

Journal of Planning & Environment Law

2014

England and the public trust doctrine

Bradley Freedman

Emily Shirley

Subject: Environment. **Other related subjects:** Administrative law. Agency. Legal systems

Keywords: Climate change; Environmental protection; Fiduciary duty; Judicial review; Legal history; Public interest

***J.P.L. 839** To date, legal actions related to climate change have been rare in England, but the Public Trust Doctrine offers a mechanism for such actions in the future. England is a natural place for a Public Trust claim because the Public Trust Doctrine has its origins in English common law, as well as Magna Carta. Despite some challenges to bringing a Public Trust claim in England, there is a clear historic and principled basis for the English Public Trust Doctrine. Moreover, the doctrine is urgently needed as an essential mechanism for protecting the commons and the rights of future generations. The challenge is to harness the principles in a persuasive, legally tight argument.

This article touches on the history of the Public Trust Doctrine, its modern application, and its potential application in England and the United Kingdom. This document is by no means comprehensive and is intended to be a starting point.

What is the Public Trust Doctrine and Atmospheric Trust Litigation?

The Public Trust Doctrine ("PTD") holds that governments have the fiduciary duty to protect vital natural resources for the benefit of current and future generations.

The modern PTD originally applied to protection of navigable waterways. But it has since been expanded to apply to water resources, forests, parklands, wildlife, and other important natural areas. Atmospheric Trust Litigation ("ATL") argues that one of these protected natural resources must be the atmosphere. Such protection requires mitigating greenhouse gas ("GHG") emissions that cause climate change.

An English ATL suit would argue that the PTD imposes a fiduciary obligation on the government of England to protect the atmosphere from the effects of the human-induced global energy imbalance and to hold England's vital natural resources in trust for present and future generations. The government may not manage the trust resource in a way that substantially impairs the public interest in a healthy atmosphere.

The goal of ATL is not to tell the English Government precisely how it must mitigate climate change. The goal is to compel the English government to implement *and enforce* mitigation standards that are based on the most up-to-date science. For example: an annual 6 per cent reduction in the emission of greenhouse gases beginning in 2014 and continuing until 2050, followed by an annual reduction of 5 per cent annually from 2050–2100, and 100 GtC storage in the biosphere and soils.¹

Because the PTD duty is fiduciary, it is not discretionary. It is not good enough for England or the United Kingdom to merely set targets or create commissions to suggest future action. Further, even legally binding emissions targets do not satisfy the obligations of the Public Trust if these targets are insufficient to avoid catastrophic climate change. ***J.P.L. 840**

Despite what some may argue, this article contends courts do not overstep their bounds when they apply the PTD. Indeed, quite the opposite is true. PTD is both a constitutional and judicial doctrine and exists to hold governments accountable to the people for actions or inactions that may violate their Public Trust responsibility. The legislative and executive branches of England's government are likely in violation of their Public Trust duty at this very moment. This violation requires an immediate, enforceable judicial remedy.

Justinian and PTD's origins

The history of the PTD shows that it is universal. Indeed, its roots lie in a melding of civil law and common law. The concept of *res communes* (things owned by no one and subject to use by all) originated in Roman Law and was transported to English common law when English jurists read and applied *Justinian's Institutes*.²

Justinian wrote in the *Institutes*:

"By the law of nature these things are common to all mankind—the air, running water, the sea, and consequently the shores of the sea. No one, therefore, is forbidden to approach the seashore, provided that he respects habitations, monuments, and the buildings, which are not, like the sea, subject only to the law of nations."³

Further:

"The public use of the banks of a river is part of the law of nations, just as is that of the river itself. All persons, therefore, are as much at liberty to bring their vessels to the bank, to fasten ropes to the trees growing there, and to place any part of their cargo there, as to navigate the river itself. But the banks of a river are the property of those whose land they adjoin; and consequently the trees growing on them are also the property of the same persons."⁴

In the 13th century, Lord Bracton incorporated parts of Justinian's *Institutes* into his own treatise, *De Legibus et Consuetudinibus Angliate*. Bracton described the rule that the public had common rights to the sea and seashore and the right to use river banks for towing and mooring. There is debate about whether Bracton was describing the common law of the time (which would have suggested a direct Roman influence) or simply stating a rule that Bracton happened to prefer.⁵ Either way, "Bracton's contemporaries emulated and relied upon his scholarship."⁶ An example of a case applying these principles is set out in annex to this article.

