A natural resource beyond the sky: invoking the public trust doctrine to protect the atmosphere from greenhouse gas emissions

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Abstract

The persisting absence of comprehensive climate change legislation in the United States has long resulted in the ever-growing number of climate-related lawsuits. Litigation has been used in various ways, for example, by requesting the regulating bodies to introduce new air quality standards, or by targeting specific individual greenhouse gas emissions sources. In the last few years, climate plaintiffs have increasingly relied on common law public trust doctrine and constitutional provisions granting rights to natural resources in an attempt to force the government to take decisive climate change mitigation measures. The latter line of climate cases, also known as atmospheric trust litigation, is the result of a nationwide campaign, which seeks judicial recognition of the fact that the planet's atmosphere is a natural resource; thus, its protection from dangerous greenhouse gas emissions is an essential obligation of the government. This chapter explores how United States courts have interpreted the public trust doctrine with regard to the atmosphere.

1. Introduction

Climate change presents a global problem, critically affecting many regions on the planet and jeopardizing both the environment and human communities. The impact of climate-related extremes, including heat waves, droughts, wildfires, weather anomalies, sea level rise, disrupted hydrological cycles, and ocean acidification is taking its toll on lives and livelihoods as well as ecosystems.² Unsurprisingly, climate change has been recognized as adversely affecting a whole spectrum of human rights, most notably the right to life, health, housing, and food and water.³

The legal response to climate change, developed over nearly the last three decades, has been multi-level. Global climate deals, regional action and national climate legislation as well as action by non-

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² See, in general, IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, p. 151 ff.

³ Understanding Human Rights and Climate Change. Submission of the Office of the High Commissioner for Human Rights to the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change, 26 November 2015. http://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf (accessed on 8 February 2018).

state actors have all been used in a complex way to mitigate climate change and adapt to its impact.⁴ The existing policies, however, have not yielded any decisive results.⁵ The reasons behind this are many,⁶ but in a general sense, the failure to achieve the required climate goals is attributable to poor policy implementation or the lack of such a policy altogether.

The United States (US), unfortunately, has long demonstrated a lackluster approach, when it comes to climate policy. Being among the top climate polluters,⁷ the country has failed to develop any comprehensive federal climate policy.⁸ Starting from the early 1990s, this regulatory void has gradually been filled with litigation.⁹ The chapter focuses on a specific type of litigation, developing since 2011, in which plaintiffs have relied on common law public trust doctrine and constitutional provisions granting rights to natural resources in an attempt to force the government to take decisive climate change mitigation measures. The latter line of climate cases, also known as atmospheric trust litigation, is the result of a nationwide campaign,¹⁰ which seeks judicial recognition of the fact that the planet's atmosphere is a natural resource – just like air, water and soil – thus its protection from dangerous greenhouse gas (GHG) emissions is an essential obligation of the government.¹¹

2. Atmospheric trust cases and their place in climate change litigation

Scholarly studies have identified and classified the body of climate change litigation based on various criteria. ¹² To date, the most prominent categories of climate cases include litigation revolving around the

⁴ See Bodansky, D., J. Brunnée and L. Rajamani (2017) International Climate Change Law, Oxford University Press; Chan, S., R. Falkner, M. Goldberg, and H. van Asselt (2018) 'Effective and geographically balanced? An output-based assessment of non-state climate actions', Climate Policy, 18(1), pp. 24-35; Wirth, D. A. (2015) 'The International and Domestic Law of Climate Change: A Binding International Agreement Without the Senate or Congress?', Harvard Environmental Law Review 39(2), pp. 515-566.

⁵ Thus, recent anthropogenic GHG emissions are the highest in history. *Supra* note 1, p. 44.

⁶ See Lazarus, R.J. (2009) 'Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future', Cornell Law Review 94(5), pp. 1153-1233.

⁷ Boden, T.A., G. Marland and R.J. Andres (2017) National CO₂ Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2014, Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy.

⁸ Peel, J. and H.M. Osofsky (2015) Climate Change Litigation: Regulatory Pathways to Cleaner Energy, Cambridge University Press, pp. 62-63.

⁹ *Ibid.*, p. 19.

¹⁰ All atmospheric trust cases have been brought by children plaintiffs supported by various non-profits, including Our Children's Trust, Wildearth Guardians, etc.

