

NOTES

Using the Public Trust Doctrine to Balance the Impacts of Renewable Energy Projects

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INTRODUCTION

The public trust doctrine, which creates an affirmative duty on the government to protect natural resources on behalf of the public,¹ is a useful tool for environmentalists. Although it was traditionally limited to resources like navigable waters and uses like fishing and navigation, the doctrine has since been expanded in some states to cover resources like groundwater, land, wildlife, and scenic views, as well as passive uses like hiking and bird watching.² The doctrine can be used to protect such natural resources from development—even when the development in question is for environmental purposes, such as renewable energy projects undertaken to reduce dependence on carbon-intensive energy. In this Note, I

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1. Hope M. Babcock, *Using the Federal Public Trust Doctrine to Fill Gaps in the Legal Systems Protecting Migrating Wildlife from the Effects of Climate Change*, 95 NEB. L. REV. 649, 675 (2017).

2. Hope M. Babcock, *Is Using the Public Trust Doctrine to Protect Public Parkland from Visual Pollution Justifiable Doctrinal Creep?*, 42 ECOLOGY L.Q. 1, 3, 20 (2015); Alexandra B. Klass, *Renewable Energy and the Public Trust Doctrine*, 45 U.C.D. L. REV. 1021, 1024–25 (2012).

will give a brief overview of the public trust doctrine generally—how it began and how it has evolved—as well as how it can be in tension with renewable energy projects. I will then explore how the public trust doctrine could have been used in Hawaii to fight two wind farms opposed by local communities and how an expansive doctrine that covers both natural resources and the climate could help balance competing interests by ensuring that all environmental benefits and harms are considered.

I. THE TRADITIONAL PUBLIC TRUST DOCTRINE

The public trust doctrine claims that the government holds and protects its lands' natural resources on behalf of the public.³ Although the doctrine's basic tenet is quite simple, the origins and scope of the public trust doctrine are complex and confusing. The doctrine's historical origins arguably go as far back as Justinian,⁴ though the doctrine was largely dormant in American legal theory until its reemergence in the 1970s through champions like Joseph L. Sax, a noted environmentalist and legal scholar.⁵ Though some scholars, such as Professor James Huffman, question the accuracy of its historical roots in American jurisprudence, environmentalists, courts, and state legislatures have continued to use the public trust doctrine to protect natural resources, giving the doctrine legitimacy through recognition.⁶

The doctrine's legal bases are equally complex and confusing. The public trust is primarily a state-based doctrine. *Illinois Central Railroad Co. v. Illinois* and subsequent Supreme Court decisions held that the public trust "is neither a creature nor a component of federal law," but rather a "judicial explication of *state . . .* law principles."⁷ As such, we must "look to state law to determine the source and scope of public trust principles."⁸ Each state has its own version of the public trust doctrine, with different histories, authorities, and scopes.

The public trust doctrine can be authorized under several sources within state law: state common law, state constitutions and statutes, and/or state sovereignty itself. Each state takes a different approach. For example, in Nevada and Pennsylvania, state constitutions are cited as the main sources of public trust

3. Babcock, *supra* note 1, at 675.

4. Richard J. Lazarus, *Changing Conceptions of Property and Sovereignty in Natural Resources Law: Questioning the Public Trust Doctrine*, 71 IOWA L. REV. 631, 632 (1986).

5. Joseph L. Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 MICH. L. REV. 471, 484 (1970).

6. Hope M. Babcock, *The Public Trust Doctrine: What a Tall Tale They Tell*, 61 S.C. L. REV. 393, 402 (2009).

7. Richard M. Frank, *The Public Trust Doctrine: Assessing Its Recent Past & Charting Its Future*, 45 U.C.D. L. REV. 665, 684 (2012).

8. *Id.* at 685. Although some lower courts have said that the federal government has public trust duties, courts in more recent cases have been hesitant to apply the doctrine to federal lands and officials. This is a particularly important issue in the western half of the U.S., where significant portions of land are federally owned. *Id.* at 673, 680.

principles.⁹ In Vermont, the state legislature has declared that its groundwater resources are “impressed with public trust obligations” through statutory law.¹⁰ In California, some have argued that, though the public trust doctrine is recognized in the State’s constitution, statutes, and common law, the trust itself “represents a fundamental, inherent attribute of state sovereignty.”¹¹ The main source of the public trust doctrine, however, comes from states’ common law. Courts have been primarily responsible for acknowledging and expanding the doctrine.¹²

States also differ in the scope of their doctrines—who can use it, who it can be used against, and what natural resources and uses it covers. As for who can use the doctrine and who it can be used against, there are three main categories: private citizens suing the government for violating the doctrine, private citizens suing other private citizens for violating the doctrine, and the government suing private citizens for violating the doctrine.¹³ Courts generally allow public trust citizen suits against government agencies. In *Marks v. Whitney*, for example, the Supreme Court of California held that “any member of the general public . . . has standing to raise a claim of harm to the public trust.”¹⁴ Similarly, in *Paepcke v. Public Building Commission of Chicago*, the Supreme Court of Illinois held that “[i]f the ‘public trust’ doctrine is to have any meaning or vitality at all, the members of the public, at least taxpayers who are the beneficiaries of that trust, must have the right and standing to enforce it.”¹⁵ Some states have also upheld the second category—private citizens wanting to sue other private citizens. Connecticut and Hawaii, for example, have granted standing to private citizens suing other private citizens through statute and constitutional amendment, respectively.¹⁶ Still, some courts either have not ruled on the issue or have rejected such attempts. Surprisingly, despite California’s generally extensive public trust doctrine, a California court of appeal rejected this second category.¹⁷ In *Center for Biological Diversity v. FPL Group*, the court reasoned that because the obligation to protect the trust fell on the government, not the private citizens, the suit had to

9. *Id.* at 685.

10. *Id.* at 676.

11. *Id.* at 686.

12. *Id.*

13. Lazarus, *supra* note 4, at 630–31.

14. Nat’l Audubon Soc’y v. Superior Court, 658 P.2d 709, n.11 (Cal. 1983).

15. 46 Ill. 2d 330, 340–41 (1970) (“To tell them that they must wait upon governmental action is often an effectual denial of the right for all time.”)

16. CONN. GEN. STAT. § 22a-16 (2020) (“ . . . [A]ny person, partnership, corporation, association, organization or other legal entity may maintain an action in superior court . . . for declaratory and equitable relief against . . . any person, partnership, corporation, association, organization or other legal entity, acting alone, or in combination with others, for the protection of the public trust in the air, water and other natural resources”); HAW. CONST. art. XI, § 9 (“Each person has the right to a clean and healthful environment . . . including control of pollution and conservation, protection and enhancement of natural resources. Any person may enforce this right against any party, public or private”).

17. *Ctr. for Biological Diversity v. FPL Grp.*, 83 Cal. Rptr. 3d 588, 601–02 (Ct. App. 2008).

be brought against the permitting agency.¹⁸ The third category has gained increasing importance over the past couple of decades as a way for agencies to counter private property rights while trying to enforce environmental protection standards.¹⁹

The natural resources and uses covered by the doctrine vary between states and throughout time. In the beginning, the resources and uses covered by the doctrine were limited. The public trust doctrine applied only to navigable waters and active uses like fishing and navigation.²⁰ *Illinois Central*, for example, dealt with submerged lands under the navigable waters of Lake Michigan.²¹ The Supreme Court held that the land was “held in trust for the people of the State that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing.”²² *Marks v. Whitney* held that the public trust in California covered tidelands,²³ and *National Audubon Society v. Superior Court* went a little further, declaring “all navigable lakes and streams” to be a part of the public trust.²⁴ The traditional doctrine may have been so limited because it only intended to “protect common rights to access for commerce purposes (hence the criteria of navigability).”²⁵

The public trust does not provide a complete bar to private ownership. A resource that is part of the public trust may still be transferable to private owners in specific circumstances. Some states allow trust resources to be conveyed to private entities if the government has “considered the proposed activity’s potential adverse impacts to the public trust and has concluded that the impacts on remaining trust resources are minor.”²⁶ Others try to balance competing interests by requiring that the resource’s use is “consistent with the trust’s purposes, do[es] not interfere with protected uses of those resources, and preserve[s] them for future as well as present generations.”²⁷ Still others allow conveyances when they are legislatively authorized.²⁸ Note also that, under the Supremacy Clause, the federal government could override state public trust concerns if it wanted to promote a particular project or policy and “clearly expressed that it intended to override state law to the contrary.”²⁹

18. *Id.* at 602.