Lord Chief Justice Matthew Hale's 1667 treatise Concerning the Law of the Sea and its Arms had a huge influence on English law. Hale's writing reflects the fact that at this time in English law, the king had ownership of the foreshore. Hale also introduced the Roman concept of *jus publicum* to common law in the form of a public right to have navigable rivers and ports free of nuisances. Not even the king could allow such a nuisance.⁷ Further, Hale quoted the *Institutes* that the shore is "common as to use." At this time in English law "the burden of proof was placed upon the subject to show that private ownership extended to the low-water mark". **J.P.L. 841*⁸

Magna Carta

The PTD also finds its roots in Magna Carta. In the 13th century, grants of coastal lands were less precise than they later became and there was less overall concern about public rights at the shoreline. However, later courts and jurists interpreted Magna Carta as protecting some public rights and serving as a foundation of the PTD. Indeed, many courts interpreted Magna Carta as establishing the king's duty (based on his capacity as sovereign) to protect public lands. Further, because Magna Carta was essentially a restriction on the Crown, it signaled that while the Crown may have owned original title to tidal lands, it did not have discretion to dispense of these lands as it chose.⁹

-

Magna Carta Chapter 16:

"No riverbanks shall be placed in defense from henceforth except such as were so placed in the time of King Henry, our grandfather, by the same places and the same bounds as they were wont to be in his time."¹⁰

-

Magna Carta Chapter 33:

"All kydells [weirs] for the future shall be removed altogether from Thames and Medway, and throughout all England, except upon the seashore."¹¹ (This seemingly

narrow provision was subsequently held in English courts to provide protection from obstruction of all navigable rivers, clearing the streams for the free passage of both people and fish.)

Medieval England

In medieval England there was enough available water that conflicts over water were rare. But when conflicts arose over the public right of navigation, the right of navigation prevailed. By the 17th century, while there was a presumption under English common law that riparian rights- owners along freshwater rivers had the exclusive right to the beds and banks, this right was also subject to a public right to use the beds and banks for purposes that were incidental to navigation.

For example, the public had the right to anchor, moor, and tow vessels along river banks.¹²

As seen above, both Justinian and Magna Carta influenced the common law doctrine of Public Trust during this period in time.

PTD in UK Courts

The following are some examples of English and UK courts' recognition of Public Trust obligations or similar obligations.

-

The Royal Fishery of the River Banne:¹³

"That there are two kinds of rivers, navigable and not navigable; that every navigable river, so high as the sea ebbs and flows in it, is a *royal* river, and belongs to the King, by virtue of his prerogative; but in every other river, and in the fishery of such other river, the tenants on each side have an interest of common right; the reason for which is, that so high as the **J.P.L. 842* sea ebbs and flows, it participates of the nature of the sea, and is said to be a branch of the sea so far as it flows." [Emphasis added.]

-

Gann v Free Fisheries:¹⁴

Holding that the bed of all navigable rivers where the tide flows, and all estuaries or arms of the sea, is by law vested in the crown only for the benefit of the subjects.

-

Kinloch v Secretary of State for India:¹⁵

There is such a thing as a *Public Interest Trust*. "the term 'trust' is one which may properly be used to describe not only relationships which are enforceable by the courts in their equitable jurisdiction but also other relationships such as the discharge under the direction of the Crown of the duties or functions belonging to the prerogative and the authority of the Crown. Trusts of the former kind are described ... as being 'trusts in the lower sense' trusts of the latter kind ... 'trusts in the higher sense'."

-

Tito v Waddell (No.2) at 216, per Megarry V-C:¹⁶

A "higher sense" of trust inhered in the Crown's control of a phosphate-rich island colony which had an Ordinance providing a commissioner would establish the formula for paying mining royalties. (But note that claimants were unsuccessful because merely imposing statutory duties on the Crown does not create fiduciary duty as a general rule. Further indicia is required.)