¹¹ See Wood, M.C. and C.W. Woodward IV (2016) 'Atmospheric Trust Litigation and the Constitutional Right to a Healthy Climate System: Judicial Recognition at Last', Washington Journal of Environmental Law & Policy 6(2), pp. 634-684.

¹² See Markell, D. and J.B. Ruhl (2012) 'An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?', Florida Law Review 64(1), pp. 15-86; Lin, J. (2012) Climate change and the courts, *Legal studies*, 32(1), pp. 35-57; Peel, J. and H.M. Osofsky (2013) 'Climate Change Litigation's Regulatory Pathways: A Comparative Analysis of the United States and Australia', Law and Policy 35(3), pp. 150-183.

environmental impact assessment legislation and air quality legislation.¹³ Such litigation has been used with mixed success, mostly to challenge the authorization of fossil fuel development and operations as well as action with regard to GHG emissions standards.¹⁴ Albeit instrumental in targeting local activities, these types of climate cases have not put the climate regime to the test on a broader scale. With action being scattered across different regions and targeting individual decisions and entities, the question arises whether it could be possible to make a sweeping challenge to governmental policy and take on climate change inaction in a comprehensive way.

This approach is exactly what lies at the core of atmospheric trust litigation. These cases are not based on environmental impact assessment or air quality legislation but rather on constitutional provisions and common law. Notably, both constitutional and common law claims have been explored in climate change litigation before;¹⁵ however, the atmospheric trust litigation has so far been the only line of climate cases systematically exploring these legal avenues. Plaintiffs in the atmospheric trust litigation invoke the common law public trust doctrine, which grants rights to certain natural resources,¹⁶ thus representing a rights-based approach to climate change litigation.¹⁷

The public trust doctrine derives from ancient Roman law, finding its way into English common law in the Middle Ages and eventually settling in American common law.¹⁸ The doctrine, being based on the antimonopoly notion,¹⁹ requires the government to hold vital natural resources in trust for the public beneficiaries, thus protecting those resources from monopolization or destruction by private interests.²⁰ In its traditional application throughout the 19th century, the doctrine was limited to navigable and tidal waters and the land submerged beneath them for the purposes of navigation, commerce and fishing.²¹

¹³ *Ibid*.

¹⁴ Varvastian, S. (2018) 'Access to Justice in Climate Change Litigation from a Transnational Perspective: Private Party Standing in Recent Climate Cases', in J. Jendrośka and M. Bar (eds), Procedural Environmental Rights: Principle X of the Rio Declaration in Theory and Practice, Intersentia, pp. 481-502.

¹⁵ For example, plaintiffs in the renowned cases *American Electric Power Co. v Connecticut*, *Comer v Murphy Oil USA*, *Inc.* and *Native Village of Kivalina v ExxonMobil Corp*. have all brought public nuisance and other common law claims. For a detailed account of these cases see Peel, J. and H.M. Osofsky, *supra* note 7.

¹⁶ See Sax, J.L. (1970) 'The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention', Michigan Law Review 68(3), pp. 471-566.

¹⁷ See Peel, J. and H.M. Osofsky (2018) 'A Rights Turn in Climate Change Litigation?', Transnational Environmental Law 7(1), pp. 37-67.

¹⁸ Abate, R. S. (2016) 'Atmospheric Trust Litigation in the United States: Pipe Dream or Pipeline to Justice for Future Generations?' in R. S. Abate (ed.) Climate justice: case studies in global and regional governance challenges, Environmental Law Institute, pp. 548-552.

¹⁹ Blumm, M.C. and A.P. Moses (2017) 'The Public Trust as an Antimonopoly Doctrine', Boston College Environmental Affairs Law Review 44(1), pp. 1-54.

²⁰ Wood, M.C. and C.W. Woodward IV, *supra* note 10, pp. 647-648.

²¹ Craig, R.K. (2009) 'Adapting to Climate Change: The Role of State Common-Law Public Trust Doctrines', Vermont Law Review 34(4), p. 784.

