Environmental Rights in States' Constitutions in USA

Citation	Summary
Books	
Maya K Van Rossum The Green Amendment: The People's Fight For a Clean, Safe & Healthy Environment (2nd ed. 2022) The Green Amendment: The People's Right to a Healthy Environment (1st ed. 2017) Austin, TX: Disruption Books	For decades, activists have relied on federal and state legislation to fight for a cleaner environment. And for decades, they've been fighting a losing battle. The sad truth is our laws are designed to accommodate pollution rather than prevent it. It's no wonder people feel powerless when it comes to preserving the quality of their water, air, public parks, and special natural spaces. But there is a solution: bypass the laws and turn to the ultimate authority--our state and federal constitutions. In 2013, the author and her team won a watershed legal victory that not only protected Pennsylvania communities from ruthless frackers but affirmed the constitutional right of people in the state to a clean and healthy environment. Following this victory, the author inaugurated the Green Amendment movement, dedicated to empowering every American community to mobilize for constitutional change. We all have the right to pure water, clean air, and a healthy environment. It's time to claim that right--for our own sake and that of future generations. Foreword by Kerri Evelyn Harris Introduction: We Need a Green Amendment 1. Living in the Sacrifice Zone 2. The Right to a Healthy Environment 3. Fracking Away Our Future 4. The Perils of Pipelines 5. Wasted 6. The Paving of America [Confronting the Climate Crises; Ending Environmental Racism; You're Not Expendable!] 7. Can We Afford a Green Amendment? 8. Fighting for a Green Amendment Excerpt at: https://perma.cc/PE9X-WCK5
The Constitutional Question to Save the Planet: The Peoples' Right to a Healthy Environment Franklin L Kury Environmental Law Institute, 2021 GE180 .K87 2021 [Also see in D. Pennsylvania]	More than 50 years ago, the author drafted and championed an Environmental Rights Amendment to the Pennsylvania Constitution, which was enacted on Earth Day 1970 and ratified by Pennsylvania's voters a year later. In the half century since then, climate change has become the overriding threat to the environment of the planet. In this book, the author expands upon the story of Article I, Section 27, to demonstrate how its principles can be the basis for addressing climate change in the rest of the world. The story concludes with a call for the federal government's leadership to seek a national environmental rights amendment to the U.S. Constitution and a treaty to expand its reach to the international community. Part 1: The Birth of Article 1, Section 27, on May 18, 1971 Chapter 1: How I Met Basse Beck Chapter 2: The Assault on Gibraltar—The 1966 Campaign Chapter 3: Pennsylvania's Environmental Revolution Chapter 4: Originating and Enacting Article I, Section 27 Part 2: The United States through May 18, 1971 Chapter 5: The Environmental Silence of the United States Constitution

	Chapter 6: The Environmental Awakening Part 3: The Half Century since May 18, 1971 Chapter 7: Pennsylvania Courts Anesthetize Article I, Section 27 Chapter 8: The English Language Prevails Chapter 9: Other States Begin to Act While the United States Constitution Remains Silent Chapter 10: The International Community Chapter 11: The Greatest Environmental Game Changer—Global Warming Part 4: May 18, 2071 and the Leadership of the United States Chapter 12: An Environmental Amendment to the U.S. Constitution Chapter 13: A Climate-Centered Foreign Policy for the United States Chapter 14: May 18, 2071, and the Leadership of the United States Afterword: President Biden's Urgent Opportunity
Articles	
The Unfulfilled Promise of Environmental Constitutionalism Amber Polk 74 Hastings L.J. 123 (2022)	The political push for the adoption of state-level "green amendments" in the United States has gained significant traction in just the last couple of years. Green amendments add an environmental right to a state's constitution. Five such amendments were made in the 1970s in Pennsylvania, Montana, Hawaii, Massachusetts, and Illinois. This Article looks in depth at the case law that has developed the contours of these constitutional environmental rights in the wake of the political revival of environmental constitutionalism in the United States. I distill two lessons from this jurisprudence. First, constitutional environmental rights are interpreted by the courts as procedural rights, not substantive rights. Second, in interpreting constitutional environmental rights, courts look to other legal doctrines to define the content and scope of the constitutional environmental right, generally on the basis of the constitutional language. I argue that because these rights are interpreted as procedural rights, they fail to effectuate the paradigm shift that we should expect from a rights-based environmentalism, and so the promise of environmental constitutionalism remains unfulfilled. https://perma.cc/94YN-6PW7
Maya K. van Rossum Green Amendments Will Empower Environmental Protection U.S.L.W. (Aug 5, 2022)	Raising environmental rights to the highest constitutional standing at the state and federal level is critical to ensuring essential environmental protections and justice … As recent US Supreme Court opinions have made clear, these rights must be made explicit, because vague statutes risk being overturned, she explains. The US Supreme Court in West Virginia v. EPA rejected nearly 40 years of precedent requiring that courts give deference to the expertise and authority of a regulatory agency entrusted by Congress with implementing a law. Instead, the Supreme Court took great pains to undermine the authority of the Environmental Protection Agency and its effort to advance common sense regulations that could limit health-harming, climate-changing emissions from existing power plant operations. In so doing, the court has most certainly sentenced communities across our nation and future generations to the growing devastation of unchecked environmental degradation and climate devastation; including the deadly wildfires, heat waves, floods, drought, human health harms, and severe economic losses wrought by a growing climate crisis. … SCOTUS Decisions Underpin a Green Amendment Lesson To Be Protected, Rights Must Be Explicit The Green Amendment Time Has Come https://perma.cc/7RUM-67Q4
Maya van Rossum	Clean water and air, a stable climate and healthy environments are essential for supporting healthy lives, healthy communities and healthy economies. Yet across our nation, these basic human rights are not given meaningful, constitutional recognition and protection.