19. Lazarus, *supra* note 4, at 646.

20. Babcock, *supra* note 2, at 2.

21. *Ill. Cent. R. Co. v. Illinois*, 146 U.S. 387, 452 (1892).

22. *Id.* at 452.

23. 491 P.2d 374, 378–79 (Cal. Ct. App. 1971).

24. 658 P.2d 709, 719 (Cal. 1983).

25. Babcock, *supra* note 2, at 15.

26. *Id.* at 11; Lazarus, *supra* note 4, at 650–51.

27. Babcock, *supra* note 2, at 11.

28. *Id.* at 11; Lazarus, *supra* note 4, at 650–51.

29. Klass, *supra* note 2, at 1058.

II. THE EXPANSION OF THE PUBLIC TRUST DOCTRINE

Over the last five decades, the public trust doctrine has grown and evolved. Whereas the doctrine was originally applied to protect “traditional uses of coastal resources and tidelands—like navigation, fishing, and oystering”—the doctrine is now applied to protect “lakes, beaches, groundwater, and even mountains, and is used to protect non-traditional uses of trust resources like recreation, scientific study, bird watching, and aesthetics.”³⁰ Unlike the commerce-related purposes of the traditional doctrine, new public trust doctrines “herald[] conservationist principles.”³¹

Scholars have used many justifications for expanding the doctrine. Some rely on the initial purposes of the doctrine, as set out by early champion Joseph L. Sax: (1) some interests are “so intrinsically important to every citizen that their free availability tends to mark the society as one of citizens rather than of serfs”; (2) some interests “are so particularly the gifts of nature’s bounty that they ought to be reserved for the whole of the populace”; and (3) some uses “have a peculiarly public nature that makes their adaptation to private use inappropriate.”³² Other scholars have used the functions of the doctrine as justification for expansion. Professor Hope Babcock, for example, has pointed to four functions of the public trust doctrine that justify expanding it to resources and uses not previously covered: (1) filling “regulatory gaps” until positive law can be enacted; (2) establishing “interim normative standards and other management tools” to assess proposals that grant public trust resources to private parties; (3) exposing “underlying social ills” to encourage enactment of positive law; and (4) ending the “regulatory commons”—when “regulatory inertia militates against gap filling by positive law”—by “chang[ing] the dynamic preventing enactment of positive law.”³³ These original purposes and functions supported the use of the public trust doctrine to protect traditional resources and uses, but proponents of expansion have argued—to varying levels of success—that the same purposes and functions support extending the doctrine to include nontraditional resources and uses.³⁴

One of the earliest expansions in the public trust doctrine was within the water resources and uses category. Originally limited to tidal and submerged lands in navigable waters,³⁵ courts began expanding the scope to include inland navigable waters,³⁶ shorelines,³⁷ and even now-dry beds and banks of rivers.³⁸ Some states

30. Babcock, *supra* note 1, at 678–79.

31. Babcock, *supra* note 2, at 15.

32. Sax, *supra* note 5, at 484.

33. Babcock, *supra* note 6, at 405, 414.

34. *See, e.g.*, Babcock, *supra* note 2, at 19, 24, 35.

35. Nat’l Audubon Soc’y v. Superior Court, 658 P.2d 709, 719 (Cal. 1983).

36. Frank, *supra* note 7, at 671–72.

37. *Id.* at 672.

38. *Id.* at 672–73.

now go as far as including groundwater.³⁹ As for uses, public access to these waterways has been one area of expansion. There is wide variation within state public trust doctrines on this type of use. In one case, for example, the New Jersey Supreme Court granted “a public trust-based easement right to cross privately-owned, shoreline property to get to the ocean . . . not limited to the right of passage along privately-owned dry sand areas, but also encompass[ing] the public’s right to sunbathe, picnic, etc. on those dry sand areas.”⁴⁰ This extreme version has not been adopted by most other state courts, which have instead limited the public’s right of access to, for example, “tideland areas below the coastal ordinary high water mark.”⁴¹ Though most of these expansions deal with consumptive water rights (rights to use water in a way that permanently removes it from the natural resource system), there has also been some expansion in the area of water quality.⁴² A California court of appeal, for example, has stated that under *National Audubon*, the State, as a trustee, can modify water rights in previously-issued permits to protect water quality values.⁴³

Wildlife can also fall under the public trust doctrine, though the doctrine has been used less often in that area. Some states, like New Jersey and Virginia, have explicitly recognized the protection of wildlife resources under the public trust doctrine. In *New Jersey Department of Environmental Protection v. Jersey Central Power & Light Co.*, New Jersey sued a power plant over a sudden shutdown that had interrupted the discharge of hot water into a nearby creek, killing over 500,000 menhaden fish.⁴⁴ The New Jersey Superior Court held that “the State had the right and the fiduciary duty to seek damages of all wild life which are part of the public trust.”⁴⁵ Similarly, in *In re Steuart Transportation Co.*, a Virginia district court held that “[u]nder the public trust doctrine, the State of Virginia and the United States have the right and the duty to protect and preserve the public’s interest in natural wildlife resources.”⁴⁶ However, the protection of wildlife under the public trust doctrine remains highly state-dependent. Missouri, for example, has never recognized wildlife as a public trust resource,⁴⁷ even

39. *Id.* at 675–76.

40. *Id.* at 674 (citing *Raleigh Ave. Beach Ass’n v. Atlantis Beach Club, Inc.*, 185 N.J. 40, 52–60 (2005)).

41. *See, e.g.*, Frank, *supra* note 7, at 674 (citing Opinion of the Justices, 649 A.2d 604, 607 (N.H. 1994)).

42. *Id.* at 677.

43. *U.S. v. State Water Res. Control Bd.*, 227 Cal. Rptr. 161, 200–01 (Ct. App. 1986).

44. Lance Noel & Jeremy Firestone, *Public Trust Doctrine Implications of Electricity Production*, 5 MICH. J. ENV’T & ADMIN. L. 169, 186–87 (2015).

45. *N.J. Dep’t of Env’t Prot. v. Jersey Cent. Power & Light Co.*, 336 A.2d 750, 758–59 (N.J. Super. Ct. App. Div. 1975), *rev’d on other grounds*, 351 A.2d 337 (N.J. 1976).

46. 495 F. Supp. 38, 40 (E.D. Va. 1980) (noting that the right to protect natural wildlife resources derives “not . . . from ownership of the resources but from a duty owing to the people.”).

