as well as the displacement of current agricultural zones resulting, for instance, in the Willamette Valley no longer being viable for growing pinot noir wine grapes;
- c. Increasing sea levels of at least 2-4 feet and greater storm intensity will result in greater coastal erosion, flooding, loss of beach areas and elevation, loss of coastal wetlands, and inundation and damage of coastal infrastructure.
- d. Changes to the marine environment including ocean temperature, salinity, dissolved oxygen levels and acidity, which can inhibit the formation of calcium carbonate shell and skeletons for a wide range of marine organisms like oysters and plankton;
- e. Increased wildlife in both western and eastern Oregon, and an increase in pests and diseases affecting Oregon forest species.

## 29. (Answer)

Paragraph 29 references and purports to summarize conclusions expressed in the 2011 Oregon Climate Assessment Report, which was the most recent Climate Assessment Report published by the OCCRI at the time the amended complaint was filed. Defendants deny that this is the most recent report published by the OCCRI. In response to the balance of paragraph 29, which purports to summarize portions of the 2011 report, Defendants respond that the report speaks for itself and is best evidence of its contents. Defendants

admit that the impacts in Oregon of human-caused global climate change have been predicted to be severe if global carbon dioxide emissions are not curtailed.

### 30. (Amended Complaint)

Climate change also poses risks to the health of all Oregonians. According to the OCCRI, "extreme weather (such as floods, droughts, severe storms, heat waves and fires) can directly affect human health as well as cause serious environmental and economic impacts." Among these impacts are the disruption of natural systems, which gives "rise to the spread or emergence of vector-, water-, and food-borne diseases in areas where they either have not existed, or where their presence may have been limited." Other impacts include "increase[d] cases of allergies, asthma and other respiratory conditions among susceptible populations" due to "[a]ir pollution and increases in pollen count" and the exacerbation of "lung health problems" due to "exposure to smoke from wild land and forest fires, as well as from the projected increases in air pollution levels in our region."

## 30. (Answer)

In response to paragraph 30, which appears to quote or to summarize portions of the 2011 OCCRI Oregon Climate Assessment Report, Defendants respond that the report speaks for itself and is best evidence of its contents. Defendants admit that global climate change poses risks to the health of all Oregonians.

In conclusion, the parties agree that climate change is caused by anthropogenic emissions of carbon dioxide, that climate change is harming and threatens continued harm to essential natural resources in Oregon, and that the State is falling far short of its own targets in reducing greenhouse gas emissions. Based on the pleadings, the Court can and should declare that the State has failed to uphold its fiduciary obligations under the Public Trust Doctrine.

There is no material factual dispute between the parties as to the causes or effect of climate change, nor is there a dispute that the State is failing to achieve the reductions in greenhouse gases necessary to address the problem.

B. In Addition to the Pleadings, Plaintiffs Present Declarations from the Foremost Experts on the Causes of Global Climate Change and the

The State's admissions to the allegations in the amended complaint demonstrate that Plaintiffs are entitled to summary judgment in this declaratory judgment action. In addition, however, Plaintiffs present to the Court expert opinions on the predicted impacts to the natural resources and economy of the State, if Oregon, alongside other state and global sovereigns, does not take action to arrest the emissions of carbon dioxide to mitigate the impacts of climate change. Plaintiffs summarize those expert opinions below.

Predicted Impacts to the Public Trust Resources of Oregon and the State

#### 1. Dr. James Hansen.

Economy.

Dr. Hansen is the former Director of the NASA Goddard Institute for Space Studies in New York City and an Adjunct Professor of Earth Sciences at Columbia University's Earth Institute. Hansen Decl. ¶ 2. He obtained his Ph.D in physics in 1967 from the University of Iowa and since the 1970's has focused on computer simulations and studies of the Earth's climate to understand the impact of humans on Earth's climate. *Id.* ¶ 4. Dr. Hansen's opinions are summarized below:

• Human burning of fossil fuels has disrupted the Earth's energy balance and caused the Earth to heat up. The atmosphere is currently impaired because the concentration of CO<sub>2</sub> is causing the Earth to absorb more heat than is reflected to space. Atmospheric CO<sub>2</sub> concentrations are at their highest level in three million years, and global surface temperatures are higher than they have been in the last 10,000 years during the development of human civilization, id. ¶ 10;

- This warming process will worsen and accelerate unless we change course. Unless abated, carbon emissions will initiate dramatic and rapid climate changes that will spin out of control for present and future generations as the planet's energy imbalance triggers amplifying feedbacks, which push the planet past critical tipping points, *id.* ¶ 11; and
- There is a brief window of opportunity to reverse course in order to preserve a habitable climate system, but the window is closing quickly. Dr. Hansen and a world-renowned team of scientists have developed a prescription or "glide path" that returns atmospheric concentrations to 350 ppm by the end of the century, the level necessary to sustain life on Earth as we currently know it. *Id.* ¶ 12, 59.