Such application of the doctrine was dictated by the paramount importance of waterways to economic activities at that time.²²

However, the public trust doctrine has not remained static. In the 20th century, many US courts started expanding it to protect wildlife, ecosystems, non-navigable waters, parks and beaches for the purposes of recreation as well as ecological preservation.²³ At the same time, the doctrine traditionally developed at the state level²⁴ and the developments in relevant jurisprudence in some states did not necessarily extend to other states.²⁵ The expansion of the public trust doctrine to the atmosphere - as the key natural resource polluted by GHG emissions, which in turn is the main cause of anthropogenically-driven climate change - has been advocated by law professor *Mary Christina Wood*, whose works have been instrumental in shaping the atmospheric trust litigation.²⁶

The atmospheric trust litigation makes sweeping challenges to governmental climate policy at state and/or federal level, and as the public trust doctrine is in some cases enshrined in constitutional law,²⁷ its interpretation with regard to the atmosphere may often have constitutional ramifications. Ultimately, atmospheric trust litigation envisions taking multi-pronged political action on climate, including, for instance, removing subsidies to fossil fuel industry and active phase-out of such fuels and equipment dependent on them, actively promoting renewable energy, preparing and implementing plans to remove GHGs from the atmosphere, etc.²⁸ Given the complex nature of climate change and the factors underlying it, such an approach may be the only viable solution to solve the problem. At the same time, it seems that the federal US government is unwilling to make the necessary policy shift.²⁹

3. Federal atmospheric trust litigation

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²² Blumm, M.C. and A.P. Moses, *supra* note 18, p. 8.

²³ *Ibid.*, pp. 31-43.

²⁴ Ryan, E. (2015) 'The Public Trust Doctrine, Private Water Allocation, and Mono Lake: The Historic Saga of *National Audubon Society v Superior Court*', Environmental Law 45(2), pp. 573-574.

²⁵ See: Craig, R.K. (2007) 'A Comparative Guide to the Eastern Public Trust Doctrines: Classifications of States, Property Rights, and State Summaries', Penn State Environmental Law Review 16(1), pp. 1-113; Craig, R.K. (2010) 'Comparative Guide to the Western Public Trust Doctrines: Public Values, Private Rights, the Evolution toward an Ecological Public Trust', Ecology Law Quarterly 37(1), pp. 53-197.

²⁶ See: Goodwin, A.T. (2015) 'A Wake–Up Call for Judges', Wisconsin Law Review 2015(4), pp. 785-788; Boudreau, T. (2017) 'The Earth's Atmosphere As A Global Trust: Establishing Proportionate State Responsibility To Maintain, Restore And Sustain The Global Atmosphere', Environmental and Earth Law Journal 7(1), p. 68.

²⁷ See Klass, A.B. (2015) 'The Public Trust Doctrine in the Shadow of State Environmental Rights Laws: A Case Study', Environmental Law 45(2), pp. 431-462; Kalen, S. (2016) 'An Essay: An Aspirational Right to a Healthy Environment', UCLA Journal of Environmental Law and Policy 34(2), pp. 156-195.

²⁸ See Blumm, M.C. and M.C. Wood (2017) 'No Ordinary Lawsuit: Climate Change, Due Process, and the Public Trust Doctrine', American University Law Review 67(1), p. 20.
²⁹ *Ibid.*, pp. 4-5.

As of today, the federal atmospheric trust litigation is comprised of two cases directed against the federal government - *Alec L. v Jackson*³⁰ and *Juliana v United States*.³¹ The first case was decided a few years ago and resulted in a decision unfavorable to the plaintiffs. The second one, however, is ongoing and has so far demonstrated viability. Since the case is targeting federal policy, it is of nationwide importance and, if successful, it could have an impact not only on the US, but could also have repercussions throughout the rest of the world. This section now turns to discussing both cases in detail.

3.1. Alec L. v Jackson

In *Alec L. v Jackson*, the youth plaintiffs alleged that several federal US agencies 'have violated their fiduciary duties to preserve and protect the atmosphere as a commonly shared public trust resource under the public trust doctrine.' For that purpose, the plaintiffs asked the court to issue the following declarations: 1) that the atmosphere is a public trust resource and that the federal government, as a trustee, has a fiduciary duty to refrain from taking actions that waste or damage it; 2) that the defendants have violated their fiduciary duties by contributing to and allowing unsafe amounts of GHG emissions into the atmosphere. Specifically with regard to the latter point, the plaintiffs asked the court to define such duties by declaring that the defendants have to 'reduce global atmospheric carbon dioxide levels to less than 350 parts per million during this century. To ensure the implementation of this, the plaintiffs asked the court to issue an injunction directing the above-mentioned federal agencies to take all necessary actions to enable carbon dioxide emissions to peak by December 2012 and decline by at least 6 per cent yearly beginning in 2013 and to order them to submit various documents (including annual US GHG reports, a climate recovery plan, etc.) for the court's approval.