Despite these cases, it must be acknowledged that the modern PTD is not as well-formed in England or the United Kingdom as it is in the United States (and, more recently, India). Indeed, one of the most famous elucidations of the English PTD actually comes from an 1821 New Jersey case of *Arnold v Mundy* where it was stated that:

"[B]y the law of nature, which is the only true foundation of all the social rights; that by the civil law, which formerly governed almost the whole civilized world, and which is still the foundation of the polity of almost every nation in Europe; that by the common law of England, of which our ancestors boasted, and to which it were well if we ourselves paid a more sacred regard; I say I am of opinion, that by all these, the navigable rivers ... are common to all the citizens, and that each has a right to use them according to his necessities, subject only to the laws which regulate that use; that the property, indeed, strictly speaking, is vested in the sovereign, but it is vested in him not for his own use, but for the use of the citizen, that is, for his direct and immediate enjoyment."¹⁷

Despite its common law origins in England, during the last two centuries it was American courts that fleshed out the PTD. Indeed, one set of commentators has stated that "[w]hilst the English law of trusts is well developed, and there are statements in early cases which might support a general principle of public trust in appropriate circumstances, it is difficult to see this doctrine being of any practical significance in English law, especially where the statutory provisions of the CCA [Climate Change Act] are in place."¹⁸

Despite the natural skepticism, there are important reasons for reviving the PTD in England. One obvious reason is that the PTD arose in England and should certainly be reintroduced in the legal system that fostered its creation. The strength of the PTD in fellow common law jurisdictions such as the U.S. and India should be used as persuasive evidence. **J.P.L. 843*

Other examples of rights and duties in the United Kingdom

PTD arguments are strengthened when one can point to parallel doctrines regarding public rights and duties. Below are a few examples of such persuasive doctrines that are found in English common law and statute. Doubtless there are other helpful examples out there.

-

Public Interest Trusts:

The United Kingdom recognises certain types of Public Interest Trusts, which shows that the United Kingdom recognises public trusts and public fiduciary duties in other contexts than the PTD. The most common of these is the charitable trust. There have been attempts to claim Political Public Trusts, but these attempts have failed so far.¹⁹ Public authorities in the United Kingdom have been held to owe fiduciary duties to their ratepayers. In *Roberts v Hopwood*,²⁰ a local Council was held to have violated its fiduciary duty when it paid its employees above the prevailing rate in the community. This fiduciary duty was based on the fact that the Council received its money from the community at large. In *Prescott v Birmingham Corp*,²¹ the Corporation was held to have violated its fiduciary duty by offering free bus transport to the elderly, thus treating the elderly more favorably than other ratepayers.

-

"Right to Wander":

In 2000, the UK Parliament passed the Countryside and Rights of Way Act, which established a new right of public access to footpaths. Whereas previously, the public could only roam on established paths, the Act established greater access to areas such as coastal lands, moorland, and heathland. It sought balance between public rights and landowner's rights. This "right to wander" is arguably an example of a sister doctrine to the PTD because it establishes public rights on private land.

-

Waste:

The common law doctrine of waste is an example of intergenerational rights and the protection thereof in England. Simply, the doctrine of waste provides that a present property owner should not be able to use that property in a manner that unreasonably interferes with the expectations of the future owner. Waste typically arises in the context of private property and traditionally deals with individual rights and obligations rather than public rights and obligations. It is thus an unlikely cause of action for ATL purposes. Waste is nonetheless useful to think about both as a corollary to the PTD and as proof that intergenerational rights have indeed been established at common law. One legal commentator notes that "strong sustainability theory and the English doctrine of waste establish a firm duty on the part of the current generation to mitigate the effects of climate change by reducing emissions and other contributions to it immediately."²² Indeed, even Margaret Thatcher acknowledged that "[n]o generation has a freehold on this [e]arth. All we (as the current generation) have is a life tenancy, with a full repairing lease." **J.P.L. 844* ²³

Judicial review

Every ATL case is unique because not every jurisdiction permits the same causes of action. Further, some countries allow broad access to the courts, while others are more restrictive.