How Green Amendments Protect Key Environmental Rights Law360 (Nov. 23, 2021)	Not every constitutional provision mentioning environmental rights meets the criteria for being a green amendment. …. While over 40 states talk about the environment and/or environmental rights in their constitutions, only three states to date have the benefit of a constitutional green amendment: Pennsylvania, Montana and, most recently, New York. https://perma.cc/X2XL-BY9M
Samuel L. Brown (moderator), Maya K. van Rossum, Antoinette Sedillo Lopez, Terry A. Sloan and Artemisio Romero y Carver Green Amendments: Vehicles for Environmental Justice 51 Environmental Law Reporter 10903 (2021)	Despite existing laws, communities across the United States are exposed to dangerous environmental conditions that can have devastating effects on public health. One emerging mechanism to address these issues are "green amendments," self-executing provisions added to a state constitution that recognize and protect the rights of all people, including future generations, to pure water, clean air, and a stable climate . On July 22, 2021, the Environmental Law Institute and Green Amendments for the Generations co-hosted a panel of experts that explored the potential for green amendments to secure the right to a healthy environment and help secure environmental justice for all. This presented a transcript of that discussion, which has been edited for style, clarity, and space considerations. https://perma.cc/M6RZ-8GLX
Maya K. van Rossum and Kacy C. Manahan Constitutional Green Amendments Making Environmental Justice a Reality 36 ABA Nat. Res. & Env't 2 (2021)	Ending Environmental Racism Requires Systemic Reform Essential Green Amendment Elements for Advancing Environmental Justice Securing Environmental Justice Through Equitable Protection Self-Executing Amendments Raise Up Environmental Rights and Justice Green Amendments Transform Environmental Justice from Rhetoric to Reality https://perma.cc/UK55-9662
Time for a New Age of Enlightenment for U.S. Environmental Law and Policy: Where Do We Go From Here? Barry E. Hill 49 ELR 10362 (2019)	This Article argues that an individual citizen's self-executing private right to a clean, safe, and healthy environment in state constitutions and the federal constitution should be incorporated more into the environmental law and policy discourse. In other words, it argues for "environmental constitutionalism," which basically means that a constitutional provision (commonly referred to as a "green amendment") should be placed in the bill of rights sections of our state and federal constitutions so that citizens across this nation can defend their human right to clean water, clean air, and clean land. In addition to existing environmental laws and their implementing regulations, environmental constitutionalism should be seriously considered as a viable mechanism to address environmental and human health challenges. Those challenges include pollution, deforestation, biodiversity loss, ocean dead zones, melting polar icecaps, rising sea levels, explosive population growth, lack of access to safe and clean drinking water and sanitation, and climate change. Here, I focus on climate change.
Structural Environmental Constitutionalism Blake Hudson 21 Widener L. Rev. 201 (2015)	This Article introduces this structural, but arguably less obvious, form of environmental constitutionalism by detailing its relationship with fundamental environmental constitutional textual provisions, and by describing some of the environmental ramifications of constitutional designs that do not optimally allocate regulatory authority across scales of government. Part II details how both fundamental and structural environmental constitutionalism may be contained in explicit constitutional text. Part II further analyzes how both the likelihood of achieving textual changes within constitutions and the efficacy of such changes depend upon the type of governmental system involved (federal versus unitary), the level of government where textual changes are sought (national versus state constitutions), and the type of environmental constitutionalism sought to be achieved (fundamental versus structural). Part III discusses how structural constitutionalism, in particular, is also embodied within judicial interpretation of other constitutional provisions, while Part IV details how it may manifest through legislative instruments. Part V briefly details the promises and perils of structural environmental constitutionalism and its implications for achieving the goals of environmental constitutionalism generally--a different set of implications than those presented by fundamental environmental constitutionalism. Part VI briefly concludes.

Jeffrey Omar Usman Good Enough for Government Work: The Interpretation of Positive Constitutional Rights in State Constitutions 73 Albany Law Review 1459 (2010)	This article focuses upon a species of U.S. state constitutional rights to which there are no federal counterparts, positive constitutional rights, and the interpretation thereof by state courts. The goal is both descriptive and normative. The article first defines what constitutes a positive constitutional right and then highlights examples in state constitutions. The article next addresses differences between interpreting state constitutions and the Federal Constitution and between interpreting positive and negative rights in state constitutions. The article then describes the various approaches state courts have taken to interpreting affirmative constitutional rights. Ultimately, the argument is advanced that there are five primary types of affirmative rights provisions in state constitutions, each of which requires a distinct interpretive approach. https://perma.cc/W4PH-ZLUW
Environmental and Natural Resources Provisions in State Constitutions Bret Adams, Alison Garner, Brent Gunson, Andrea Hansen, Michael Holje, Deborah Houchins, David Stice, Anne Marie Turner, Michael Van Tassell, Leanne Webster, Derek Williams, Kira Dale Pfisterer, Michael Steeves eds. 22 J. Land, Res. & Envt'l L. 73 (2002)	This is a survey of substantive state constitutional provisions relating explicitly to the environment or natural resources. The survey is intended to assist both practitioners and academics in their study of state constitutions as independent sources of law relating to environmental and natural resource issues. Most state constitutions contain provisions expressly addressing natural resources and the environment. In total, our research has uncovered 207 state constitutional provisions relating to natural resources and the environment in 46 state constitutions. Table 1 of the appendix provides a state-by-state summary of these provisions. Substantively, the provisions address issues of state power, as well as private rights relating to natural resources and the environment. More specifically, the substantive areas addressed fall into nineteen categories: (1) public land acquisition/ preservation/ management, (2) public ownership of land and other resources, (3) sovereignly issues, (4) use/ development balance, (5) school trust lands, (6) public trust doctrine, (7) takings/ eminent domain/ condemnation power, (8) water access rights, (9) water rights, (10) water development and reclamation, (11) water resource protection, (12) mining and mineral rights, (13) fish and wildlife, (14) fishing access, (15) hunting and fishing restrictions, (16) rights of way, (17) timber and forest management, (18) nuclear power, and (19) agriculture. Table 2 of the appendix categorizes the state constitutional provisions by the substantive areas addressed. These substantive areas can take several forms within the states' constitutions. For example, some provisions may be written as general policy statements, or expressions of public values, while other provisions may explicitly direct the legislature to act. The different forms of provisions within the states' constitutions include: (1) general policy statements; (2) legislative directives; (3) legislative protection; (4) agency authority; (5) individual rights; (6) financial provisions, including (7) tax provisions, (8) bond-making authority, and (9) various funds and trust accounts; (10) educational programs; and (11) a private liability provision. Table 3 of the appendix categorizes the constitutional provisions by these specific forms. https://perma.cc/77TR-5NWZ
Right to a Clean Environment Provisions in State Constitutions, and Arguments as to A Federal Counterpart Congressional Research Service (CRS) Report RS20084 (February 23, 1999)	The issue arises occasionally whether it might be desirable to amend the U.S. Constitution to add an environmental provision -- such as one declaring an individual right to a clean environment. Some attention was given this issue during the 1970s, when over a dozen states adopted clean environment or other environmentally oriented provisions in their constitutions. Our focus here is solely personal right to a clean environment provision and the questions they raise. Are they self-executing, or dependent instead on implementing legislation? Do they create private rights of action? If so, on whose behalf, for what remedies, and against what categories of defendants? What is the standard to be enforced, and the level of proof needed to show injury? And soon. All these issues would arise as well were a federal right-to-a-clean-environment provision to be proposed. In addition, a federal provision would implicate federalism concerns if its scope exceeded that of the Commerce Clause. https://perma.cc/6UCN-9EC4
Barton H. Thompson Jr.	What distinguishes most state constitutions from the federal Constitution is their immense number of substantive provisions. Part I provides an overview of the substantive provisions dealing with public access, environmental policy, and natural resource policy. Over two-thirds of state constitutions contain such provisions, and each year brings dozens of proposals to add new substantive environmental