47. Missouri has an extremely limited public trust doctrine, having only expressly acknowledged it a few times. *See State ex. rel. Citizens’ Elec. Lighting & Power Co. v. Longfellow*, 69 S.W. 374, 379 (Mo. 1902) (stating that Missouri holds the beds of navigable waters in trust for the benefit of the people for

though its statutes echo public trust language in regulating and protecting wildlife: “The ownership of and title to all wildlife of and within the state” belongs to Missouri “for the purpose of control, management, restoration, conservation and regulation thereof.”⁴⁸ Professor Hope Babcock has advocated for a federal public trust doctrine that covers wildlife because “only the federal version of the doctrine can be coterminous with the interstate migratory corridors that need protection.”⁴⁹

Similarly, scenic views are not yet a widely recognized public trust value, but some states have incorporated them into their versions of the doctrine. The Wisconsin Supreme Court, for example, has noted that “the enjoyment of scenic beauty is a public right” under a state law on dam permitting.⁵⁰ Although scenic views seem very remote from the traditional public trust resources, which are tangible and not passively used, some scholars have advocated for the doctrine’s expansion because protecting scenic views aligns with the purposes of the traditional use of the public trust doctrine. Professor Babcock has argued that scenic views satisfy all three of Sax’s purposes⁵¹ and, using her own four functions framework, has claimed that applying the doctrine to protect scenic views would be “consistent with the doctrine’s gap-filling role and malleable nature.”⁵² She suggests that aesthetics are related to the doctrine’s “socializing benefits” and that “interfering with the aesthetic enjoyment of a trust resource is comparable with preventing access to that resource.”⁵³ Besides the aesthetic value, there is a considerable amount of research showing that scenic landscapes can reduce stress and benefit mental health.⁵⁴ Many of these benefits are also associated with trust resources like parks,⁵⁵ so the extension of the doctrine to scenic views, she argues, may not be so attenuated.

Some particularly ambitious scholars and environmental groups are attempting to expand the doctrine to cover air resources in the face of increasing concern about climate change. The Atmospheric Trust Litigation, for example, is a global

the purposes of navigation and commerce); *Citizens for Pres. of Buehler Park v. City of Rolla*, 230 S. W.3d 635, 639–40 (Mo. Ct. App. 2007) (holding that dedication of a park to the City so it “could maintain and improve it” created a “public trust” in the park and that citizens had standing to sue City for trying to sell the property); *Hinton v. City of St. Joseph*, 889 S.W.2d 854, 860–61 (Mo. Ct. App. 1994) (refusing to impose a public trust on a proposed park because of conditions in the dedication to the city).

48. MO. REV. STAT. § 252.030 (2020).

49. Babcock, *supra* note 1, at 685.

50. *Muench v. Pub. Serv. Comm’n*, 261 Wis. 492, 508 (1952).

51. Babcock, *supra* note 2, at 24 (“[S]eeing beautiful natural scenery is of great intrinsic importance to the public, and . . . wild places . . . are such unique gifts of nature’s bounty that the interest in maintaining them as they are so ‘peculiarly public’ that their appropriation for private use . . . is inappropriate.”).

52. *Id.* at 3.

53. *Id.* at 3, 21–22, 24.

54. *Id.* at 26–30.

55. *Id.* at 31.

campaign created “to provide a legal structure geared toward forcing urgent emissions reduction around the world.”⁵⁶ In May 2011, the non-profit Our Children’s Trust helped young people initiate legal processes in every state in the United States, all of which “invoked the public trust doctrine and declared a uniform sovereign trust duty to protect the atmosphere needed by the youth and future generations for their long-term survival.”⁵⁷ In 2015, Our Children’s Trust helped launch one of these suits at the federal level, which has garnered significant attention—*Juliana v. United States*.⁵⁸ The plaintiffs in *Juliana* alleged that the federal government “fail[ed] to protect the essential resources in the public trust by promoting the development of fossil fuels.”⁵⁹ The plaintiffs had some initial victories. A magistrate recommended denying the government’s and fossil fuel interveners’ motions to dismiss and found that the constitutional and federal public trust claims could go forward.⁶⁰ This decision was then upheld by a U.S. district court, and the Supreme Court denied the government’s application for a stay.⁶¹ However, the case was then dismissed by the Ninth Circuit Court of Appeals for lack of standing.⁶²

Efforts to expand the doctrine to the atmosphere, however, have been controversial. Even scholars who agree that the doctrine theoretically covers the atmosphere disagree over how far to extend the doctrine in this area—some worry that extending the doctrine too far “exposes the public trust doctrine’s greatest weakness: it simply claims too much.”⁶³ Indeed, some scholars see the expanding boundaries of the doctrine as too broad, surpassing the original meaning and purposes of the doctrine.⁶⁴ In response, proponents of extending the doctrine have pointed to its prior expansion as evidence of the doctrine’s flexibility to support further expansion.⁶⁵ They point to the way the doctrine has already evolved in some states—from tidelands to drylands and from protecting traditional uses (navigation and fishing) to “non-water-based” and so-called “passive” uses (like

56. Mary C. Wood & Charles W. Woodward, IV, *Atmospheric Trust Litigation and the Constitutional Right to a Healthy Climate System: Judicial Recognition at Last*, 6 WASH. J. ENV’T L. & POL’Y 633, 642 (2016).

57. *Id.* at 643.

58. *Id.* at 645.

59. *Id.* at 646.

60. *Id.*

61. *Id.*

62. *Juliana v. United States*, OUR CHILDREN’S TRUST, <https://perma.cc/9859-SQ3A> (last visited Jan. 21, 2020); Press Release, OUR CHILDREN’S TRUST, Decision of Divided Ninth Circuit Court of Appeals Finds Primarily for *Juliana* Plaintiffs, but Holds Federal Judiciary Can Do Nothing to Stop the U.S. Government in Causing Climate Change and Harming Children (Jan. 17, 2020), <https://perma.cc/R5ZK-6YSE>.

63. See J. Peter Byrne, *The Public Trust Doctrine, Legislation, and Green Property: A Future Convergence?*, 45 U.C.D. L. REV. 915, 927 (2012).

64. See, e.g., Lazarus, *supra* note 4, at 658; James L. Huffman, *Speaking of Inconvenient Truths—A History of the Public Trust Doctrine*, 18 DUKE ENV’T L. & POL’Y F. 1, 95 (2007).

65. Babcock, *supra* note 2, at 3, 21–22, 24.

hiking, bird watching, scientific research, etc.)—as they try to get more and more resources recognized as part of the public trust.⁶⁶

III. THE PUBLIC TRUST DOCTRINE AND RENEWABLE ENERGY

The majority of traditional public trust doctrine cases have focused on projects that benefit present generations (for example, through economic development) rather than future generations (for example, through clean air and water, enjoyment of land use, etc.).⁶⁷ More recently, however, there has been another type of public trust conflict, one where both sides claim benefits for future generations: cases where renewable energy projects threaten public trust resources.

Given the reality of climate change and the need to de-carbonize our power generation, there has been a large push towards renewable energy as an environmentally-friendly alternative to fossil fuel power generation.⁶⁸ However, though renewable energy projects can help lower our greenhouse gas emissions, they can also create unintended environmental harms that interfere with public trust resources. For example, solar and wind farms take up a lot of land,⁶⁹ which can interfere with critical habitats and human enjoyment of public lands. Solar projects also require water to clean solar collection and reflection surfaces and for cooling (for concentrating solar power plants),⁷⁰ creating conflicts in areas with water scarcity.⁷¹ Wind turbines can affect wildlife, impair sightlines, and create noise pollution.⁷²

Environmentalists have been torn, wanting the benefits of renewable energy projects but fearful of the unintended environmental impacts, leading to hesitant support and seemingly unlikely opposition. The Natural Resources Defense Council, Defenders of Wildlife, and the Wilderness Society have given “lukewarm support” to large-scale solar projects approved by the Department of the Interior, while the Sierra Club has sued California over a solar project in the Mojave Desert because of its potential effect on a desert tortoise habitat.⁷³

So far, courts and scholars have tried to balance these competing tensions in different ways. The California Court of Appeal, in *Center for Biological Diversity*, held that courts must take the public interest in both natural resources and renewable energy into account, but that it is not for the court to choose one

66. *Id.*

67. Klass, *supra* note 2, at 1063.

68. U.N. ENV'T PROGRAMME AND WORLD METEOROLOGICAL ORG., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE [IPCC], IPCC SPECIAL REPORT ON RENEWABLE ENERGY SOURCES AND CLIMATE CHANGE MITIGATION 9 (2011), available at <https://perma.cc/L8U5-LC5Q>.