However, the PTD is flexible because the principles behind it are universal: no government has the right to permit destruction of critical natural resources, including the atmosphere. Thus, there is most likely a cause of action in English law based on the violation of the right of present and future generations to have a viable atmosphere and a livable planet. The main points to note about the use of judicial review are:

-

Courts can generally review: (i) unlawfulness of a decision; (ii) unreasonableness of a decision; and (iii) unfairness/improper procedure. In short: "Illegality, Irrationality, or Impropriety."²⁴

-

The United Kingdom does not allow judicial review of Acts of Parliament. Only secondary legislation and acts of public bodies are subject to judicial review. Judicial review generally requires a "decision" from a public authority, although lack of a decision is not always fatal. However, "judicial review" can include a claim to review the lawfulness of "a decision, action or failure to act in relation to the exercise of a public function".²⁵

-

Standing:

Supreme Court Act §31(3) requires "sufficient interest" by claimant or other "interested parties." Courts often take a liberal approach to allowing review to environmental groups. For example in *R. v HM Inspectorate of Pollution Ex p. Greenpeace*²⁶ it was said that if the court were to refuse standing to Greenpeace, those it represents might not have an effective way to bring the issues before the court. However, even after a claimant is granted leave to pursue a claim, the judge retains discretion to consider lack of interest or standing at a later stage. Thus, standing is largely determined on a case-by-case basis.

-

Timing:

English rules of Civil Procedure require prompt application. Further, application should be made within three months after grounds to sue arose. CPR 54.6. Anyone doing PTD litigation in England should be wary of this rule to ensure they make a strong argument for timeliness, given that trust litigation doesn't point to a specific date when cause to sue arose.

-

Potential Remedies:

quashing order, mandatory order, prohibiting order, injunction, declaration.

-

Costs:

Unsuccessful claimants must often pay the costs. Protective orders do exist and may be granted in public interest litigation. **J.P.L. 845*²⁷

Statutes

One frequent hurdle to Public Trust arguments is the claim that a judicial remedy ordering the other branches of government to set emissions standards infringes on the other branches, or is redundant because the other branches have already addressed the issue of climate change.

However, a government cannot meet its fiduciary duty as Trustee of the atmosphere merely by "addressing" the issue of climate change. Only by actually setting legal standards (based on scientific consensus) and enforcing those standards can a government be said to have fulfilled its obligations under the PTD. While English law has indeed "addressed climate change," it has not necessarily fulfilled its Public Trust obligations.

-

Climate Change Act 2008 ("CCA"):

This legislation will need to be addressed in any PTD arguments, because opponents will argue that the United Kingdom has already implemented this law, which is specifically related to climate change. However, the CCA 's targets are based on outdated science, and its emission reductions goals are likely insufficient.

-

CCA set legally binding national targets and provided that it is the duty of the Secretary of State to ensure net UK carbon account for 2050 is at least 80 per cent below 1990 baseline. This target is based on the premise that "global temperature increase by 2100 should be limited to as little above 2°C over pre-industrial levels as possible, and the likelihood of a 4°C increase should be kept to very low levels (e.g. less than 1%)". However, these targets are based on the outdated premise that the planet can safely adapt to an increase of 2°C. Dr. James Hansen's latest research shows that even a 2°C increase would be "disastrous".²⁸

-

CCA does not provide sanctions, but failure to meet targets may be liable for judicial review because targets are legally binding. According to the Committee on Climate Change ("CCC")—set up under the CCA to advise the Secretary of State:

"[a]chieving the required global reduction in emissions would imply a global level of emissions in 2050 of around 20–24 gigatonnes on a CO₂-equivalent basis (GtCO₂e). This would be around a 50% reduction in emissions as against recent levels. Given a projected global population in 2050 of around 9 billion, such a level of emissions implies per capita emissions averaging around 2 tonnes CO₂e. It is hard to see how the UK's emission allowance for 2050 could be higher than that average. Allowing for expected population growth, emissions of 2 tCO₂e/capita in the UK translates to an emissions reduction target of 80% in 2050 relative to 1990."²⁹

-

CCA has been referenced in case law. See *Hillingdon LBC v Secretary of State for Transport*.³⁰

-

CCA led to establishment of *Carbon Reduction Commitment Energy Efficiency Scheme* ("CRC"), which provides for allowances to be sold by the government or traded on a secondary market. CRC applies only to large companies that are not covered by the EU emissions trading scheme. CRC has been in place since April 2010. It is a mandatory carbon emissions reporting and pricing scheme which tackles GHG emissions from large non-energy intensive organisations using more than 6,000 megawatt-hours ("MWh") per year of electricity. Participants of the CRC need to measure and report their carbon emissions **J.P.L. 846* annually. Starting in 2012, participants can buy allowances from the Government each year to cover their emissions in the previous year. The price of allowances has been fixed at £12 per tonne of carbon dioxide.