Environmental Policy and State Constitutions: The Potential Role of Substantive Guidance. 27 Rutgers L.J. 863 (1996)	provisions to state constitutions. In 1995-96, for example, environmental interests proposed adding a new provision protecting natural resources in New Hampshire, establishing environmental rights in New Jersey, and adding an environmental bill of rights to the Michigan Constitution, among other proposals. Part II considers what type of substantive environmental provisions should be included in state constitutions and how effective such provisions have been in practice. Since these inquiries necessarily require a model of state constitutionalism, Part II analyzes and contrasts two potential models. Under what might be called a "Representative Democracy Model," a state constitution would provide an optimum system of representative democracy for addressing policy issues. Particular policy issues, like the environment, would require separate provisions only if the general system would encounter unique disabilities addressing such issues or if the issues were an inappropriate subject for democratic discretion. Under what might be called a "Community Values Model," state constitutions also would help direct legislative debate and solidify community values by laying out important policy principles of the community. Part III examines whether state constitutions should explicitly incorporate and delimit the public trust doctrine. In the face of active judicial use of the doctrine, property owners in California and other states have complained that state courts have unjustly wielded the doctrine to shrink private ,property rights without needing to comply with the "just compensation" provisions of the state and federal constitutions. Past use of the doctrine raises a number of troubling issues, including the takings issue. At the same time, the foundations of the public trust doctrine always have been uncertain, undermining the doctrine's legitimacy and potential use. For these and other reasons, a state might want to consider "constitutionalizing" the public trust doctrine. Although the Representative Democracy Model and Community Values Model are valuable means of evaluating what substantive provisions should go into state constitutions, they, in practice, have not guided what substantive provisions actually have been included in state constitutions. As Part IV elaborates, many provisions result instead from political expediency. The relative ease of amending constitutions in most states has led special interests to use state constitutions as a substitute for the legislative process, evading legislative obstacles and protecting current majoritarian views against shifting coalitions. Given these goals, such politically driven provisions tend to be quite detailed. One result is that state governments frequently find it difficult to change policies to meet shifting conditions and needs. Another consequence is a cluttered constitution that alienates and confuses the average reader. To play a viable and distinct political role, state constitutions must be more than simply another means of direct democratic legislating or a mere substitute for the initiative. Part V concludes with some final thoughts on the relevance of substantive constitutional provisions to state environmental policy.

A. Pennsylvania

Citation	Summary
Book	
The Constitutional Question to Save the Planet: The Peoples' Right to a Healthy Environment Franklin L Kury Environmental Law Institute, 2021	More than 50 years ago, the author drafted and championed an Environmental Rights Amendment to the Pennsylvania Constitution, which was enacted on Earth Day 1970 and ratified by Pennsylvania's voters a year later. In the half century since then, climate change has become the overriding threat to the environment of the planet. In this book, the author expands upon the story of Article I, Section 27, to demonstrate how its principles can be the basis for addressing climate change in the rest of the world. The story concludes with a call for the federal government's leadership to seek a national environmental rights amendment to the U.S. Constitution and a treaty to expand its reach to the international community. Part 1: The Birth of Article 1, Section 27, on May 18, 1971 Chapter 1: How I Met Basse Beck Chapter 2: The Assault on Gibraltar—The 1966 Campaign Chapter 3: Pennsylvania’s Environmental Revolution Chapter 4: Originating and Enacting Article I, Section 27

	Part 2: The United States through May 18, 1971 Chapter 5: The Environmental Silence of the United States Constitution Chapter 6: The Environmental Awakening Part 3: The Half Century since May 18, 1971 Chapter 7: Pennsylvania Courts Anesthetize Article I, Section 27 Chapter 8: The English Language Prevails Chapter 9: Other States Begin to Act While the United States Constitution Remains Silent Chapter 10: The International Community Chapter 11: The Greatest Environmental Game Changer—Global Warming Part 4: May 18, 2071 and the Leadership of the United States Chapter 12: An Environmental Amendment to the U.S. Constitution Chapter 13: A Climate-Centered Foreign Policy for the United States Chapter 14: May 18, 2071, and the Leadership of the United States Afterword: President Biden's Urgent Opportunity
John Mattioni, Pennsylvania Environmental Law Handbook Lanham, Md. : Government Institutes, 6th ed. (2004).	Introduction Agencies responsible for environmental programs in Pennsylvania Air pollution control Water pollution control Coastal zones, water obstructions, and wetlands Solid and hazardous waste management Waste minimization and pollution prevention Storage tank regulation Right-to-know and emergency planning Pennsylvania environmental tort law Environmental considerations in business transactions.
Environmental Private Rights of Action in Pennsylvania. Pennsylvania Bar Institute (1991).	Ch. 1. Overview of citizen suit provisions found in Federal and Pennsylvania environmental statutes / Michael M. Meloy Ch. 2. Private rights of action under Superfund / Frank M. Thomas, Jr. Ch. 3. Environmental rights of action under the Pennsylvania Hazardous Sites Cleanup Act / Winifred M. Prendergast Ch. 4. "Cost shifting" in the context of environmental toxic torts / Gerald J. Williams Ch. 5. Citizen enforcement of water pollution laws in Pennsylvania / Robert B. McKinstry, Glenn L. Unterberger, Harry R. Weiss Ch. 6. Citizen enforcement of the Federal Clean Air Act / Robert B. McKinstry and Harry R. Weiss Ch. 7. Private rights of action under the Resource Conservation and Recovery Act, the Solid Waste Management Act, and the Municipal Waste Planning, Recycling and Waste Reduction Act / Robert J. Yarbrough and David W. Buzzell Ch. 8. Common law rights of action: Private and public nuisance / James D. Morris Ch. 9. Integrated problem: Petroleum tank contamination / Steven J. Engelmyer and Beth Olanoff.
Articles	
John C. Dernbach,	In landmark decisions in 2013 and 2017, the Pennsylvania Supreme Court revitalized the Environmental Rights Amendment (Article I, Section 27) to the state constitution. It did so by rejecting a three-part test that the Commonwealth Court articulated in 1973 as a substitute for the text of the Amendment. The new standard of review, the Supreme Court said, is based on "the text of [a]rticle I, [s]ection 27 itself as well as the underlying principles of Pennsylvania trust law in effect at the time of its enactment."