69. For example, the Imperial Valley solar farm in California will be ten square miles. Klass, *supra* note 2, at 1059.

70. *Water Use Management*, SOLAR ENERGY INDUS. ASS'N, <https://perma.cc/G45B-HKK6> (last visited Jan. 21, 2020).

71. Klass, *supra* note 2, at 1040. See also Noel & Firestone, *supra* note 44, at 193.

72. Klass, *supra* note 2, at 1040, 1046–47; Noel & Firestone, *supra* note 44, at 194.

73. Klass, *supra* note 2, at 1062–63.

side over the other.⁷⁴ Others have focused on the idea of alternatives. In *Waiahole I*, the Hawaii Supreme Court held that, in approving water use permit applications, the State must consider potential alternatives to the proposed projects that would reduce harms to trust resources.⁷⁵ Some Hawaiian courts have since gone even further, “requir[ing] permit applicants to demonstrate that there is an ‘absence of practicable alternatives.’”⁷⁶ Meanwhile, scholars like Professor Alexandra Klass have advocated for more transparency in decision-making and a more complete record for the ultimate judicial review as a way to that ensure that renewable projects do not adversely affect public trust values.⁷⁷

These formulations and suggestions understand the need to take both the benefits of renewable energy projects on climate change and the harms of renewable energy projects on local natural resources into account to accurately reflect the true impact of these projects. The *Center for Biological Diversity* approach and Klass’s transparency argument, even if they do not tip the scale in favor of one environmental consideration or the other, at least make sure that the costs of the project are not hidden. The alternatives approach, adopted in *Waiahole I* and strengthened by some Hawaiian courts, not only brings these hidden costs to light, but also encourages discussion on paths forward that can benefit both sides (or at least mitigate harms).

Currently, the public trust doctrine is a patchwork of state common law, statutes, and constitutions. This state-by-state variation and the lack of a federal version of the public trust doctrine has upsides and downsides. State-based doctrines allow states (generally those with stronger environmental ambitions) to push boundaries and test extremely protective versions of the doctrine.⁷⁸ On the other hand, because of the lack of federal authority and the patchwork of state common law, statutes, and constitutions, balancing public interests with renewable energy projects under the public trust doctrine has become even more difficult. Professor Klass, along with other scholars,⁷⁹ has called for a federal public trust doctrine, arguing that “Congress is likely the best branch of government to set that balance among competing public trust values, rather than having courts apply indeterminate statutes when disputes,” like those in renewable energy projects, “inevitably arise.”⁸⁰ A federal public trust doctrine that covers air resources and a healthy

74. 83 Cal. Rptr. 3d 588, 603–04 (Ct. App. 2008).

75. *In re Water Use Permit Applications (Waiahole I)*, 9 P.3d 409, 483 (Haw. 2000).

76. Noel & Firestone, *supra* note 44, at 233 (quoting *In re Contested Case Hearing On the Water Use Permit Application Filed By Kukui (Molokai), Inc.*, 174 P.3d 320, 334–35 (Haw. 2007)).

77. Klass, *supra* note 2, at 1065, 1070–72.

78. A concern in some state-by-state schemes is that, without a federal “floor” (minimum level of protection), states may not provide any level of protection to the right or resource. Although, under the current state-by-state public trust doctrine, that is true for some states, others, which do not have strong public trust doctrines (or the public trust doctrine at all) may still have constitutional protections that mirror the doctrine’s protection of natural resources. *Id.* at 1066–67.

79. *See, e.g.*, Babcock, *supra* note 1, at 696.

80. Klass, *supra* note 2, at 1069.

climate would also be beneficial because these resources, which are meant to be protected by renewable energy projects, do not respect state borders. Having a federal public trust doctrine that can weigh these benefits against the harms to other public trust resources (like endangered species, which may also cross borders) would allow for a more truthful balancing of the benefits and harms of a renewable energy project.

IV. THE KAHUKU AND PALEHUA WIND PROJECTS

Conflicts between renewable energy projects to protect our climate and community opposition to protect local natural resources have occurred all over the country. The public trust doctrine could be a powerful tool for environmental groups and communities opposing local renewable projects that threaten their public resources. But their ability to use this tool is heavily dependent on the version of the doctrine adopted by the state. In states with robust public trust doctrines, like in California and Hawaii, opponents of these projects are more likely to succeed. These states, however, also have extreme renewable energy goals,⁸¹ which may lead to state agencies giving extra weight to the benefits of renewable energy projects over the impacts on local resources when considering permits.⁸² These extreme goals may also mean that these conflicts will occur more frequently as more renewable energy projects are developed to meet the demand. This section will explore two wind turbine projects in Hawaii, where the tension between protecting local natural resources and protecting the climate resulted in community protests and legal action.

A. BACKGROUND ON THE PROJECTS

One place where the conflict between renewable energy projects and local natural resources has come to a head is Kahuku, a village on the island of Oahu, where nearly 130 people were arrested while protesting a wind energy project in 2019.⁸³ In January 2015, the Hawaii Public Utilities Commission (“PUC”) approved a contract for a wind farm between Hawaiian Electric Company, Inc. (“HECO”)—the electric utility that serves Oahu—and Champlin/GEI Wind Holdings. The protestors argued that the wind farm, called Na Pua Makani, “poses a threat to the Hawaiian hoary bat and other endangered species, will affect learning and sleeping due to the noise pollution and proximity to schools, and will destroy the country landscape.”⁸⁴

81. *Renewable Energy Portfolio Standard: Hawaii*, NC CLEAN ENERGY TECH. CTR. (May 31, 2018), <https://perma.cc/7YTV-9Z4E>; *Renewable Energy Portfolio Standard: California*, NC CLEAN ENERGY TECH. CTR. (Sept. 24, 2018), <https://perma.cc/A5KC-22GP>.

82. See discussion *infra* Section IV.D (discussing allegations that Hawaii’s Public Utilities Commission is approving too many projects without considering impacts on local resources).

83. Robert Bryce, *Hawaii Protests Show Why Wind Energy Can’t Save Us from Climate Change*, THE HILL (Nov. 13, 2019, 7:00 AM), <https://perma.cc/DY5D-UANU>.

84. Kevin Brown, *Oahu Residents Unite to Protest the Construction of More Towering Wind Turbines in Kahuku*, KE ALAKA’I (Nov. 19, 2019), <https://perma.cc/6XVQ-6YXD>.