-

CCA §5(1)(a):

Carbon budget "for the budgetary period including the year 2020, must be such that the annual equivalent of the carbon budget for the period is at least 26% lower than the 1990 baseline."

-

CCA §6(2)(a)(i):

Allows amendment of the target percentages "if it appears to the Secretary of State that there have been significant developments in scientific knowledge about climate change." This may be one avenue to pursue if there is an argument to be made that there is new scientific knowledge that requires more stringent controls on emissions.

-

CCA Reporting:

Every five years the Secretary of State is required to submit a carbon budget, and a report on the impact of climate change. §§4, 56. This may be an avenue to pursue under a Public Trust action, because every five years is not frequent enough to submit a carbon budget. However, it should be noted that the CCC is required to make annual reports to Parliament under s.36(1).

According to the CCC, the United Kingdom has achieved its first carbon budget ending in 2012 and is on pace to meet the second budget ending in 2017. However, the United Kingdom is not on pace to meet the third or fourth carbon budget.³¹ Further, the carbon budget should be scrutinized to ensure that it accounts for all emissions and does not use sleight-of-hand to make it easier to achieve.

-

Importantly, at this time UK carbon budgets require 3 per cent annual reduction in carbon emissions.³² However, according to Dr. Hansen, global annual reductions of 6 per cent are required to avoid heating above 1°C and GHG concentrations of 350ppm by the end of the century. Yet even the current standards may not be met under the current legislation—the CCC notes that "it will be a major challenge to achieve a 3% a year reduction as the economy recovers".³³

-

In 2012, GHG emissions in the United Kingdom increased by 3.5 per cent.³⁴

Agencies

Those who argue against the application of the Public Trust Doctrine to climate change often argue that governmental agencies with environmental or climate change portfolios supersede the PTD. However, as with statutes, the mere existence of a "climate change" agency or department is not sufficient to fulfill a government's fiduciary duties. A sovereign state such as England cannot absolve itself of its fiduciary duties by delegating climate change mitigation to an agency. However, such an agency is potentially liable for its own failure to fulfill the sovereign's fiduciary obligation. **J.P.L. 847*

-

Department of Energy and Climate Change ("DECC"):

created in 2008 to merge energy and climate change mitigation policy. DECC is an example of a department that might be liable for its failure to sufficiently mitigate climate change. If this is the sole decision-making body on matters of climate change, then it is a potential defendant. The important thing to remember is that the PTD cannot be displaced. Thus, even if the DECC (or any other agency) is adhering to its explicit statutory duties, this is not sufficient to entail adherence to the sovereign's duties under the PTD.

Local authorities are required to ensure that new development is sustainable in terms of achieving GHG emission reductions.

Department for Communities and Local Government ("DCLG"):

published the National Planning Policy Framework ("NPPF") which sets out how planning should contribute to reducing emissions. NPPF directly cites the 2008 CCA as a relevant consideration in decision-making, thus making the 80 per cent reduction in carbon dioxide emissions by 2050 clearly relevant to the discharge of the duty on planning authorities to shape policy which reduces carbon dioxide emissions.

International context

The United Kingdom is a party to multiple international environmental treaties, such as the Kyoto Protocol. Further, as an EU Member, the United Kingdom is part of additional climate change regimes such as the European Climate Change Programme and its carbon trading scheme. However, none of these obligations are sufficient to satisfy England's duties as Trustee of the atmosphere for current and future generations. The failure of the international community to agree on globally binding, enforceable emission reduction targets does not give England permission to continue emitting above scientifically safe levels. Nor is it relevant that England is not the only country that has failed to mitigate climate change.

A trustee's duty does not depend on whether *other* trustees perform their duties. England cannot decline to fulfill its own role as Trustee merely by asserting that other countries have failed to fulfill their roles any more than, for example, Private Trustee A can violate her duties because Private Trustee B failed his obligations. England's fiduciary duty is towards its own citizens and its own future generations.