## 2. Dr. Phillip Mote

Dr. Mote is the Director of the Oregon Climate Change Research Institute in the College of Earth, Ocean & Atmospheric Sciences at Oregon State University. Mote Decl. ¶ 1. Dr. Mote received his Ph.D in atmospheric sciences from the University of Washington in 1994, and a B.A. with honors in physics from Harvard University in 1987. *Id.* Before assuming his current position as Director of OCCRI, Dr. Mote was the State Climatologist for the State of Washington from 2003 until 2009. He is the current co-leader of the NOAA-funded Climate Impacts Research Consortium ("CIRC") for the Northwest, and also of the Northwest Climate Science Center for the U.S. Department of the Interior.

Dr. Mote summarizes for the Court the findings and conclusions of OCCRI's 2013 report *Climate Change in the Northwest – Implications for Our Landscapes, Waters, and Communities*, which is attached to his declaration. Observed and predicted impacts from climate change in Oregon are summarized as follows:

 Alterations in streamflow magnitude and timing, water temperatures, and water quality, particularly in snow-dominant watersheds and those fed by glacial runoff,

- which will experience reduced spring peak flow, increased winter flow, and reduced late-summer flow, id. ¶ 4–5;
- Changes in hydrologic flow regimes and warming stream and lake temperatures pose significant threats to aquatic ecosystems and are expected to alter key habitat conditions for salmon and other aquatic species, *id.* ¶ 4;
- Water-dependent recreational activities will be affected by dry conditions, reduced snowpack, lower summer flows, impaired water quality, and reduced reservoir storage, id. ¶ 5;
- Sea level along the coast is projected to rise 4-56" by 2100 relative to 2000 levels,
   resulting in erosion, sea water intrusion, and flooding, id. ¶ 6;
- Increasing acidification of ocean waters hinders the ability of shellfish to build shells and skeletons and could alter key ecological processes, threatening coastal marine ecosystems, fisheries, and aquaculture, id. ¶ 4;
- Northwest forest ecosystems will experience increased fire activity in response to warmer and drier summers, *id.* ¶ 7, and the abundance and distribution of many species of fish and wildlife may also be affected, *id.* ¶ 4–5;
- Average temperatures and heat events are projected to increase in the Northwest with an expected increase in the incidence of heat-related illness and death, id.  $\P$  8; and
- Climate change can have a negative impact on respiratory disorders due to longer and more potent pollen seasons, increases in ground-level ozone, and increases in particulate matter due to wildfires. *Id.* ¶ 9.

#### 3. Dr. Burke Hales

Dr. Burke Hales is a Professor of Ocean Ecology and Biogeochemistry at the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. Hales Decl. ¶ 2. Dr. Hales obtained his Ph.D in Chemical Oceanography from the University of Washington

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School of Oceanography in 1995. *Id.* Ex A. He has co-authored over 60 scientific papers and was lead author of "North American Continental Margins," detailing carbon cycling research in the continental margins (which includes the continental shelf, continental slope, and continental rise) of North America. *Id.* ¶ 5. Since 2007, he has been studying the "combined effects of natural variability and human influences on the carbonate chemistry of the coastal ocean," and since 2008 has studied "the links between ocean and estuarine chemistry fluctuations and the responses of shellfish populations." *Id.* ¶ 7. Dr. Hales' opinions are summarized below:

- Anthropogenic emissions of carbon dioxide have resulted in ocean acidification, id.
   ¶ 8;
- The increased corrosivity in ocean waters in Oregon and the Pacific Northwest are threatening the ability of larval shellfish like mussels and oysters to build shells and skeletons necessary for natural reproduction, id. ¶ 7; and
- The change in corrosivity has already pushed shellfish producers to implement costly mitigation measures to respond to poor marine water conditions. *Id.*  $\P$  8.

### 4. Mr. Ernie Niemi

Mr. Niemi is a trained economist and founder of Natural Resources Economics, Inc. based in Eugene, Oregon. Niemi Decl. ¶ 1. From 1978 until 2012, he managed economic and policy analysis for the consulting firm, ECONorthwest, where he was a co-owner, vice president, and senior economist. *Id.* Ex A. He obtained a B.S. in chemistry from the University of Oregon in 1970 and a Master of City and Regional Planning from Harvard University in 1978. *Id.* Mr. Niemi specializes in applying the principles of cost-benefit analysis, economic valuation, and economic-impact analysis to describe the economic importance of natural resources.