Although the turbines have already been built, the project still faces three⁸⁵ legal challenges.⁸⁶ In 2020, the Hawaii Supreme Court agreed to hear a legal challenge brought by Keep the North Shore Country (“KNSC”).⁸⁷ KNSC is challenging the project over its environmental review, arguing that a key component—the environmental assessment on the effect of the turbines on endangered opeapeas (hoary bats)—is inadequate.⁸⁸ KNSC believes that the estimate of how many bats may “fall victim” to a “take” (be killed by a wind turbine) is too low.⁸⁹ Proponents of the reassessment point to other wind farms that have had to reassess their bat take counts after beginning operation to account for higher bat takes than claimed in initial estimates.⁹⁰ While waiting for arguments to be scheduled, the Court denied KNSC’s motion for stay upon appeal to temporarily suspend the project’s habitat conservation plan and incidental take license.⁹¹ KNSC, joined by the Kahuku Community Association, has also launched another legal challenge, arguing that the turbines were wrongfully permitted to be closer to homes and schools than the Land Use Ordinance allows.⁹² The third legal challenge was brought by Life of the Land, which argued that the PUC should not have granted the power purchase agreement to the AES Corporation, which acquired the project from Champlin/GEI Wind Holdings,⁹³ because the project did not get an incidental take permit within the agreement’s set time frame.⁹⁴ The PUC conducted a hearing in November 2019, where nearly 100 opponents sat in silent

85. Another legal challenge connected to the project has since been settled. Although it does not directly affect the outcome of the wind farm, it may lead to increased community input in similar projects. The lawsuit, by a Kahuku resident, alleged that the state Board of Education violated the state’s “Sunshine Law” by “[holding] secret meetings and ignor[ing] public input” before it commented on the project’s environmental impact statement in 2016. ‘A’ali’I Dukelow, *Concerned Resident Alleges BOE Ignored Public Input on Kahuku Turbines Built Near Schools*, KITV4 (Aug. 26, 2020), <https://perma.cc/4KLN-8EZ6>. The resident was concerned about the noise pollution of the project so near her children’s elementary school and its potential impact on their learning. *Id.* The lawsuit was settled in September 2020 after the state Board of Education agreed to reconsider the resident’s petition, which would create “new rule that would require the Hawaii Department of Education to hold school community meetings over proposed development[s] near a school or library.” Suevon Lee, *Board of Ed Settles Sunshine Lawsuit, Will Rehear Petition*, HONOLULU CIVIL BEAT (Sept. 25, 2020), <https://perma.cc/Y5QS-V63X>.

86. *Controversial Kahuku Wind Farm Is Built, What’s Next?*, KITV (Feb. 9, 2020, 1:50 PM), <https://perma.cc/KRG8-HA3T>; Megan Fernandes, *Protestors Block Construction of AES’s Pua Makani Wind Farm*, PAC. BUS. NEWS (Oct. 14, 2019), <https://perma.cc/8RNE-9WRE?type=image>.

87. Diane Ako, *Supreme Court Agrees to Hear Challenge from Kahuku Wind Farm Opponents*, KITV (Mar. 2, 2020), <https://perma.cc/F6H5-FAYB>.

88. Gina Mangieri, *Kahuku Wind Farm Building While Legal and Regulatory Challenges Loom*, KHON2 (Oct. 18, 2019), <https://perma.cc/DDS4-3HM7>.

89. *Id.*

90. Mark Ladao, *Controversial Kahuku Wind Project Being Connected to Electric Grid*, HONOLULU STAR-ADVERTISER (Aug. 11, 2020), <https://perma.cc/W8GA-PDLQ>.

91. *Id.*

92. KITV, *supra* note 86.

93. *Na Pua Makani Wind Energy Project*, HAW. STATE ENERGY OFF.: HAW. RENEWABLE ENERGY PROJECTS DIRECTORY, (last visited Jan. 22, 2020), <https://perma.cc/2CJ9-5ZVQ>.

94. Mangieri, *supra* note 88.

protest.⁹⁵ The PUC denied Life of the Land’s motion, and Life of the Land has filed a direct appeal to the Hawaii Supreme Court.⁹⁶

A similar fight happened over a wind farm in Palehua, also on the island of Oahu.⁹⁷ According to HECO, which had signed a power purchase agreement with Eurus Energy America of San Diego,⁹⁸ the 2,000-acre site was “among the two or three best wind sites on [Oahu]” and would have “provide[d] enough electricity to power 25,000 homes.”⁹⁹ The Gill Family, which owns the hillside on which the farm would have been built, wanted to use the money generated from the wind farm to preserve the Palehua Forest, which has been degraded from “decades of ranching and neglect.”¹⁰⁰ The plan included thirteen wind turbines, each nearly 500 feet tall—half as many turbines as a previous plan for a wind farm on the same site, halted years ago because of community opposition.¹⁰¹

Environmentalists and community members once again pushed back against having a wind project on the site, saying it “[would] be an eyesore and [would] harm local wildlife.”¹⁰² In December 2018, the federal government got involved. The U.S. Fish & Wildlife Service asked the PUC to halt approvals of new wind turbines “until state and federal officials ha[d] a chance to meet with the facility owners and review the plans.”¹⁰³ In September 2019, the PUC denied a waiver request from HECO to excuse it from the competitive bidding process and denied the proposed power purchase agreement for the project.¹⁰⁴ Finally, in March 2020, Eurus Energy America announced that it was scrapping the project, stating, “After much consideration, the risk factors associated with developing wind projects in Hawaii were deemed too great for us to proceed.”¹⁰⁵

Although the public trust doctrine is not a central part of the legal challenges against the wind projects, Hawaii’s expansive version of the public trust doctrine

95. *Na Pua Kanai Wind Energy Project*, *supra* note 93; Andrew Gomes, *Silent Protest Over Kahuku Wind Farm Made to State Commission*, HONOLULU STAR-ADVERTISER (Nov. 23, 2019), <https://perma.cc/BB5H-L9AZ>.

96. Notice of Appeal at 1, *In the Matter of Hawaiian Elec. Co.*, No. 2013-0423 (Haw. Apr. 27, 2020), available at <https://perma.cc/YD9E-765Q>.

97. Rick Daysog, *A Planned Wind Farm Is Getting Opposition from an Unusual Source: Environmentalists*, HAW. NEWS NOW (Feb. 11, 2019), <https://perma.cc/E2AU-6KKA>.

98. *Id.*

99. *Id.*

100. *Id.*

101. *Id.*

102. *Id.*

103. Kirstin Downey, *Feds Say Hawaii Is Too Quick to Approve Wind Power Turbines*, HONOLULU CIVIL BEAT (Jan. 22, 2019), <https://perma.cc/X4X7-YEFR>; Letter from Mary M. Abrams, Field Supervisor, Pac. Islands Fish & Wildlife Off., to Randall Iwase, Chair, Pub. Utils. Comm’n (Dec. 27, 2018) (on file with the PUC), available at <https://perma.cc/DM5R-33BG>.

104. HAW. PUB. UTILS. COMM’N, ANNUAL REPORT FOR FISCAL YEAR 2019, at 15 (2019), <https://perma.cc/KQ86-Q2QW>; Nina Wu, *Developer of Palehua Wind Farm in Waianae Withdraws Its Bid*, HONOLULU STAR-ADVERTISER (Mar. 25, 2020), <https://perma.cc/P82E-39FV>.

105. Nina Wu, *Developer of Waianae Wind Project Yanks Bid*, HONOLULU STAR-ADVERTISER (Mar. 25, 2020), <https://perma.cc/AL35-YLNG>.

could cover many of the concerns voiced by the projects' opponents—concerns that the projects would create noise pollution, disrupt scenic views, and harm wildlife. Currently, much of the case law involving Hawaii's public trust doctrine concerns water rights, but its Constitution and common law contain expansive language covering "all natural resources," suggesting that the natural resources affected by the projects are protected under the doctrine.