Notably, the plaintiffs did not allege violation of any federal legislation or constitutional provision, but invoked the federal public trust doctrine.³⁶ The defendants moved to dismiss the claim, arguing that the plaintiffs' complaint was grounded in state common law but did not raise a federal question, thus failing to invoke a federal court's jurisdiction.³⁷

The court granted the defendants' motions. The court's assessment of the applicability of federal jurisdiction in the context of the public trust doctrine was based on the Supreme Court's decision in the

³⁰ Alec L. v Jackson, 863 F.Supp.2d, p. 11 (D.D.C. 2012).

³¹ Juliana v United States, 217 F.Supp.3d, p. 1224 (D. Or. 2016).

³² Alec L. v Jackson, 863 F.Supp.2d, p. 12 (D.D.C. 2012).

³³ *Ibid.*, pp. 13-14.

³⁴ *Ibid.*, p. 14.

³⁵ Ibid

³⁶ *Ibid.*, p. 12.

³⁷ *Ibid.*, pp. 12-13.

non-climate case *PPL Montana*, *LLC v Montana*.³⁸ In that case, the Supreme Court distinguished the public trust doctrine from another legal principle - the equal footing doctrine - by stating that 'the public trust doctrine remains a matter of state law' and that 'the States retain residual power to determine the scope of the public trust'.³⁹ Furthermore, the court in *Alec L. v Jackson* referred to yet another non-climate case, where the Court of Appeals for the District of Columbia Circuit (D.C. Circuit) observed that '[i]n this country the public trust doctrine has developed almost exclusively as a matter of state law',⁴⁰ while a federal common-law public trust doctrine would possibly be displaced by federal statutes.⁴¹

Upon the appeal, the D.C. Circuit affirmed the position of the lower court, by holding that the Supreme Court in *PPL Montana* 'directly and categorically rejected any federal constitutional foundation for [the public trust] doctrine, without qualification or reservation.'⁴² In other words, in this case, the question whether the atmosphere is a natural resource protected by this doctrine at the federal level practically remained unanswered because the courts rejected the very idea of the federal public trust doctrine.

3.2. Juliana v United States

In August 2015, a group of minors from across the US filed a new federal atmospheric trust lawsuit in the District Court for the District of Oregon against the US President and a number of federal agencies. The lawsuit challenged numerous decisions taken by the defendants, such as 'whether and to what extent to regulate [carbon dioxide] emissions from power plants and vehicles, whether to permit fossil fuel extraction and development to take place on federal lands, how much to charge for use of those lands, whether to give tax breaks to the fossil fuel industry, whether to subsidize or directly fund that industry, whether to fund the construction of fossil fuel infrastructure such as natural gas pipelines at home and abroad, whether to permit the export and import of fossil fuels from and to the US, and whether to authorize new marine coal terminal projects.'43

According to the plaintiffs, the defendants have known for more than fifty years that carbon dioxide produced by burning fossil fuels was destabilizing the climate system, significantly endangering the plaintiffs, yet despite that knowledge, they exercised the sovereign authority over the country's atmosphere and fossil fuel resources in such a way that permitted, encouraged, and enabled continued exploitation, production and combustion of fossil fuels, thus deliberately allowing atmospheric

³⁸ PPL Montana, LLC v Montana, 565 U.S., p. 576 (D. Mont. 2012).

³⁹ *Ibid.*, p. 603.

⁴⁰ District of Columbia v Air Florida, Inc., 750 F.2d 1077, p. 1082 (D.C. Cir. 1984).

⁴¹ *Ibid.*, p. 1085 n. 43.

⁴² Alec L. ex rel. Loorz v McCarthy, 561 Fed.Appx. 7, p. 8 (D.C. Cir. 2014).

⁴³ Juliana v United States, 217 F.Supp.3d, p. 1234 (D. Or. 2016).

concentrations of carbon dioxide to escalate to unprecedented levels.⁴⁴ The plaintiffs asserted that the defendants' decisions have substantially caused the planet to warm and the oceans to rise, thus drawing a direct causal line between defendants' policy choices and floods, food shortages, destruction of property, species extinction, and various other harms.⁴⁵ Accordingly, the plaintiffs based their lawsuit on constitutional grounds as well as the public trust doctrine. The defendants moved to dismiss the claims, just like in the first federal atmospheric trust case, challenging, *inter alia*, the application of the federal public trust doctrine.