In 2009, Mr. Niemi prepared a report entitled An Overview of Potential Economic Costs to Oregon of a Business-As-Usual Approach to Climate Change on behalf of the

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Program on Climate Economics, Climate Leadership Initiative, Institute for a Sustainable Environment at the University of Oregon. In his declaration, Mr. Niemi summarizes the findings of his report, which represents the most thorough estimates of the economic costs of climate change in the State of Oregon. Those findings include:

- By 2020, the potential economic costs in Oregon total \$3.3 billion per year;
- By 2040, the potential economic costs in Oregon total \$3.6 billion per year;
- By 2080, the potential economic costs in Oregon total \$9.8 billion per year;
   Dec ¶ 14.7
  - These costs result from the predicted adverse impacts to natural resources, including:
    - Increased health-related costs from human mortality and illness associated with decreased air quality;
    - Reduced salmon populations;
    - Increased flood and storm damage;
    - Reduced food production;
    - Increased wildfire costs; and
    - Lost recreation opportunities.

## Niemi Dec ¶¶ 7–13.

C. The State of Oregon's Own Data Documents Unequivocally that the State is Failing to Achieve the Reductions in Emissions of Greenhouse Gases That Are Necessary to Uphold its Fiduciary Obligations Under the Public Trust Doctrine.

In 2007, following a report from the Governor's Advisory Group on Global Warming, the Oregon legislature passed House Bill 3543, which set non-binding targets for reductions in the emissions in greenhouse gases in the State of Oregon. *See* HB 3543 (2007), Or Laws 2007,

<sup>&</sup>lt;sup>7</sup> These economic impacts do not include the lost value of all public trust resources, ecosystem functions, and human life, and the true costs to Oregon could be much more severe.

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ch 907, §§ 1–14 (codified, in part, at ORS 468A.200 to .260). The legislature recognized the "need to assess the current level of greenhouse gas emissions in Oregon, to monitor the trend of greenhouse gas emissions in Oregon over the next several decades and to take necessary action to begin reducing greenhouse gas emissions in order to prevent disruption of Oregon's economy and quality of life and to meet Oregon's responsibility to reduce the impacts and pace of global warming." HB 3543 § 1(7). The legislature set non-binding goals for greenhouse gas reductions. *Id.* § 2(1). The legislature then created the Oregon Global Warming Commission, *id.* § 4(1), and charged the Commission with tracking and evaluating "[p]rogress toward the greenhouse gas emissions reduction goals established" by the legislation. *Id.* § 12(1)(e).

Since that time, the Global Warming Commission has collected and reported data on greenhouse gas emissions in Oregon.<sup>8</sup> That data and the accompanying reports provide indisputable evidence that Oregon is failing to take the actions necessary to protect public trust assets and to reduce emissions of carbon dioxide in Oregon.

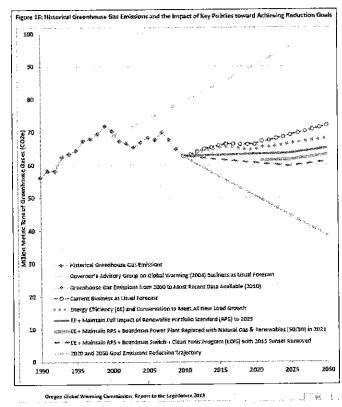
The Global Warming Commission published a report in 2009, which tracked the State's progress towards its greenhouse gas reduction goals. At that time, the Commission found that "the state will likely fall well short of meeting its 2020 emission reduction goal, and by extrapolation, clearly is not on track to meet its 2050 goal." Oregon Global Warming Commission, *Report to the Legislature* 18 (Jan 2009) (Sherlock Decl., Exhibit 1). In 2011, the Commission released another report confirming that the State is falling far behind its efforts to meet the 2020 and 2050 goals. Oregon Global Warming Commission, *Report to the Legislature 2011 – Including Key Action and Results from the Commission's Interim Roadmap to 2020* at 77–78 (Feb 2011) (Sherlock Decl., Exhibit 2). In 2013, the Global Warming

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<sup>&</sup>lt;sup>8</sup> The Commission is chaired by Mr. Agnes Duncan, President and CEO of the Bonneville Environmental Foundation. The reports and information prepared by the Oregon Global Warming Commission can be found on its web site at <a href="http://www.keeporegoncool.org/">http://www.keeporegoncool.org/</a>.

Commission issued another report again demonstrating that Oregon is falling far behind its own outdated targets. Oregon Global Warming Commission, *Report to the Legislature 2013* at 95, 97 (Feb 2013) (Sherlock Decl., Exhibit 3).