B. HAWAII'S PUBLIC TRUST DOCTRINE

Hawaii, along with California, has one of the most developed public trust doctrines in the United States.¹⁰⁶ Hawaii finds its doctrine's bases in state common law, statutory law, and the state constitution.¹⁰⁷ Given the State's expansive version of the doctrine, the public's concerns about these projects seem to invite public trust arguments. Noise pollution and the disruption of scenic views could be tied to diminished use and enjoyment of land, another potential public trust resource.¹⁰⁸ Scenic views, while not commonly considered a public trust resource, have also been separately covered under some state versions of the doctrine.¹⁰⁹ Finally, endangered species, such as the hoary bat, are often protected by states with more robust public trust doctrines.¹¹⁰

The Supreme Court of Hawaii first recognized the public trust doctrine in the 1899 case *King v. Oahu Railway & Land Co.*¹¹¹ Citing *Illinois Central*, the court held that the government (then, the Republic of Hawaii) had "ownership and trusteeship over submerged lands."¹¹² Hawaiian courts continued to recognize the public trust doctrine even as Hawaii transitioned from a republic to a U.S. territory. In an early 20th century case, *Territory of Hawaii v. Kerr*, the Supreme Court of Hawaii again upheld the doctrine, allowing the Territory's attempts to prevent a private land owner from constructing a wall on the seashore as part of its "duty of maintaining, managing and caring for the public property thus placed in its possession."¹¹³ After Hawaii achieved statehood in 1959, its Supreme Court further strengthened the State's public trust doctrine. Ignoring a long line of cases upholding private water rights, the court held that all freshwater in the State was

106. Noel & Firestone, *supra* note 44, at 229.

107. *Id.* at 229–31.

108. Virginia's Constitution, for example, states that, so the people can have the "use and enjoyment" of, among other resources, public lands, "it shall be the Commonwealth's policy to protect its . . . lands . . . from pollution, impairment, or destruction, for the benefit, enjoyment, and general welfare of the people." VA. CONST. art. XI, § 1.

109. *Muench v. Pub. Serv. Comm'n*, 261 Wis. 492, 508–12 (1952).

110. See discussion on the expansion of the doctrine to cover wildlife in *supra* Part II.

111. 11 Haw. 717, 725 (1899) ("The people of Hawaii hold the absolute rights to all its navigable waters and the soils under them for their own common use . . . The lands under the navigable waters in and around the territory of the Hawaiian Government are held in trust for the public uses of navigation.").

112. Noel & Firestone, *supra* note 44, at 229.

113. 16 Haw. 363, 369 (1905) ("When land grants include the shore . . . the ownership is subject to the *jus publicum*, including the right of public use for purposes of navigation and fishery.").

“held in trust by the state for the common good of its citizens.”¹¹⁴ A few years later, the court ruled that all lands, even newly lava-formed lands, belonged to the “people of Hawaii, held in public trust by the government for the benefit, use and enjoyment of all the people.”¹¹⁵

In 1978, Hawaii’s public trust doctrine was strengthened even more, when the Hawaii Constitution was amended to apply the public trust to all natural resources:

For the benefit of present and future generations, the State and its political subdivisions shall conserve and protect Hawaii’s natural beauty and all natural resources, including land, water, air, minerals and energy sources, and shall promote the development and utilization of these resources in a manner consistent with their conservation and in furtherance of the self-sufficiency of the State. All public natural resources are held in trust by the State for the benefit of the people.¹¹⁶

Although many of the public trust cases since the amendment have been about water rights,¹¹⁷ the Supreme Court of Hawaii has recognized the use of the public trust doctrine to protect groundwater, preserve wildlife,¹¹⁸ and to promote “present and future needs” in land permitting.¹¹⁹ Furthermore, in *Waiahole I*, the court stated that, under the amendment, “any balancing between public and private purposes begin[s] with a presumption in favor of public use, access, and enjoyment.”¹²⁰

Finally, in 1987, Hawaii also recognized the public trust doctrine through its statutory law when it adopted the State Water Code, which specified that “the waters of the State are held for the benefit of the citizens of the State.”¹²¹ Under the Code, permit applicants must show that their water use “is a reasonable-beneficial use” and “is consistent with the public interest.”¹²² It lists several “public interest” objectives, including “the protection and procreation of fish and wildlife” and “the maintenance of proper ecological

114. Noel & Firestone, *supra* note 44, at 230 (citing *McBryde Sugar Co. v. Robinson*, 504 P.2d 1330, 1345–46 (Haw. 1973)).

115. *State v. Zimring*, 566 P.2d 725, 735 (Haw. 1977).

116. HAW. CONST. art. XI, § 1.

117. Noel & Firestone, *supra* note 44, at 231–33.

118. Robin K. Craig, *A Comparative Guide to the Western States’ Public Trust Doctrines: Public Values, Private Rights, and the Evolution Toward an Ecological Public Trust*, 37 *ECOLOGY L. Q.* 53, 88 (2010); *Morimoto v. Bd. of Land & Nat. Res.*, 127 Haw. 296, 308 (2005).

119. *Stop H-3 Ass’n v. State Dept. of Transp.*, 706 P.2d 446, 451 (Haw. 1985) (explaining that HAW. REV. STAT. § 183-41(c)(3) requires the State Department of Land and Natural Resources to permit utilizations of public lands only after taking into account “present and future needs” and “public use and enjoyment.”).

120. *Waiahole I*, 9 P.3d 409, 454 (Haw. 2000).

121. HAW. REV. STAT. § 174C-2(a) (2019).

122. HAW. REV. STAT. § 174C-49(a)(2)–(3) (2019).

balance and scenic beauty.”¹²³ Case law interpreting the statute has also held that applicants must not only demonstrate the “social and economic utility” of their proposed use, but “also demonstrate the absence of practicable mitigating measures” because “such a requirement is intrinsic to the public trust . . . the definition of ‘reasonable-beneficial use,’ and is an essential part of any balancing between competing interests.”¹²⁴

Hawaii allows its citizens to enforce the public trust doctrine through its common, statutory, and constitutional law.¹²⁵ Through common law, the Hawaii Supreme Court has lowered standing barriers “in cases of public interest,” holding, for instance, that “a member of the public has standing to sue to enforce the rights of the public even though his injury is not different in kind from the public’s generally, if he can show he has suffered an injury in fact.”¹²⁶ Although there is no specific statutory enforcement mechanism for the public trust doctrine, Hawaii’s Administrative Procedure Act (“APA”) permits courts to review and affirm, reverse, or modify agency decisions and orders if they are “in violation of constitutional or statutory provisions.”¹²⁷ Hawaii’s public trust doctrine is found both in its statutory and constitutional law, so parties may be able to challenge agency decisions through the State’s APA.¹²⁸ The clearest authority, however, comes from Hawaii’s constitution, which, in the same article as its declaration of the public trust, states, “Each person has the right to a clean and healthful environment . . . *Any person* may enforce this right against *any party, public or private*”¹²⁹

C. APPLYING THE PUBLIC TRUST DOCTRINE TO KAHUKU AND PALEHUA

Even though one of these projects has been scrapped and the other project is already mired in several legal challenges, these types of conflicts are good examples of areas where communities may be able to use the public trust doctrine to supplement procedural arguments (such as the KNSC’s challenge to the adequacy of Kahuku’s environmental assessment of the wind farm’s impact on opeapeas) as well as provide a legal basis for substantive concerns (such as Palehua opponents’ concerns about the impact on scenic views). Given the expansiveness of Hawaii’s public trust doctrine, and the need for a truer balancing system for the

123. HAW. REV. STAT. § 174C-2(c) (2019).

124. In re Contested Case Hearing on Water Use Permit Application filed by Kukui (Molokai), Inc., 174 P.3d 320, 329 (Haw. 2007).