Thinking Anew About the Environmental Rights Amendment: An Analysis of Recent Commonwealth Court Decisions, 30 Widener Commw. L. Rev. 147 (2021).	This Article is an analysis of the Commonwealth Court's 13 Environmental Rights Amendment decisions in the first four years after the Supreme Court revitalized the Amendment. The Commonwealth Court plays a critical role in shaping the law of the Amendment because it is a specialized intermediate appellate court that decides questions of public law, including constitutional questions. These 13 decisions involve a variety of permitting, zoning, and related cases that are quite different from the two Supreme Court decisions, which involved the constitutionality of statutes under Section 27. They thus provide a sense of the wide variety of contexts in which Section 27 can apply. This Article describes these cases and draws seven key themes from them about the Commonwealth Court's approach to Environmental Rights Amendment jurisprudence during this four-year period. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3777547
Julia E. Sappey, Greening the Trust: Enforcing Pennsylvania's Environmental Rights and Duties to Combat Climate Change, 62 William & Mary Law Review 1691 (2021)	Part I examines the purpose and early history of the Environmental Rights Amendment (ERA). Part II analyzes recent court decisions that have established both the contours of Pennsylvanians' environmental rights and the Common- wealth's duties under the ERA. Part III explains the functionality of cap-and-trade systems generally and how Regional Greenhouse Gas Initiative (RGGI) currently operates. Part IV discusses how the Commonwealth's duties under the ERA inform the administration of a cap-and-trade program and how Pennsylvania courts can enforce the fulfillment of those duties. Part V anticipates and addresses potential counterarguments regarding enforcement in light of separation of powers concerns and the sufficiency of RGGI in fulfilling the Commonwealth's duties. https://scholarship.law.wm.edu/wmlr/vol62/iss5/6
Jacob Elkin, Environmental Justice and Pennsylvania's Environmental Rights Amendment: Applying the Duty of Impartiality to Discriminatory Siting, 11 Columbia Journal of Race and Law 195 (2021)	Since the 1970s, there has been a growing awareness that environmental hazards are disproportionately sited in low-income communities and communities of color. Under the label of the environmental justice movement, community groups have pursued various means to fight against the discriminatory concentration of environmental burdens in their neighborhoods. Yet in its Civil Rights Act and Equal Protection Clause jurisprudence, the Supreme Court has largely shut the door on federal environmental justice litigation by requiring plaintiffs to prove that the government acted with discriminatory intent in its siting and permitting decisions. This Note argues that Pennsylvania's Environmental Rights Amendment provides an avenue for disparate impact environmental justice litigation at the state level. In its 2013 Robinson Township v. Commonwealth decision, the Pennsylvania Supreme Court interpreted the state's Environmental Rights Amendment as imposing significant public trust obligations on the state legislature and other governmental actors. While previous scholarship has analyzed Robinson Township's impact on environmental constitutionalism generally, this Note focuses on the decision's environmental justice implications. In particular, this Note argues that one public trust duty imposed by the Pennsylvania Supreme Court-the duty of impartiality-should prohibit state actors from continuing to site environmental hazards in communities that already bear disproportionate environmental burdens. https://journals.library.columbia.edu/index.php/cjrl/article/view/8016/4099
John C. Dernbach, The Role of Trust Law Principles in Defining Public Trust Duties for Natural Resources, University of Michigan Journal of Law Reform, Vol. 54, 2020.	Public trusts for natural resources incorporate both limits and duties on governments in their stewardship of those natural resources. They exist in every state in the United States—in constitutional provisions, statutes, and in common law. Yet the law recognizing public trusts for natural resources may contain only the most basic provisions—often just a sentence or two. The purpose and terms of these public trusts certainly answer some questions about the limits and duties of trustees, but they do not answer all questions. When questions arise that the body of law creating or recognizing a public trust for natural resources does not fully answer, trustees, lawyers, and courts often look to trust law for help. In fact, they have been doing so for more than a century, including in the U.S. Supreme Court's landmark 1892 public trust decision in Illinois Central Railroad Co. v Illinois. In this sense, trust law provides a set of background or underlying principles for interpreting and applying public trusts. Using cases from around the country, this Article sets out a four-step methodology for determining when and how to use trust law principles to help interpret public trusts. This methodology can be applied in any case involving the use of trust principles to help interpret any particular public trust. This Article also explains that the relevant trust law includes general trust principles, private trust law principles, and charitable trust law principles, and should not be limited to private trust law. This Article uses a 2019 Pennsylvania Commonwealth Court decision, Pennsylvania Environmental Defense Fund v. Commonwealth, as a case study. The case applies Article I, Section 27 of the Pennsylvania constitution, which requires that public

	natural resources be conserved and maintained for the benefit of present and future generations. In that case, the court used an interpretation of private trust law to decide that the state could spend some bonus and rental payment money from oil and gas leasing on state forest and park land, which is constitutional public trust property, for non-trust purposes. This Article applies the four-part methodology to the case, explains general trust law and charitable trust law principles that the Commonwealth Court did not address, and argues that use of these principles better fits the constitutional public trust. It concludes that the money from bonus and rental payments should be spent entirely for the purposes of the trust. This Article is intended to draw attention to both the potential value of trust law principles and also to their potential danger in the interpretation and application of public trust laws for natural resources. Trust law has the potential to enhance the protectiveness of public trusts by imposing various fiduciary duties on trustees. It also has the potential to undermine public trusts, particularly through rules requiring that trust assets be financially productive. To vindicate public trusts for natural resources, environmental and natural resources lawyers need to become better trust lawyers. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3569906
John C. Dernbach, Natural Resources and the Public Estate; Article I, Section 27 Natural Resources and the Public Estate, Chapter 29, of The Pennsylvania Constitution — A Treatise on Rights and Liberties (2d ed., 2020)	This is a detailed explanation of the history and cases decided under Article I, Section 27 of the Pennsylvania Constitution, also known as the Environmental Rights Amendment. It is the final pre-publication version of the chapter on the Amendment in The Pennsylvania Constitution: A Treatise on Rights and Liberties. The Amendment has two parts. The first part creates a right in "the people" to clean air, pure water, and the preservation of certain values. The second part articulates the right of "the people" to the state's public natural resources, and establishes a right in "the people" to have those resources conserved and maintained for the benefit of present and future generations. The amendment is in Article I of the Pennsylvania constitution (the subject of the treatise), which is Pennsylvania's Declaration of Rights, analogous to the U.S. Bill of Rights. Pennsylvania is one of few states in the country to recognize the environmental rights of its citizens, and is perhaps the most prominent. This treatise chapter first explains the history of the Amendment. It then describes four ways that courts have applied it. The first and most obvious is as a basis for legally enforceable claims. For more than four decades, Pennsylvania courts avoided applying the text of the Amendment, using instead a judicially invented test as a substitute for the text and greatly weakening the Amendment's effect. Beginning with a plurality opinion in 2013 in Robinson Township v. Commonwealth, and then a majority opinion in 2017 in Pennsylvania Environmental Defense Foundation v. Commonwealth, the Pennsylvania Supreme Court used the text of the Amendment to hold legislation unconstitutional, and discarded the judicially invented test. This chapter also explains that Pennsylvania courts have applied the Amendment in three other ways—as confirmation and extension of the police power, as guidance in statutory interpretation, and as constitutional authority for laws whose constitutionality has been challenged on other grounds. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3588331
Robert B. McKinstry Jr. & John C. Dernbach, Applying the Pennsylvania Environmental Rights Amendment Meaningfully to Climate Disruption, 8 Mich. J. Envtl. & Admin. L. 49 (2018).	The Pennsylvania Constitution contains a unique Environmental Rights Amendment (ERA), which recognizes an individual right to "clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment." The ERA also includes a public trust element that makes "Pennsylvania's public natural resources . . . the common property of all the people, including generations yet to come." It makes the Commonwealth the "trustee of these resources," requiring it to "conserve and maintain them for the benefit of all the people." Recent decisions by the Pennsylvania Supreme Court (the Court) in Robinson Township v. Commonwealth and Pennsylvania Environmental Defense Foundation v. Commonwealth provide significant support for Pennsylvania regulations to address the threat of climate disruption posed by greenhouse gas (GHG) emissions to achieve net zero carbon emissions by the middle of this century. In light of the threats that climate disruption poses to Pennsylvania's public natural resources, the text of the ERA, and the principles articulated in those recent cases, we argue that a stable climate (a climate that has not been disrupted by anthropogenic emissions of GHGs) should be considered protected by the rights recognized by the ERA, and the public trust duties it creates. We argue that these rights and duties require Pennsylvania to employ regulatory measures to reduce GHG emissions to the level warranted by the