The magistrate judge *Coffin* recommended denying the motions to dismiss, holding that the plaintiffs' public trust and other claims may proceed. The judge emphasized that the invoked public trust doctrine 'is directed against the United States and its unique sovereign interests over the territorial ocean waters and atmosphere of the nation', ⁴⁶ observing that 'the complaint touches upon protected areas (territorial ocean waters at a minimum) impacted by the government's alleged conduct and harm to many plaintiffs given the alleged sea level rise, ocean acidification, and atmosphere change.' Notably, the judge disagreed that the federal public trust doctrine and, therefore, its application to the atmosphere was foreclosed by cases referred to in *Alec L. v Jackson*, since the legislative and executive branches' control over the territorial sea is arguably not absolute and constrained by the public trust doctrine under the Constitution. At any rate, the judge held that the matter should be further developed before the court could adjudicate.

This position was subsequently endorsed by district judge *Aiken*. The judge referred to the seminal work within this field by *Joseph Sax*, who highlighted three types of restrictions imposed by the public trust doctrine on the government: 1) the property subject to the trust must not only be used for a public purpose, but it must be held available for use by the general public; 2) the property may not be sold, even for a fair cash equivalent; 3) the property must be maintained for particular types of uses.⁴⁹ In light of this, judge *Aiken* stated that atmospheric trust lawsuits:

"... depart from the "traditional" public trust litigation model, which generally centers on the second restriction, the prohibition against alienation of a public trust asset. Instead, plaintiffs assert defendants have violated their duties as trustees by nominally retaining control over trust

⁴⁴ *Ibid.*, p. 1233.

⁴⁵ *Ibid.*, p. 1234.

⁴⁶ Juliana v United States, Order and Findings & Recommendation, 6:15-cv-01517-TC, p. 20 (D. Or. 2016).

⁴⁷ *Ibid.*, p. 21.

⁴⁸ *Ibid.*, pp. 21-23.

⁴⁹ Juliana v United States, 217 F.Supp.3d, p. 1254 (D. Or. 2016) (citing Sax J. L., supra note 15, p. 477).

assets while actually allowing their depletion and destruction, effectively violating the first and third restrictions by excluding the public from use and enjoyment of public resources.'50

Although the judge did not find it necessary to address the question of whether the atmosphere is a public trust natural resource at that particular point, she referred to the roots of the doctrine as well as its further interpretation by courts and legal scholarship, which suggests that the answer may be positive.⁵¹ Furthermore, she essentially reiterated the magistrate judge's view by holding that 'because a number of plaintiffs' injuries relate to the effects of ocean acidification and rising ocean temperatures, they have adequately alleged harm to public trust assets.'⁵² Finally, the judge disagreed with the court's reasoning in *Alec L. v Jackson*, regarding the applicability of the federal public trust doctrine, by declining to interpret the doctrine as purely a matter of state law⁵³ and concluding that the 'federal government, like the states, holds public assets - at a minimum, the territorial seas - in trust for the people.'⁵⁴ The case was pending before the Ninth Circuit Court of Appeals at the time of writing; ultimately, the above-mentioned questions, including the applicability of the federal public trust doctrine, will likely be addressed by the Supreme Court.

4. State atmospheric trust litigation

While the application of the public trust doctrine at the federal level may be contentious, atmospheric trust litigation at the state level could have been conspicuously within the grasp of the judiciary, since the doctrine has been prolifically interpreted in state jurisprudence. This, however, is not exactly so. Although atmospheric trust lawsuits have already been filed in many state courts across the US, only a handful of courts have actually gone as far as to explicitly address the question of whether the atmosphere is a natural resource covered by the public trust doctrine.

4.1. Declining to recognize the atmosphere as a natural resource

In the two early cases, *Aronow v State* and *Filippone v Iowa Department of Natural Resources*, the state courts in Minnesota and Iowa merely concluded that the public trust doctrine in the respective states does not apply to the atmosphere.⁵⁵ Notably though, in a concurring opinion one of the judges in the latter case expressed that there was 'a sound public policy basis' for extending the public trust doctrine to the

⁵⁰ *Ibid*.

⁵¹ *Ibid.*, p. 1255, fn 10.

⁵² *Ibid.*, p. 1256.

⁵³ *Ibid.*, pp. 1256-1259.

⁵⁴ *Ibid.*, p. 1259.