125. Nathan Morales, *Hawaii*, in THE PUBLIC TRUST DOCTRINE IN 45 STATES 204, 219 (Michael C. Blum ed., 2014).

126. *Bush v. Watson*, 918 P.2d 1130, 1135 (Haw. 1996); *Akau v. Olohana Corp.*, 652 P.2d 1130, 1134 (Haw. 1982).

127. HAW. REV. STAT. § 91-14 (2019).

128. *Id.*

129. HAW. CONST. art. XI, § 9 (emphasis added).

protection of natural resources, the use of the public trust doctrine would likely have bolstered the community's complaints and legal challenges.

First, the communities would have needed standing to bring public trust claims against both the state agencies that have granted permits for the wind farms and the private owners of the farms themselves. According to the plain language of the state constitution, "any person" can enforce the right. This would allow any community member or group to bring a claim. Both the agencies and the private owners should also fall within the broad language of the Constitution as "any party, public or private." Two questions then would remain: first, what resources and uses are covered by Hawaii's public trust and, second, do the actions of the state agencies and/or private wind farm owners interfere with the people's rights in those public trust resources?

Many of the public's concerns—noise pollution, disruption of scenic views, and harm to wildlife—would likely have been covered under the State's public trust doctrine because the projects could be considered a threat to residents' enjoyment of the land, Hawaii's natural beauty, and biodiversity. Hawaii's constitutional provision specifically mentions land as a public trust resource.¹³⁰ In addition, *Waiahole I* included "enjoyment" of the public trust resource as a value to consider when balancing private and public purposes. Opponents of the projects said that the wind turbines would affect learning and sleeping because of the noise they would create, and would ruin scenic views because some of the turbines would be over 500 feet tall.¹³¹ Noise pollution and the disruption to their scenic views, community members could have argued, would interfere with their enjoyment of the land, violating the doctrine. Not only does the disruption of scenic views interfere with land enjoyment, it interferes with "Hawaii's natural beauty," another public trust resource specifically named in the constitutional provision.¹³² Thus, community members might have had a public trust claim over the ruined views and noise pollution.

Community members could also have tried to bring a claim based on the effect of the wind farms on the opeapeas. Although the protection of wildlife and endangered species is not specifically mentioned in the constitutional amendment, Hawaii's Supreme Court has "indicated that these more general constitutional public trust concepts extend to environmental and biodiversity protection."¹³³ In *Morimoto v. Board of Land & Natural Resources*, the court considered a biological assessment and mitigation plan concerning the Palila, an endangered bird. Although the government ultimately won that case, the court did not reject the argument that the Palila was covered by the public trust. Instead, the court held that the environmental impact statement was adequate in assessing the threat to

130. HAW. CONST. art. XI, § 1.

131. Mangieri, *supra* note 88.

132. HAW. CONST. art. XI, § 1.

133. Craig, *supra* note 118, at 88.

the Palila.¹³⁴ In addition, although the State Water Code is limited to water resources, it does acknowledge “the protection and procreation of fish and wildlife” as a public interest that must be taken into account when evaluating water use permits.¹³⁵ There is, therefore, at least some basis for a wildlife-related public trust claim under Hawaiian law.

Even if use and enjoyment of land (to the extent that the wind farms would create noise pollution and ruin scenic views) and wildlife are not covered by previous case law, opponents of the wind farms could have argued that the doctrine should be extended. Sax’s three purposes of the doctrine support extending the doctrine to protect against noise pollution, the disruption of scenic views, and threats to wildlife. It has already been argued, for example, that “seeing beautiful natural scenery is of great intrinsic importance to the public, and that wild places . . . are such unique gifts of nature’s bounty that the interest in maintaining them as they are is so ‘peculiarly public’ that their appropriation for private use . . . is inappropriate.”¹³⁶ The wind farms would interfere with community members’ ability to see the “beautiful natural scenery” that is such a “unique gift[] of nature’s bounty.” Wind farm opponents might find Sax’s second purpose—that some interests “are so particularly the gifts of nature’s bounty that they ought to be reserved for the whole of the populace”—especially useful because it seems embedded in the spirit of Hawaii’s constitutional amendment, which conserves and protects not only all of Hawaii’s natural resources, but also its natural beauty for the benefit of all Hawaiians, present and future.¹³⁷ The use and enjoyment of one’s own land, more broadly, is also an interest intrinsically important to all citizens, an interest threatened by noise pollution.

Similarly, all of Professor Babcock’s four functions support the use of the doctrine in cases where there is a need and an absence of positive law. The second and third purposes—interim normative standards and management tools and exposing the “underlying social ills” to encourage enactment of positive law—are particularly relevant in this case. There is a need for interim standards and management tools in this area. Given the push for renewable energy projects, which can conflict with public trust values, and the current lack of guidance in both federal and state law for reconciling the two, opponents of the wind farms could have argued that Hawaii needs a standard that takes the public trust values of the local resources at risk into account. The public trust doctrine could function as a “constrain[t]” on “the natural tendency of governmental officials to exhaust resources in the present generation.”¹³⁸ Moreover, using the public trust doctrine

134. *Morimoto v. Bd. of Land & Nat. Res.*, 127 Haw. 296, 308 (2005).

135. HAW. REV. STAT. § 174C-31(k) (2019).

136. Babcock, *supra* note 2, at 24.

137. Sax, *supra* note 5, at 484; HAW. CONST. art. XI, § 1.

138. Mary Christina Wood, *Protecting the Wildlife Trust: A Reinterpretation of Section 7 of the Endangered Species Act*, 34 ENV’T L. 605, 612 (2004).

here would allow courts and parties to take into account the underlying social ills of renewable energy projects (ills such as disruption to land use and wildlife).

Ironically, the purposes of the renewable energy projects are also to protect public resources for future generations. Many opponents of the wind farms respect this purpose,¹³⁹ but believe that these are not the proper places for the projects. In the future, they may want to advocate not only for the local resources to be considered under the public trust doctrine, but also for the air resources (and renewable energy benefits) to be considered as well to truly balance public interests and effects. As previously mentioned, some scholars and environmental groups have pushed for the public trust doctrine to be extended to include the atmosphere, though these attempts have so far been largely unsuccessful.¹⁴⁰ Renewable energy has also not been considered by most to be covered by the public trust doctrine. In the Cape Wind case, *Alliance to Protect Nantucket Sound v. Energy Facilities Siting Board (Alliance II)*, for example, the majority opinion narrowly reviewed the permitting of transmission lines for an offshore wind project, focusing only on the question of delegation without “attempt[ing] to opine on the benefits or risks associated with renewable energy,” while the dissenting opinion “did not recognize the project as one with any inherent public interest as a renewable energy project,” instead “compar[ing] it to the BP Oil Spill, a nuclear power plant, or any other energy-related development with potentially disastrous consequences.”¹⁴¹ Nonetheless, there is a connection between renewable energy and mitigating climate change, and the public trust principle of protecting resources from being degraded now so future generations can enjoy them. Moreover, Hawaii’s constitution specifically mentions “air” and “energy sources” in its public trust amendment. Although other states may not yet consider the atmosphere or renewable energy covered under the doctrine and although an attempt to protect the atmosphere recently failed at the federal level (albeit on standing grounds), it is likely that Hawaii’s constitution could cover both.