	social cost of carbon and to achieve carbon neutrality (net zero emissions) by mid-century. Further, we argue that there are judicially recognizable standards to compel the Commonwealth to exercise its existing authority to limit GHG emissions. In light of existing legislative authority, the obligations imposed by the United Nations Framework Convention on Climate Change, the Paris Agreement, and the federal Clean Air Act, we make the case that this regulatory program should take the form of an economy-wide cap-and-trade program providing for the auction of allowances with a reserve price based on the social cost of carbon and additional measures to prevent leakage and a cap reaching carbon neutrality by mid-century. https://repository.law.umich.edu/mjeal/vol8/iss1/3 & https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3141354
John C. Dernbach, Kenneth T. Kristl & James R. May Recognition of Environmental Rights for Pennsylvania Citizens: Pennsylvania Environmental Defense Foundation v. Commonwealth of Pennsylvania 70 Rutgers U. L. Rev. 804 (2018)	This Article describes the background of this landmark case, including the cases in which the Pennsylvania courts put the Environmental Rights Amendment into a state of near dormancy for more than four decades. After briefly reviewing Robinson Township, this Article reviews each of the Pennsylvania Supreme Court's opinions in Pennsylvania Environmental Defense Foundation v. Commonwealth ("PEDF"). It then addresses a variety of issues about the interpretation and application of section 27, many of which surfaced after Robinson Township, but which have much greater salience after PEDF. Finally, the Article addresses the implications of this remarkable decision for constitutional environmental amendments in other states and around the globe. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3137074 https://perma.cc/C99N-NJXN
Kenneth Kristl, It Only Hurts When I Use It: The Payne Test and Pennsylvania's Environmental Rights Amendment, Environmental Law Reporter, Vol. 46, No. 7, 2016.	While the Pennsylvania Constitution's Environmental Rights Amendment creates rights to clean air, pure water, the preservation of natural, scenic, historic and esthetic values of the environment and a public trust over public natural resources, judicial interpretations since the Amendment's passage significantly restricted the meaning of the provision. The Commonwealth Court's three-part test in Payne v. Kassab was the primary basis for those judicial interpretations, and had the effect of a near-universal rejection of such claims. The Pennsylvania Supreme Court's plurality opinion in Robinson Township provides a fresh and expansive view of the amendment that revitalizes the possibility of constitutional claims. Although Robinson Township expressly criticized the Payne test, the Commonwealth Court continues to apply it. This article explores the development of the Payne test, and identifies fundamental problems with that test in light of Robinson Township. Finding that the Payne test cannot be salvaged, the article proposes a new test based on the principles articulated in Robinson Township that more closely hews to the new understanding of what the Environmental Rights Amendment means. It concludes by postulating that eliminating the Payne test would better serve the effort to revitalize Section 27 and allow Commonwealth agents and judges to assure that Section 27 plays a vital role in helping to protect Pennsylvania's environment and public natural resources. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2758960
John C. Dernbach, James R. May and Kenneth Kristl, Robinson Township v. Commonwealth of Pennsylvania: Examination and Implications, Rutgers U. L. Rev. Vol. 67, 2015	In Robinson Township v. Commonwealth of Pennsylvania, the Pennsylvania Supreme Court held unconstitutional major parts of Pennsylvania's "Act 13" — a 2012 oil and gas law designed to facilitate the development of natural gas from Marcellus Shale. In so doing, the Court breathed new life into Article I, Section 27 of Pennsylvania's constitution, which creates public rights in certain environmental amenities and requires the state to "conserve and maintain" public resources "for the benefit of all the people." This paper describes the decision, explains some of its immediate implications in Pennsylvania, and also explains its importance for public environmental rights and environmental constitutionalism elsewhere. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2412657
Erin Daly and James May, Robinson Township v. Pennsylvania: A Model for Environmental Constitutionalism 21 Widener L. Rev. 151 (2015)	This article situates Robinson Township within comparative constitutionalism. Part I provides an overview of Act 13 and the state constitutional Environmental Rights Amendment. Part II examines how the state supreme court overcame impediments to judicial authority in reaching the merits. Part III considers how the court dispensed with some structural issues involving justiciability. Issues of whether and the extent to which constitutional environmental rights are on par with political rights are the focus of Part IV. How the court decided that the Commonwealth of Pennsylvania had violated its public trust responsibilities is addressed in Part V. Part VI then explains how to reconcile the court's analysis with notions of ecological sustainability.

John C. Dernbach and Marc Prokopchak, Recognition of Environmental Rights for Pennsylvania Citizens: A Tribute to Chief Justice Castille Widener Law School Legal Studies Research Paper No. 15-10 Posted: 31 May 2015 Revised: 23 Jul 2015	This article is based on remarks made at a Special Session of the Pennsylvania Supreme Court at Duquesne University on October 7, 2014 in honor of Chief Justice Ronald Castille. It is about the loss and recovery of the original meaning of the Environmental Rights Amendment (Article I, Section 27) of the Pennsylvania Constitution. As a result of two court decisions in the 1970s, subsequent courts have essentially ignored the history, purpose, and text of Article I, Section 27. In its place, they have mostly applied a judicially created three-part balancing test as a substitute for the amendment itself. The recovery of the original meaning began with the Supreme Court's December 19, 2013 decision in Robinson Township v. Commonwealth. A plurality of the court, in a scholarly, thoughtful, and detailed opinion by Chief Justice Castille, based its decision on the text, purpose, and history of Article I, Section 27. This article explains why Robinson Township is likely to have staying power even though it did not command a majority of Pennsylvania's Supreme Court. This article also collects and summarizes 79 judicial and administrative tribunal decisions applying or considering the three-part balancing test as a substitute for the text of the amendment, and demonstrates that the challenging party has almost never prevailed under that test. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2611997
John C. Dernbach and Ed J. Sonnenberg, A Legislative History of Article 1, Section 27 of the Constitution of the Commonwealth of Pennsylvania, Showing Source Documents Widener Law School Legal Studies Research Paper No. 14-18 Posted: 2 Aug 2014; Revised: 1 Nov 2015	The Pennsylvania Supreme Court's decision in Robinson Township v. Commonwealth, 803 A.3d 901 (Dec. 19, 2013) has prompted enormous interest in the history and text of Article I, Section 27 of the Pennsylvania Constitution. This legislative history is a response to that interest. Amendments to the state constitution must be approved by each house of the General Assembly in two successive legislative sessions, and then approved by a majority of voters in a public referendum. Article I, Section 27 was agreed to in the 1969-1970 and 1971-72 sessions of the General Assembly, and approved by the state's voters on May 18, 1971. We have attempted to put in one place all of the bills and other documents that represent its passage through this process. More than 40 years after its adoption, many of these documents are relatively hard to find. We hope that this legislative history will make it easier for the public, the bar, and others to see what was done, and why. A companion legislative history, showing only material relevant to Article I, Section 27, is available at 24 Widener L.J. 181 (2015), http://ssrn.com/abstract=2684030 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2684030 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2474660
Richard Rinaldi, Dormant for Decades, the Environmental Rights Amendment of Pennsylvania's Constitution Recently Received a Spark of Life from Robinson Township v. Commonwealth, Widener Law Journal, Vol. 24, No. 3, 2015.	In the wake of Pennsylvania's coal revolution, voters took to the polls in 1971 expressing a unified vow not to repeat the environmental mistakes of their industrious-minded forefathers. What resulted was the Environmental Rights Amendment to Pennsylvania's Constitution. It guaranteed the people's "right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment" and affirmed that "public natural resources are the common property of all the people, including generations yet to come." The Amendment was the most powerful affirmation of citizens' rights to environmental protection in the United States — perhaps even a bit too powerful for its time. Over the years, Pennsylvania courts gave little constitutional effect to the Amendment's plain meaning, treating it instead as a broad policy statement whose true activation as a constitutional right might require further action from the General Assembly. However, after lying in suspended animation for forty-three years, Pennsylvania's Environmental Rights Amendment recently received a spark of life from a plurality of the Supreme Court of Pennsylvania. In a landmark decision, Robinson Township v. Commonwealth employed the Environmental Rights Amendment — for the first time since its inception — to strike down three provisions of a Pennsylvania statute as unconstitutional. Section II.A of this survey first details the three challenged provisions Act 13. Section II.B then outlines Pennsylvania's Environmental Rights Amendment, including the historical context of its passage and the past jurisprudence that diminished the Amendment's purpose. Section III then highlights the facts of Robinson Township, including its procedural history, the parties' arguments and its final treatment by the Supreme Court of Pennsylvania. Section IV subsequently evaluates the impact of that landmark decision and suggests a potentially vast sea-change in the way future courts assess claims under the Environmental Rights Amendment, namely that the plurality's textual interpretation of the Amendment may revitalize its