⁵⁵ See *Aronow v State*, A12-0585, 2012 WL 4476642, p. 3 (Minn. Ct. App. 2012); *Filippone ex rel. Filippone v Iowa Dept. of Natural Resources*, 829 N.W.2d 589, p. 2-3 (Iowa Ct. App. 2013).

atmosphere in Iowa by referring to relevant statutes, which included air as a natural resource to be protected for public benefit.⁵⁶ However, the same judge felt reluctant to have the court in the present case rule in a different manner.⁵⁷

Meanwhile, in another early case *Svitak v State*, the Court of Appeals of Washington stated that declaring the atmosphere a public trust natural resource would 'create a new judicial cause of action [that] would necessarily involve resolution of complex social, economic, and environmental issues', which is inappropriate under common law 'because it invades the prerogatives of the legislative branch, thereby violating the separation of powers doctrine'.⁵⁸ The court concluded that '[b]ecause [...] state constitution does not address state responsibility for climate change, it is up to the legislature, not the judiciary, to decide whether to act as a matter of public policy.'⁵⁹

A similar position was expressed by the Circuit Court of Oregon in *Chernaik v Kitzhaber*.⁶⁰ On the appeal, though, the Court of Appeals of Oregon held that a declaration on the atmosphere is justiciable and would not violate the separation of powers principle, meaning that the 'plaintiffs are entitled to a judicial declaration of whether [...] the atmosphere "is a trust resource" that the State of Oregon, as a trustee, has a fiduciary obligation to protect [...] from the impacts of climate change'.⁶¹ On remand, the court of first instance explicitly shied away from recognizing the atmosphere as a natural resource protected by the state public trust doctrine. The court held that although the atmosphere 'perhaps may be said to fall within this broad definition of "resource", [it] does not fit into the structure and legal reasoning which underpins Oregon's public trust doctrine' for the following reasons: 1) unlike the submerged and submersible lands and the waters of the State, the State does not hold title to the atmosphere, as the latter 'is not acquired and sold or traded for economic value and hence is not a commodity' 2) the atmosphere does not present the concern of being 'exhaustible and irreplaceable' in nature, as it 'is not the type of resource that "can only be spent once," although it certainly can be polluted or otherwise changed'.⁶² It remains to be seen though, whether such an interpretation is endorsed in the future.⁶³

4.2. Leaving the question open

In *Kanuk v Alaska* the youth plaintiffs alleged that the defendant, the state Department of Natural Resources breached its public trust obligations stemming from the state constitution by failing 'to protect

⁵⁶ Filippone ex rel. Filippone v Iowa Dept. of Natural Resources, 829 N.W.2d 589, pp. 3-4 (Iowa Ct. App. 2013).

⁵⁷ Ibid

⁵⁸ Svitak ex rel. Svitak v State, 2013 WL6632124, p. 2 (Wash. App. Div. 2013).

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⁶⁰ Chernaik v Kitzhaber, No. 16-11-09273, 2012 WL 10205018 (Or. Cir. Ct. 2012).

⁶¹ Chernaik v Kitzhaber, 328 P.3d 799, p. 808 (Or. Ct. App. 2014).

⁶² Chernaik v Brown, No. 16-11-09273, 2015 WL 12591229, pp. 10-12 (Or. Cir. Ct. 2015).

⁶³ The case was on appeal at the time of writing.

and preserve the atmosphere as a public trust resource'.⁶⁴ The plaintiffs asked the court to declare the atmosphere a public trust resource under the state constitution and 'to declare that the parameters of the [s]tate's duty to protect the atmosphere are [...] "dictated by the best available science", which required carbon dioxide emissions to peak in 2012 and be reduced by at least 6% each year until 2050'.⁶⁵

The Superior Court of Alaska dismissed the case as non-justiciable by observing, *inter alia*, that even if it 'were to declare the atmosphere a public trust resource [...], it would still have to determine whether the defendant breached its fiduciary duty to protect and preserve the atmosphere under the public trust doctrine', which would necessarily involve 'a policy determination about how the state should "fulfill" its fiduciary duty under the public trust doctrine.'66 This position was reiterated by the Supreme Court of Alaska,67 which, however, held that the plaintiffs' public trust and constitutional claims regarding the recognition of the atmosphere as a natural resource were justiciable, because they implied the judicial interpretation of the state constitution.68