A simple graphic from the 2013 report demonstrates the State's own admitted shortcoming in reducing emissions of greenhouse gasses. The graphic depicts Oregon's own projections as to how emissions in the State will greatly exceed the non-binding targets set by the legislature.<sup>9</sup>



<sup>&</sup>lt;sup>9</sup> The goals are to:

<sup>(</sup>a) By 2010, arrest the growth of greenhouse gas emissions and begin to reduce greenhouse gas emissions.

<sup>(</sup>b) By 2020, achieve greenhouse gas levels that are 10 percent below 1990 levels.

<sup>(</sup>c) By 2050, achieve greenhouse gas levels that are at least 75 percent below 1990 levels.

ORS 468A.205(1). These non-binding targets are outdated and not tiered to or supported by the best available science, which is presented in section VII below.

Report to the Legislature 2013, at 95 Figure 16.

In short, these facts are not in dispute. Plaintiffs rely on the State of Oregon's own data, and moreover "Defendants admit that Oregon is likely to fall well short of the targets set by its greenhouse gas reduction and mitigation plan." Answer ¶ 36. The State's own data and its admission in its Answer demonstrate unequivocally that the sovereign government is failing to uphold its obligations to protect public trust resources from the adverse impacts of climate change. While some (but certainly not all) of those impacts will accrue in the future, the only time to avoid those impacts is running out, and steps must be taken now to reduce emissions of carbon dioxide in order to avoid the most devastating effects of climate change. The only opportunity available to these trustees, on behalf of all current and future generations of Oregonians, will soon be lost.

VII. To Uphold its Obligation Under the Public Trust Doctrine to Manage and Preserve Essential Natural Resources in Trust for the Benefit of the Citizenry, the State of Oregon Must Take Action as Soon as Possible to Achieve the Reductions Necessary to Meet its Obligation to Return Atmospheric Concentrations of CO<sub>2</sub> to 350 ppm by the Year 2100.

While the situation is dire, there is still time to reverse course and to implement the changes necessary to restore atmospheric concentrations of CO<sub>2</sub> to the level necessary to sustain life on Earth as we know it. Dr. Hansen, in collaboration with a team of the most well-respected scientists working in this field, have developed a prescription of CO<sub>2</sub> reductions necessary to return atmospheric concentrations of CO<sub>2</sub> to 350 ppm by the end of the century. See Hansen Decl. ¶¶ 62–63, Ex 2 at 10. The scientific prescription of 350 ppm is premised upon the work of Dr. Hansen and others as the level at which Earth's energy imbalance will be corrected, i.e., the amount of heat radiated to space by Earth increases and the amount of heat absorption decreases to a state of equilibrium. See Hansen Decl. ¶¶ 22–24, 58–59, Ex 2 at 5. Carbon dioxide persists in the atmosphere for many years. See Hansen Decl. ¶¶ 44–46. To

lower the atmospheric concentration of  $CO_2$ , we must therefore reduce emissions over time such that the rate of addition is less than the rate of decay. *Id*.

Based on these principles, Dr. Hansen and his team prescribe carbon dioxide reductions that allow for a transition to an essentially carbon-free economy. The sooner these reductions begin, the more gradual the transition. The longer we delay, the more difficult the task. *Id.* ¶¶ 60–64. If the emissions reductions commenced in 2013, the "glide path" would have been 6% per year. Hansen Decl., Ex 2 at 10. If we wait until 2020 to begin the process, we will then need to achieve annual reductions of 15% per year. Ex 2 at 10, Hansen Decl. ¶ 64. Time is of the essence. <sup>10</sup>

As discussed above, the State's fundamental obligation under the Public Trust Doctrine is to act as a fiduciary and to protect against "substantial impairment" of the corpus of the trust. See Ill. Central, 146 US at 453; Morse, 285 Or at 203; Caminiti, 107 Wash 2d at 670, 732 P2d at 994–95. As the Court of Appeals has said, the "state, as trustee for the people, bears the responsibility of preserving and protecting the right of the public to the use of the waters . . . ." Or. Shores Conservation Coal., 62 Or App at 493. In this case, carbon pollution and climate change threatens the very existence of those waters in the State of Oregon as many of our most treasured rivers and streams will see greatly reduced summer flows from reduced snowpack, threatening the viability of native populations of salmon and trout. Mote Decl. ¶ 4–5. Rising sea levels threaten to wash away Oregon's tidelands and beaches. Mote Decl. ¶ 6; Sherlock Decl., Ex. 4 at 209 (Oregon Climate Assessment Report concluding that "with accelerated rates of sea level rise, the entire coast will eventually be submerging and experiencing significantly