Even if the wind farm opponents could not get renewable energy and the climate covered under the doctrine, they could still oppose the wind farms and support renewable energy by suggesting alternatives to be considered in the court’s balancing, as in *Waiahole I* and other water permit application cases.¹⁴² The Hawaii State Energy Office (“HSEO”) and the Hawaii Department of Health have collaborated on an online map, called the Hawaii Brightfields Initiative, which “identifies contaminated lands that officials hope developers can turn into renewable energy sites.”¹⁴³ Opponents could use sites on the map as potential

139. See, e.g., Bryce, *supra* note 83; Brown, *supra* note 84.

140. Babcock, *supra* note 2, at 19.

141. Klass, *supra* note 2, at 1056.

142. See *Waiahole I*, 9 P.3d 409, 483 (Haw. 2000); Noel & Firestone, *supra* note 44, at 233.

143. Ashley Mizuo, *Online Map Identifies Contaminated Land with Potential for Renewable Energy Development*, HAW. PUB. RADIO, (Nov. 25, 2019), <https://perma.cc/B9TJ-JJ9Y>.

alternatives to consider when balancing the benefits and adverse effects of the renewable energy projects on local natural resources.

D. HOW THE APPLICATION OF THE PUBLIC TRUST DOCTRINE COULD IMPACT HAWAII'S
RENEWABLE ENERGY GOALS

The conflicts in Kahuku and Palehua are just two of many conflicts to come as Hawaii tries to drastically ramp up its renewable energy production to meet its ambitious goals.¹⁴⁴ In 2015, Hawaii's legislature increased its Renewable Portfolio Standards ("RPS") targets to 100% renewable energy by 2045, with interim goals of 30% by 2020, 40% by 2030, and 70% by 2040.¹⁴⁵ These goals are made even more ambitious given the unique challenges that Hawaii faces including the difficulty of transmitting electricity across islands, its limited land, and the presence of several endangered species that could be affected by wind turbines.¹⁴⁶

Currently, most of Hawaii's renewable mix comes from solar and wind power.¹⁴⁷ As of 2018, nearly 40% of its renewable energy came from distributed solar photovoltaic ("PV") systems (solar electric generation and storage by small, grid-connected devices), with another 8.6% from utility-scale PV and nearly 24% from wind.¹⁴⁸ Given its heavy reliance on distributed PV, it is not that surprising that the State leads the nation in rooftop solar installation.¹⁴⁹ As for wind projects, there are currently eight utility-scale wind energy projects in Hawaii.¹⁵⁰ They are all located on the islands of Oahu, Maui, and Hawaii. Note, none exist on the island of Kauai, in large part because of its protected seabird populations.¹⁵¹ Given the State's limited land, these existing wind farms have an average acres per megawatt ratio of 13.8.¹⁵² To help reach its RPS goals, Hawaii's four electric companies (collectively called the "HECO Companies") plan to install up to an additional 64 MW of onshore wind on Oahu, between 42 MW to 150 MW of onshore wind on Maui, up to 5 MW of onshore wind on Molokai, and up to 102 MW of additional wind on Hawaii Island by 2045.¹⁵³

In setting out these goals, the HSEO has acknowledged the potential effects on public trust resources and seems to commit to careful impact assessments to

144. See Bryce, *supra* note 83.

145. STATE OF HAW. PUB. UTILS. COMM'N, REPORT TO THE 2019 LEGISLATURE ON HAWAII'S RENEWABLE PORTFOLIO STANDARDS 1 (2018).

146. Noelle Swan & Nathan Eagle, *How Hawaii Has Built Momentum to Become a Renewable Energy Leader*, GREENBIZ (Sept. 26, 2019, 1:10 AM), <https://perma.cc/D3SJ-E62V>; HAW. STATE ENERGY OFF., HAWAII ENERGY FACTS & FIGURES 16, 32, 34–35 (2019).

147. Swan & Eagle, *supra* note 146.

148. HAW. STATE ENERGY OFF., HAWAII ENERGY FACTS & FIGURES 14 fig.10 (2019).

149. Swan & Eagle, *supra* note 146.

150. HAW. STATE ENERGY OFF., HAWAII ENERGY FACTS & FIGURES 32 (2019).

151. *Id.*

152. *Id.*

153. *Id.* at 33.

ensure their protection. Noting the potential strain that the large utility-scale solar farms can also have on the agricultural industry, the HSEO has stated that “any proposed projects with potential to impact Hawaii’s agricultural sector *or its natural environment* will undergo intense regulatory and community scrutiny to ensure protection of these resources.”¹⁵⁴ Similarly, though Hawaii has considered offshore wind (proposing up to 200 to 800 MW of offshore wind off of Oahu), the HSEO has said it is also concerned about wind farms’ impacts on protected or endangered birds and bats, plant species, and critical habitats as well as potential visual and cultural impacts.¹⁵⁵

Despite the acknowledgement of the potential negative impacts, some wind farm opponents claim that the State “is giving too many projects an easy approval without considering their potential hazards.”¹⁵⁶ Part of the problem may be the order of the approval system—the U.S. Fish & Wildlife Service letter to the PUC requesting a halt in wind turbine approvals noted that “in most instances, at the time the [power purchase agreement] is submitted to the PUC for approval, the project proponent is still in the process of obtaining Federal and State endangered species permits.”¹⁵⁷ When the power purchase agreement is submitted for approval before the permits are obtained, the PUC does not have the information necessary to determine whether the wind farm’s consequences will be overall beneficial.¹⁵⁸ A true consideration of the impacts on public trust resources should include full and accurate impact assessments before approval. The U.S. Fish & Wildlife Service also stated that, once the project has been approved, commercial deadlines and power generation thresholds are set, which weakens the power of wildlife officials in negotiations over wind farm operations.¹⁵⁹

The successful application of the public trust doctrine to protect wildlife and the use and enjoyment of land from renewable energy projects would help guarantee that the careful assessments the HSEO is touting will take place and will be adequate. The threat of future litigation under the public trust doctrine could incentivize better assessments earlier in the process and strengthen the negotiating power of project opponents (even once the project has been approved and deadlines and power generation thresholds are set). The doctrine could be used independently or together with more procedural claims, like those used by KNSC.

The successful application of the public trust doctrine to protect these natural resources from renewable energy projects would also pose a threat to Hawaii’s

154. *Id.* at 31 (emphasis added).

155. *Id.* at 34.

156. Downey, *supra* note 103.

157. Letter from Mary M. Abrams, Field Supervisor, Pac. Islands Fish & Wildlife Off., to Randall Iwase, Chair, Pub. Utils. Comm’n (Dec. 27, 2018) (on file with Public Utilities Commission).

158. Eliza Larson, *Proposed West Oahu Wind Farm Gets Voted Down at Neighborhood Board Meetings*, KITV4 (Jan. 23, 2019), <https://perma.cc/UM9D-RFCY>.

159. Downey, *supra* note 103.

RPS, as projects may be slowed down to better assess their impacts. But these impacts cannot just be ignored in favor of climate benefits—some of these projects could have irreparable effects on local views, land use, and wildlife. Climate change mitigation is undoubtedly essential, but to prioritize it at the cost of these natural resources is irresponsible and short-sighted. As the need for climate change mitigation increases, all states—not just Hawaii—will have to decide how to balance these issues. An expansive version of the public trust doctrine helps to ensure that all environmental benefits and harms are considered.

V. CONCLUSION

Despite its contested history and legitimacy, the public trust doctrine has been used by environmentalists and governments for decades to protect natural resources for public use and enjoyment. The state-by-state nature of the public trust doctrine both hinders its full potential, preventing it from accounting for interstate environmental threats and impacts, and provides opportunities for states to push boundaries and test extremely protective versions of the doctrine. Although the doctrine was originally put forth as a way to protect local natural resources from development at the risk of future generations' needs, it may be useful in a newer conflict—protecting natural resources from renewable energy projects, also designed to protect future generations' needs. As the push for renewable energy grows in response to the need to de-carbonize our energy production, these conflicts, like the ones happening in Hawaii, will likely become more common. Expanding the public trust doctrine may help balance these environmental goals, by weighing impacts—both positive and negative—and alternatives.