In light of this, the court observed that although the state constitution does not explicitly create a public trust, it is applied to describe the nature of the state's duties with respect to wildlife and other natural resources meant for common use.⁶⁹ However, the court stopped short at recognizing the atmosphere as such a resource. For one, it held that the plaintiffs' request for a judgment that the state 'has failed to uphold its fiduciary obligations' concerning the atmosphere cannot be granted, since the court has declined, on political question grounds, to determine precisely what those obligations entail.⁷⁰ Second, the court held that although the state legislature 'has already intimated that the state acts as trustee with regard to the air just as it does with regard to other natural resources', the 'past application of public trust principles has been as a restraint on the state's ability to restrict public access to public resources, not as a theory for compelling regulation of those resources'.⁷¹ Finally, the court judged that:

'Although declaring the atmosphere to be subject to the public trust doctrine could serve to clarify the legal relations at issue, it would certainly not "settle" them. It would have no immediate impact on greenhouse gas emissions in Alaska, it would not compel the State to take any particular action, nor would it protect the plaintiffs from the injuries they allege in their

⁶⁴ Kanuk ex rel. Kanuk v State Dep't of Nat. Res., 335 P.3d 1088, p. 1091 (Alaska 2014).

⁶⁵ Ibid

⁶⁶ Kanuk v State of Alaska, Department of Natural Resources, 3AN1107474, 2012 WL 8262431, p. 4 (Alaska Super, 2012).

⁶⁷ Kanuk ex rel. Kanuk v State Dep't of Nat. Res., 335 P.3d, p. 1097.

⁶⁸ *Ibid.*, p. 1099.

⁶⁹ *Ibid*.

⁷⁰ *Ibid.*, p. 1101.

⁷¹ *Ibid.*, p. 1102.

complaint. Declaratory relief would not tell the State what it needs to do in order to satisfy its trust duties and thus avoid future litigation; conversely it would not provide the plaintiffs any certain basis on which to determine in the future whether the State has breached its duties as trustee.'72

In the end, though, the court took an optimistic course of view, emphasizing that if the plaintiffs are able to bring forward justiciable claims in the future, they have a basis to proceed 'even absent a declaration that the atmosphere is subject to the public trust doctrine.' This is so because the plaintiffs' complaint alleged 'that the atmosphere is inextricably linked to the entire ecosystem, and that climate change is having a detrimental impact on already recognized public trust resources such as water, shorelines, wildlife, and fish.' The court thus concluded that the alleged breach of the state's duties with regard to the management of these resources does not depend on a declaratory judgment about the atmosphere.

To a similar effect was another state atmospheric trust case *Foster v Ecology*, where the youth plaintiffs requested the government of the Washington state to implement rules that would ensure carbon dioxide emissions are reduced to levels scientifically required to protect the oceans from acidification and the climate system from further disruption. The plaintiffs based their claims on the public trust doctrine under the state constitution. Although judge Hill of the Superior Court of Washington did not explicitly expand the state public trust doctrine to encompass the atmosphere, she did nonetheless rebuke the agency's argument that 'since the public trust doctrine has not been expanded by the courts beyond protection of navigable waters it cannot be applied to protection of the "atmosphere." Specifically, the judge observed that such argument 'misses the point since current science makes clear that global warming is impacting the acidification of the oceans to alarming and dangerous levels, thus endangering the bounty of [...] navigable waters.'

In other words, in this case the link between the state of the atmosphere and ocean acidification was once again critical in addressing the former's pollution with GHG emissions, with judge Hill emphasizing that:

⁷² *Ibid*.

⁷³ *Ibid.*, p. 1103.

⁷⁴ *Ibid*.

⁷⁵ *Ibid*.

⁷⁶ Foster v Wash. Dep't of Ecology, No. 14-2-25295-1 SEA, 2015 WL 7721362, p. 1 (Wash. Super. Ct. 2015).

⁷⁷ *Ibid.*, pp. 3-4.

⁷⁸ *Ibid.*, p. 4.

⁷⁹ *Ibid*.

'... the navigable waters and the atmosphere are intertwined and to argue a separation of the two, or to argue that GHG emissions do not affect navigable waters is nonsensical. Therefore, the public trust doctrine mandates that the State act through its designated agency to protect what it holds in trust. The Department of Ecology is the agency authorized both to recommend changes in statutory emission standards and to establish limits that are responsible.'