The State, in its Answer, does not admit plaintiffs' allegation that "the best available science concludes that atmospheric carbon dioxide cannot exceed 350 parts per million" to avoid an increase in the average surface temperature of earth of more than 1° C (1.8° F). See Complaint  $\P$  26; Answer  $\P$  26. The State professes that it is "without knowledge or information sufficient to form a belief" as to the reductions necessary. Answer  $\P$  26. Dr. Hansen's declaration presents the best available science on safe levels of carbon dioxide that would protect our other public trust resources and natural systems.

greater erosion and flood impacts than at present day"). Coastal flooding threatens to inundate our wetlands, "with a concomitant loss of associated ecosystem services, such as habitat for juvenile salmon and waterfowl, flood control, maintenance of estaurine water quality, and carbon sequestration." Sherlock Decl., Ex. A at 235. Acidifying ocean waters threaten to destroy naturally-propagating shellfish, relied upon by the people of Oregon for food and recreation. Hales Decl. ¶ 8–9. And our native forests will experience higher rates of and more intense wildfires. Mote Decl. ¶ 7. All of these impacts are a direct result of anthropogenic emissions of carbon dioxide.

To be clear, plaintiffs are well aware that Oregon cannot solve this problem on its own. Governor Kitzhaber and the State of Oregon do not have the power to tackle this daunting global problem alone. But that fact – the inherent nature of the global crisis facing our communities – does not relieve the State sovereign of its fiduciary obligations. "The State can no more abdicate its trust over property in which the whole people are interested . . . than it can abdicate its police powers in the administration of government and the preservation of peace." *Ill. Central R.R.*, 146 U.S. at 453. The State of Oregon has a fiduciary obligation to achieve the reductions necessary <u>in</u>, by and under the control of Oregon to solve this global crisis.

Indeed, jurisdictions all over the world are taking steps to implement systems for regulating emissions of carbon dioxide, from a carbon tax in British Columbia, to a cap-and-trade program in California, to the mature trading scheme in the European Union. Even at the local level, government trustees are implementing laws to reduce emissions, such as Eugene City Council's Climate Recovery Ordinance. Eugene, Or, City Code §§ 6.675–90 (2014). The State of Oregon is being left behind, and all of these other efforts will be

<sup>11</sup> The World Bank estimates in 2014 that over 40 countries and 20 sub-national jurisdictions have placed a price on carbon, totaling more than 22% of global emissions. *See* World Bank, *Putting a Price on Carbon* (June 3, 2014), http://www.worldbank.org/en/programs/pricing-carbon (last visited Jan 7, 2015).

undermined if Oregon does not contribute its share to the necessary reductions.<sup>12</sup> Our state sovereign has a mandatory fiduciary obligation to contribute to this essential work on behalf of all Oregonians in order to preserve and protect the natural legacy that we have inherited and that we must pass on to future generations. That obligation is a covenant made with the citizens of this State and it is called the public trust.

#### CONCLUSION

For the foregoing reasons, plaintiffs respectfully request that the Court grant their motion for partial summary judgment.

DATED this 9th day of January 2015.

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The Northwest Economic Research Center at Portland State University released a report in December of 2014 concluding that a carbon tax in Oregon could result in significant reductions in emissions with de minimis impacts on employment and economic output that are within normal ranges of employment fluctuations. Such carbon pricing could contribute significantly to the sovereign's obligation to reduce carbon emissions. See Jenny H. Liu et al., Economic and Emissions Impacts of a Clean Air Tax or Fee in Oregon (SB306), Northwest Economic Research Center (NERC), Portland State Univ at 7 (Dec 2014), available at http://www.pdx.edu/nerc/sites/www.pdx.edu.nerc/files/carbontax2014.pdf (last visited Jan 7, 2015).

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### CERTIFICATE OF SERVICE

I certify that on January 9, 2015 I served the foregoing PLAINTIFFS' MOTION FOR PARTIAL SUMMARY JUDGMENT FOR DECLARATORY RELIEF on the following attorney of record:

Sarah Weston Renee Stineman Special Litigation Unit Department of Justice 1515 SW Fifth Ave., Suite 410 Portland, OR 97201

Of Attorneys for Defendants

by causing a true copy thereof, addressed to the attorney's last known address, and served on the attorney(s) of record by the following method.

 $\checkmark$  by US Mail, first class postage prepaid, from Eugene, Oregon. by overnight courier.

by electronic mail. by hand delivery.

electronically by the electronic filing system.

William H. Sherlock, OSB #903816 Of Attorneys for Plaintiffs