Conclusion

The PTD arose under English common law, yet it is universal. No sovereign government has the right to permit destruction of the atmosphere. England has this fiduciary duty because England is a sovereign government. Just as sovereignty offers inherent rights, it demands inherent duties. In England these duties take the form of a trust.

England's duties arise from its sovereign capacity. Therefore, somewhere in the government there is an official, agency, or body that is responsible for its failure to act pursuant to the sovereign's obligations. The PTD provides a judicial remedy for such violations. Thus, it is logical to conclude that there is a cause of action somewhere in English law based on violation of the Public Trust. It must simply be discovered. **J.P.L. 848*

Annex

Juliana the Washerwoman

One of the earliest historical sources relating to the use of Winchester's watercourses dates to 1299 and involved a legal case involving two Wintonians who lived on Upper Brook Street. One was a washerwoman called Juliana, and the other was the merchant John de Tytyng, who also served as the city's mayor and MP.³⁵

In 1299, Juliana obtained a writ from King Edward I, ordering the mayor and bailiffs to compel John de Tytyng and others from preventing her from scouring her clothes, thread and yarn in the Upper Brook. The case was settled in court by Edward I who relied on the advice of a jury made up from inhabitants of Upper, Middle and Lower Brook Streets.

Edward I was a firm believer in Common Law so it is not surprising that his ruling³⁶ made in the Great Hall on September 1299 stated:

"water has always been common."

If the ruling was left at this we probably would never have heard of this court case, but the King attached a number of regulations at the end changing it from Common Law into Statute Law. These regulations were addressed to general households and industries in the area.

The regulations stated that people should not put in the water:

- woad-waste/dyestuffs (Dyers);
- hides in the course of being tanned (Tanners);
- sheepskins (Tanners);
- entrails (Butchers);
- animal blood (Butchers);
- human blood (Barbers);
- panni puerorum cum horidibus (soiled nappies) (Washerwomen);
- nor should they have garderobes or gutters discharging into the water (Households).

The importance of the ruling was recognised by Juliana's contemporaries and she received the by-name of Juliana de la Floude or Juliana of the Water.³⁷ In time, the ruling became known as the Concordance de Julian. It is likely to be the earliest piece of environmental legislation relating to the use of water in Europe. As a principle, it has developed into an internationally recognised Human Right.³⁸ It provides the legal basis for the access to fresh flowing water for billions of people round the world today, all this as a result of a neighbourly tiff between an MP and a washerwoman on a back street of medieval Winchester.

Bradley Freedman

Emily Shirley

J.P.L. 2014, 8, 839-848

-
1. James E. Hansen, "Scientific Prescription to Avoid Dangerous Climate Change to Protect Young People and Future Generations, and Nature" 21 at <http://pubs.giss.nasa.gov/abs/ha08510t.html>. [Accessed May 21, 2014.]
 2. Daniel R. Coquillete, "Mosses From an Old Manse: Another Look at Some Historic Property Cases" (1978-79) 64 CORNELL L. REV. 801.
 3. Justinian, *Institutes J. INST., Proemium, 2.2.2.* (T. Sandars trans., 4th edn. 1867.)