	promise as a true constitutional right to environmental protection. In conclusion, section V argues that the plurality's interpretation and prescribed application of the Amendment is in accordance with the intent of the legislators and ratifying voters who were responsible for its enactment. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2447705
John C. Dernbach, The Potential Meanings of a Constitutional Public Trust Environmental Law, Vol. 45, No. 463, 2015.	The Pennsylvania Supreme Court's 2013 decision in Robinson Township v. Commonwealth (Robinson Township) has lawyers looking at the state's constitutional Environmental Rights Amendment (Amendment) — including its public trust provision — as if it magically appeared in the state constitution on the date of the decision. The Amendment had been so thoroughly buried by judicial decisions that most lawyers had never given the text much thought. This Article describes the origin of the Amendment, the two primary cases decided shortly after it was adopted that effectively buried the Amendment, and the Robinson Township decision. It then surveys the wide range of issues that have arisen in the courts and other adjudicatory bodies in the immediate aftermath of Robinson Township and provides suggestions for how some of them should be resolved. Taken together, these cases provide a glimpse of what constitutionally protected environmental rights, including a constitutional public trust, could mean if the Pennsylvania courts continue to treat the Amendment as constitutional law. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2613582
Devra Lee Davis & Carrie Forrester, Past and Present Environmental Health Challenges in Southwestern Pennsylvania: Some Comments on the Right to a Clean Environment, 30 AM. J.L. & MED. 305 (2004).	This Article depicts two distinct examples of environmental challenges to public health-one an acute and spectacular episode that felled half a town, the other an ongoing series of problems posed by chronic contamination of a sparsely populated rural county. Part II portrays the circumstances leading up to the 1948 incident in the Washington County town of Donora, Pennsylvania, site of one of the first acknowledged lethal smog episodes in the industrial world, relying in part on excerpts from When Smoke Ran Like Water, a book exploring the impact and legacy of the Donora episode. Part III contrasts the acute Donora episode, which occurred when there were no federal or state standards for pollutants, with the chronic and complex environmental policy issues surrounding current efforts to identify and develop integrated regulatory strategies to control sources of arsenic and other contaminants in Greene County, Pennsylvania. Part IV argues that the tendency of recent environmental policies to insist that public health damage be demonstrated before action is taken to prevent further harm violates the Fourth Amendment which guarantees citizens "the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures." Such policies effectively permit and require proof of harm and are a major obstacle to the implementation of preventive public health policy. The right to a clean environment should be understood as a basic and protected freedom that requires preventive policies.
John C. Dernbach, Taking the Pennsylvania Constitution Seriously When it Protects the Environment: Part I - An Interpretative Framework for Article I, Section 27, 103 Dickinson Law Review 693 (1999)	Article I, Section 27 of the Pennsylvania constitution does something that statutes and regulations cannot do; it makes environmental and historic protection part of the constitutional purpose of state government. This two-part Article explains how the Amendment accomplishes that purpose and what it should mean for Pennsylvania, and suggests the value of similar inquiries under other state and national constitutions. Pennsylvania's experience is particularly important in understanding such provisions because Article I, Section 27 is the most prominent environmental amendment to a state constitution. Part I of this Article suggests an interpretative framework for understanding the Amendment that is based on its text, legislative history, and purposes. First, the Amendment creates two separate constitutional rules - one concerning the public's right to clean air, pure water, and the preservation of certain environmental values; and the other creating a public right in the conservation and maintenance of public natural resources. Second, Article I, Section 27 gives the environment the same legal protection that other provisions of the state constitution give to individual property rights. The Amendment, when balanced by provisions protecting property rights, is thus not anti-development. Rather, it is directed toward environmentally sustainable development. Third, Article I, Section 27 needs to be understood primarily on the basis of governmental responsibilities. While citizen rights are an essential part of the Amendment, such rights should be directed primarily at enforcement of the government's duties. Finally, when legislation or administrative regulation provides as much protection as Article I, Section 27, or even more protection, there is no need for judicial enforcement of the Amendment. Where legal gaps exist, however, courts should enforce the substantive rules contained in the Amendment. Courts should also use Article I, Section 27 to support the application of other legal rules. These four premises create a