The judge, referring to the state constitution as well as the agency's own regulations, concluded that 'if ever there were a time to recognize through action [the] right to preservation of a healthful and pleasant atmosphere, the time is now.'81

In contrast, in another state atmospheric trust case *Funk v Wolf*, the Commonwealth Court of Pennsylvania left the question of whether the atmosphere is a natural resource virtually unaddressed, by merely observing that the requested declaration on the atmosphere would have no practical effect.⁸² The unwillingness of the court in Pennsylvania to recognize the atmosphere as a public trust natural resource, or even address the question altogether, seemed strange due to the recognition of the public trust doctrine in the state constitution, granting environmental human rights and the existing state jurisprudence related to it.⁸³

4.3. Recognizing the atmosphere as a natural resource

In *Butler v Brewer* the Court of Appeals of Arizona declared that courts have never 'determined that the atmosphere, or any other particular resource, is *not* a part of the public trust'.⁸⁴ Although the court stated that the present case 'does not address the measures by which a resource may be determined to be a part of the public trust or a framework for analyzing [whether] the public trust applies to the atmosphere with respect to GHG emissions and climate change', it 'assume[d] without deciding that the atmosphere is a part of the public trust'.⁸⁵

Meanwhile, the District Court of Texas in *Bosner-Lain v State Commission on Environmental Quality* and the Court of Appeals of New Mexico in *Sanders-Reed v Martinez* went even further, recognizing that the public trust doctrine and constitutional law in the respective states protect the atmosphere as a natural resource. Thus, the court in Texas ruled that:

⁸⁰ *Ibid*.

⁸¹ *Ibid*.

⁸² Funk v Wolf, 144 A.3d 228, p. 251 (Pa. Cmwlth. 2016).

⁸³ For a detailed analysis of this case see Varvastian, S. (2017) 'Climate Change and the Constitutional Obligation to Protect Natural Resources: The Pennsylvania Atmospheric Trust Litigation', Climate Law 7(2-3), pp. 209-226.

⁸⁴ Butler ex rel. Peshlakai v Brewer, Not Reported in P.3d (Ariz. Ct. App. 2013).

⁸⁵ *Ibid*.

'... the public trust doctrine includes all natural resources of the State including the air and atmosphere. The public trust doctrine is not simply a common law doctrine but was incorporated into the Texas Constitution [...], which states: "The conservation and development of all of the natural resources of this State, [...] and the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties; and the Legislature shall pass all such laws as may be appropriate thereto.""

Similarly the New Mexico court agreed that the state constitution 'recognizes that a public trust duty exists for the protection of New Mexico's natural resources, including the atmosphere, for the benefit of the people of this state.'87

Ultimately, however, despite recognizing the atmosphere as a public trust natural resource, the state courts in all three above-mentioned cases dismissed them on various other grounds.⁸⁸

5. Concluding remarks

So far, US courts have not demonstrated unity with regard to recognition of the atmosphere as a natural resource protected by the common law public trust doctrine. While some state courts have explicitly rejected the idea, or left the question open, others have been more willing to adapt the doctrine to the pressing needs of this century, recognizing its relevance to the relationship between atmospheric pollution with GHG emissions and climate change. Furthermore, it is still unclear whether the doctrine proves viable at federal level. Meanwhile, at state level, there are still many jurisdictions that have not tackled the question altogether.

Although putting the atmosphere on the map of natural resources is instrumental in recognizing that it could be damaged by GHG emissions, the discussed jurisprudence indicates that a bare declaration on the atmosphere might have little practical effect; it is more rational to link it to other resources. Thus, it is important to stress the interaction between the atmosphere and water resources, which offers a novel angle to the application of the public trust doctrine, while building on the established traditional interpretation of it by courts all across the US. This way, plaintiffs in future atmospheric trust litigation could avoid the pitfalls faced by their predecessors and present much more viable claims. Regardless of whether such claims would target action at federal or state level, their successful exploration would be

⁸⁶ Bonser-Lain v Texas Com'n on Environmental Quality, 2012 WL 3164561 (Texas Dist. Ct. 2012).

 ⁸⁷ Sanders-Reed ex rel. Sanders-Reed v Martinez, 350 P.3d 1221, p. 1225 (N.M. Ct. App. 2015).
 88 For instance, the court in New Mexico concluded that the state constitution delegates the implementation of specific duties to the legislature; therefore, 'the courts cannot independently intervene to impose a common law public trust duty upon the State to regulate greenhouse gases in the atmosphere.' (*Ibid.*, pp. 1225-1227).

crucial as, despite all the setbacks, it has long been perceived that no step is too small to take in addressing climate change.