4. *Justinian, Institutes J. INST., Proemium, 2.1.4. (T. Sandars trans., 4th edn. 1867.)*
5. See Patrick Deveney, "Jus Publicum, and the Public Trust: An Historical Analysis" (1976) 1 SEA GRANT L.J. 36.
6. See, "Police Power and the Public Trust: Prescriptive Zoning Through the Conflation of Two Ancient Doctrines" (2001) 28 ENVTL. AFF. L. REV. 683, 704; Daniel R. Coquillete, "Mosses From an Old Manse: Another Look at Some Historic Property Cases" (1978–1979) 64 CORNELL L. REV. 804.
7. See Patrick Deveney, "Jus Publicum, and the Public Trust: An Historical Analysis" (1976) 1 SEA GRANT L.J. 36, 46.
8. *Harrison C. Dunning, Waters and Water Rights, Amy K. Kelly (ed), 3rd edn (LexisNexis/Matthew Bender, 2011).*
9. See *Harrison C. Dunning, Waters and Water Rights, Amy K. Kelly (ed), 3rd edn (LexisNexis/Matthew Bender, 2011)*; see also Mitchell M. Tannenbaum, "The Public Trust Doctrine In Maine's Submerged Lands: Public Rights, State Obligations And The Role Of The Courts" (1985) Me. L. Rev 105, 108–20.
10. James L. Huffman, "Speaking of Inconvenient Truths—A History of the Public Trust Doctrine" (2007) 18 DUKE ENVTL. L. & POL'Y F. 1, 19 (quoting the 1215 version of Magna Carta).
11. James L. Huffman, "Speaking of Inconvenient Truths—A History of the Public Trust Doctrine" (2007) 18 DUKE ENVTL. L. & POL'Y F. 1, 19, 20 (quoting the 1225 version of Magna Carta).
12. See *Harrison C. Dunning, Waters and Water Rights, Amy K. Kelly (ed) 3rd edn (LexisNexis/Matthew Bender, 2011).*
13. *The Royal Fishery of the River Banne (1611) 80 Eng. Rep. 540 (K.B. 1611).*
14. *Gann v Free Fisheries (1865) 11 Eng. Rep 1305 HL.*
15. *Kinloch v Secretary of State for India (1882) 7 App. Cas. 619.*
16. *Tito v Waddell (No.2) (1977) Ch. 211 at 216*
17. *Arnold v Mundy (N.J. 1821) 6 N.J.L. 1, 76–77.*
18. *Lord (ed.), Climate Change Liability: Transnational Law and Practice (2012).*
19. See *Skinner's Co v Irish Society; Kinlock's Case; Tito v Waddell (No.2) (1977) Ch. 211.*
20. *Roberts v. Hopwood [1925] A.C. 578.*
21. *Prescott v Birmingham Corp [1955] Ch. 210.*
22. Anthony L. I. Moffa, "Wasting the Planet: What A Storied Doctrine of Property Brings to Bear on Environmental Law and Climate Change" (2012) 27 J. ENVTL. L. & LITIG. 459, 488.
23. Anthony L. I. Moffa, "Wasting the Planet: What A Storied Doctrine of Property Brings to Bear on Environmental Law and Climate Change" (2012) 27 J. ENVTL. L. & LITIG. 459, 480.
24. See *Council of Civil Service Unions v Minister for the Civil Service [1985] A.C. 374.*
25. See *Council of Civil Service Unions v Minister for the Civil Service [1985] A.C. 374.*
26. *R. v HM Inspectorate of Pollution Ex p. Greenpeace (No.2) [1994] 4 All E.R. 329.*
27. *Lord (eds), Climate Change Liability: Transnational Law and Practice (2012), 451.*
28. *James E. Hansen, "Scientific Prescription to Avoid Dangerous Climate Change to Protect Young People and Future Generations, and Nature" 21.*
29. *Setting a Target for Emission Reduction, CCC.ORG at <http://www.theccc.org.uk/tackling-climate-change/the-science-of-climate-change/setting-a-target-for-emission-reduction/>. [Accessed May 21, 2014.]*
30. See *Hillingdon LBC v Secretary of State for Transport [2010] EWHC 626 (Admin), §§3, 41, 77.*
31. *Meeting Carbon Budgets—2013 Progress Report to Parliament, 10 (June 2013) at http://www.theccc.org.uk/wp-content/uploads/2013/06/CCC-Prog-Rep-Book_singles_web_1.pdf [Accessed May 21, 2014]; Alex Morales, *UK Risks Missing Carbon Targets Without Clearer Signals, BLOOMBERG.COM (June 26, 2013) at <http://www.bloomberg.com/news/2013-06-25/u-k-risks-missing-carbon-targets-without-clearer-signals.html>. [Accessed May 21, 2014.]**
32. *Meeting Carbon Budgets at 10.*
33. *Meeting Carbon Budgets at 18.*

- [34.](#) *Meeting Carbon Budgets at 16–17.*
- [35.](#) Information in this Annex is attributed to Winchester City Council.
- [36.](#) Hampshire Record Office, Winchester City archives, Borough court roll.
- [37.](#) Derek Keene, *Survey of Medieval Winchester Vol.2*, Oxford, Clarendon Press, 1985 at 56.
- [38.](#) Resolution 64/292 2014 <http://www.un.org/es/comun/docs/?symbol=A/RES/64/292&lang=E> and implicit by the right to life provision in the European Convention on Human Rights.

© 2014 Sweet & Maxwell and its Contributors