	framework for understanding the environmental rights and public trust parts of the Amendment, which are discussed in detail in Part II of this Article. https://ssrn.com/abstract=1105154
John C. Dernbach, Taking the Pennsylvania Constitution Seriously When It protects the Environment: Part II - Environmental Rights and Public Trust, 104 Dickinson Law Review 97 (1999)	The first part of this Article suggests a framework for understanding Article I, Section 27 of the Pennsylvania constitution. This second and final part of the Article outlines ways in which that framework should be applied. The Article argues that the environmental rights and public trust provisions of Article I, Section 27 are self-executing against the government. The public trust clause requires an understanding of the trust corpus (publicly owned natural resources), the trustee (state), the beneficiaries (the public, including future generations), and the substantive obligations of the trustee (to conserve and maintain these resources). Because the state's obligation to conserve and maintain public natural resources for the benefit of all the people is stated in the Amendment itself, this obligation should be the basic benchmark against which state decisions concerning management of these resources are judged. Courts should read the environmental rights clause to prohibit the state, including any state agency or municipality whose decisions affect these resources or values, from interfering with their protection. In addition to its substantive application, Article I, Section 27 has also been used by the courts to reinforce the application of other rules or principles. Article I, Section 27 confirms and extends the application of the police power to environmental matters, provides guidance in statutory interpretation, and supports the constitutionality of laws whose constitutionality has been challenged on other grounds. Finally, the public trust clause suggests the need for judicial recognition of several subsidiary rules that reinforce the state's substantive obligations. In private trust law, the trustee is obliged to keep track of the trust corpus, to report to the beneficiary at the beneficiary's request on the status of the trust corpus, and to permit third-party auditing of the trustee's accounts. Such obligations would reinforce the state's substantive obligations under Article I, Section 27 and would also force the state to deal with its trust responsibilities in a more holistic manner. II. Substantive Rules A. Three Self-Executing Applications (Environmental Rights and Public Trust) B. The Constitutional Public Trust (Settlors, Trust Corpus, Beneficiaries, Trustees, and Responsibilities of Trustees) C. Environmental Rights III. Principle-Reinforcing Rules 1. Confirmation and Extension of Police Power 2. Guidance in Statutory Interpretation 3. Constitutional Authority for Laws Whose Constitutionality is Challenged on Other Grounds 4. Accounting for Status of Public Natural Resources IV. Conclusion https://ssrn.com/abstract=1105158
Franklin L. Kury, The Environmental Amendment to the Pennsylvania Constitution: Twenty Years Later and Largely Untested, 1 Villanova Environmental Law Journal 123 (1991).	In the nineteen years since enactment, Article I, Section 27 (the Amendment) has been widely quoted and frequently used in litigation to block environmental incursions. Efforts to use the Amendment in such a manner have, however, been unsuccessful. Nonetheless, the Amendment has had impact in the realm of state agency decision-making and in the state legislature. The Amendment has provided a firm policy basis that is widely applied by the agencies responsible for protecting the environment in Pennsylvania: The Department of Environmental Resources, the Historical and Museum Commission, the Fish Commission, and the Game Commission. In addition, the state legislature has passed a number of laws to implement the Amendment. It has also been used in environmental magazines and by environmental organizations. I. Introduction: An Earth Day Birthday

	II. The Amendment and its Application A. Is the Amendment Self-Executing? B. What Standards to Apply? C. Who are the Trustees? III. What Impacts has the Amendment Had? A. Judicial Application B. The State Legislature C. State Agencies 1. The Department of Environmental Resources 2. The Department of Transportation 3. The Public Utility Commission 4. The Fish and Game Commissions 5. The Historical and Museum Commission D. Municipalities IV. Public Trust Doctrine V. Summary and Conclusions Appendix: Constitutional Provisions in Other States Available at: https://digitalcommons.law.villanova.edu/elj/vol1/iss1/3
Franklin L. Kury, Natural Resources and the Public Estate: A Biography of Article I, Section 27 of the Pennsylvania Constitution (1985).	
Richard C. Lane, The Pennsylvania Public Trust Doctrine: Its Use as a Restraint on Government, 13 Duq. L. Rev. 551 (1975).	The public trust theory of natural resource management was established as the law of the Commonwealth of Pennsylvania in 1971, with the adoption of article I, section 27 of the Constitution of Pennsylvania.' This section declares that certain environmental rights belong to the citizens of Pennsylvania, and imposes upon the Commonwealth, as trustee, the duty to conserve and maintain the public natural resources for the benefit of the people. The public trust doctrine was a part of the body of common law in Pennsylvania prior to the adoption of article I, § 27; however, the common law public trust doctrine applied exclusively to waterways of the Commonwealth and the submerged land thereunder. The constitutional public trust doctrine applies to all of the public natural resources of the Commonwealth. It is the premise of this comment that the constitutional amendment is more than a general statement of environmental policy; it is a declaration of substantive rights in the people and an establishment of an active trust. The scope of the discussion will be limited to the public trust doctrine in Pennsylvania. The doctrine as it exists at common law will be presented for its dependent significance to the development of the constitutional public trust doctrine. https://dsc.duq.edu/dlr/vol13/iss3/6
Op-eds, Blogs, and Others	
John Dernbach, PA Supreme Court: Accounting Required for Environmental Rights Amendment Trust Fund Money	In 2017 and 2021, the Pennsylvania Environmental Defense Foundation (PEDF) obtained decisions from the Pennsylvania Supreme Court that royalties and other money the state receives from oil and gas drilling in state forests must be used to "conserve and maintain" public natural resources in accordance with Article I, Section 27 of the state constitution (Environmental Rights Amendment or ERA). The Court held that the General Assembly—the legislature–could not spend this money any way it saw fit. Applicable Law

John Dernbach, August 17, 2022.	Did the General Assembly Violate the ERA by Authorizing DCNR to Spend ERA Trust Fund Money Outside the Marcellus Shale Region? Did the General Assembly Violate the ERA by Transferring Money from the Keystone Recreation, Park, and Conservation Fund to the General Fund? Did the General Assembly Violate the ERA by Repealing the 1955 Oil and Gas Lease Fund Act and Replacing It with Legislation That Requires the General Assembly Only to "Consider" the ERA Before Appropriating ERA Trust Fund Money? Did the General Assembly Violate the ERA by Appropriating ERA Trust Fund Money to DCNR for Its General Operating Expenses? Did the General Assembly Violate the ERA by Allowing the Commingling of ERA Trust Fund Money With Money from Non-ERA Sources? Underlying Problems Summing Up: The Commonwealth Won, Sort Of https://johndernbach.com/2022/08/pennsylvania-supreme-court-accounting-required-for-era-trust-fund-money/
What Impact Review Does Pennsylvania's ERA Require? By David G. Mandelbaum, Greenberg Traurig, LLP (February 11, 2022)	As is by now familiar, the Pennsylvania Constitution includes an Environmental Rights Amendment, Article I, Section 27. Because neither the General Assembly nor any administrative agency can definitively say what rights a constitutional provision confers, we must await elucidation from the courts. Last month, the Pennsylvania Commonwealth Court decided another in a series of cases applying the Environmental Rights Amendment to municipal land use decisions involving the oil and gas industry. See Murrysville Watch Committee v. Municipality of Murrysville Zoning Hearing Board, No. 579 C.D. 2020 (Pa. Commw. Ct. Jan. 24, 2022). That opinion may reflect some lack of judicial clarity with implications for ordinary government processes and therefore business.
Franklin Kury, Pennsylvania's Environmental Rights Amendment: Past, Present, & Future (2019). This is a presentation at the Sustainability Research & Creative Activities at West Chester University.	I will use my remarks to describe how Article 1, Section 27 came to be, but I also want to articulate how the amendment can help save us from the slow destruction of global warming. These remarks will start with a review of the history of the environmental rights amendment, and then focus on what the amendment hopefully will do in the next half century. Where will the environment of our state, nation and the planet be in 2071? That is the central question I will ask. My remarks will be in three parts. First, I will place Article1, Section 27 in its historical context, both nationally and in Pennsylvania, including our state's environmental revolution of 1965-1972. This will be followed by a discussion of how Pennsylvania's courts have treated Article 1, Section 27, and what other states have done on this issue. I will then turn to how Article 1, Section 27 might be used in the United States and the world at large. We need, I will argue, an environmental rights amendment in the U.S. Constitution. We need its principles in the constitutions of other countries. We need its principles in treaties and international agreements. Finally, I will ask how our natural environment will be in 2071 and what we can do to provide the right answer. https://digitalcommons.wcupa.edu/srca_sp/4
Jordan B. Yeager, Lauren M. Williams, John Smith, and Jonathan Kamin A Green Amendment is a Restraint on Governmental Authority (Jan. 8, 2019)	This article provides an overview of the role of a Green Amendment as an important limitation on governmental authority, as are all other fundamental rights protections in a state Constitution. This article begins by discussing Pennsylvania's history and experience with its Environmental Rights Amendment. It then discusses the important components of a Green Amendment, and the central role of a Green Amendment's antidegradation standard in checking governmental authority and promoting healthy communities and sustainable economies. https://perma.cc/46HM-L66E
Donna Morelli, Pennsylvania's Environmental Rights Amendment Grows Some Teeth, Circle of Blue, February 22, 2018.	After decades of irrelevance, two court decisions uphold people's right to "clean air, pure water," hearten activists to push for more. https://www.circleofblue.org/2018/world/pennsylvanias-environmental-rights-amendment-grows-teeth/

The Pennsylvania Common Conservation Agenda (1st Edition), Rise up for a Healthy Environment (2018) greenin18.org	The Pennsylvania Constitution requires that our state government defend the right of the citizens "to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment." Despite this mandate, Pennsylvania has the third worst air quality in the United States. In some of our cities, one in three children suffers from asthma. Pennsylvania ranks among the states with the highest risks for lead-contaminated water. Nineteen thousand miles of our streams and rivers are unsafe for drinking, recreation, aquatic life, agriculture, or industrial use. An impaired environment threatens our agriculture and tourism industries, while we miss opportunities to take advantage of the world's transition to clean renewable energy. Pennsylvania's leading conservation organizations have joined together to identify the most promising solutions to Pennsylvania's environmental challenges. They are proud to offer these solutions in the first-ever Pennsylvania Common Conservation Agenda. 5 Strengthen the 21st Century Workforce through Green Jobs 6 Champion the Great Waters of Pennsylvania from Source to Tap 8 Provide the Department of Environmental Protection and Department of Conservation and Natural Resources with the Needed Resources to Fulfill Their Missions 9 Improve the Department of Environmental Protection's Ability to Protect the Public from Threats Posed by Natural Gas and Petrochemical Infrastructure 10 Ensure Environmental Justice for Vulnerable Communities 11 Boost Current Investments in Growing Greener 12 Bolster the Commonwealth's Clean Energy Sector 14 Appendix I: Expert List
A Citizen's Guide To Article I, § 27 of the Pennsylvania Constitution Prepared by The Widener School of Law's Environmental & Natural Resources Law Clinic (Summer 2010)	At first glance, Article I, Section 27 seems to allow a citizen to challenge any activity he or she may feel is a detriment to Pennsylvania's natural environment. Indeed, on its face the language of § 27 appears to promise as much. However, the Payne test and its subsequent interpretation means that courts have thus far interpreted the amendment in a narrow way such that the amendment merely makes the state responsible to ensure, through legislation, that the state's natural resources are protected. This has given the state the power to define exactly what section 27 is meant to protect and how it should be protected. Until a successful litigant can convince the courts to expand their view, § 27 challenges will likely not succeed.
Pennsylvania's Environmental Rights Amendment Conservation Advocate, Pennsylvania Land Trust Association	It discusses the history behind the amendment. https://conservationadvocate.org/pennsylvanias-environmental-rights-amendment/
Pennsylvania Constitution Article I, § 27 Resources	In 1971, Pennsylvania voters approved the Environmental Rights Amendment to the Pennsylvania Constitution. The effort to adopt this amendment was led by then-Representative Franklin L. Kury. Article I, Section 27 provides: The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people. On this page, the Environmental Law and Sustainability Center is making available relevant legal resources concerning Article I, Section 27. https://widenerenvironment.com/environmental-law/art-1-sec-27-resources/

B. California

Citation	Summary
Books	
David Carle, Water and the California Dream: Historic Choices for Shaping the Future Counterpoint, 2016.	Imported water has transformed the Golden State's environment and quality of life. Land ownership patterns and real estate boosterism dramatically altered both urban and rural communities across the entire state. The key has been redirecting water from the Eastern Sierra, the Colorado River, and Northern California rivers. 'Whoever brings the water, brings the people, ' wrote engineer William Mullholland, whose leadership began the process of water irrigating unlimited growth. Using first-person voices of Californians to reveal the resulting changes, Carle concludes that now is the time to stop drowning the California Dream. With extensive use of oral histories, contemporary newspaper articles and autobiographies, Carle provides a rich exploration of the historic changes in California, as imported water shaped patterns of growth and development. In this thoroughly revised edition, Carle brings that history up to date, as water choices remain the primary tool for shaping California's future. In a land where climate change is exacerbating the challenges of a naturally dry region, the state's damaged environment and reduced quality of life can be corrected, Carle argues, if Californians step out of the historic pattern and embrace limited water supplies as a fact of life. Introduction: Changes and Choices Part I: Frontierland to Fantasyland 1. In Grizzly Days 2. Save the Cows ... Horses Off the Cliffs 3. Gold Fever : Afflicted Forefathers 4. Statehood, State Water and State Laws 5. Railroads and Real Estate, Citrus and Sunshine Part II: Historic Choices -- Eastern Sierra Water 6. Melodrama on the Right Side of California 7. Life in the Big City -- How Did They Get Away with It? 8. Did They See Where They Were Going? 9. What If the Los Angeles Aqueduct Had Never Been Built? Part III: Historic Choices -- Colorado River Water 10. "And lest our city shrivel and die ..." 11. Boom! Sprawling Gridlock 12. People Fumes (I) Part IV: Historic Choices -- Northern California Water 13. A Dam Inside Yosemite and M.U.D. for the East Bay 14. Big Dams Irrigate Big Farms : The Central Valley Project 15. Too Much is Not Enough : The State Water Project Part V: Tomorrowland : Today's Choices in a Hotter, Drier California 16. Who Needs Fish? Who Needs Farms? 17. The Fate of Mono Lake

	18. People Fumes (II) : Climate Warming and the Changing Water Cycle 19. Use Local Water Again and Again, Because Dams Are Little Help 20. Visualize Tomorrow -- A California Dream.
Allison Lassiter, Sustainable Water: Challenges and Solutions from California University of California Press, 2015.	Water scarcity, urban population growth, and deteriorating infrastructure impact water security around the globe. As California wrestles with the most significant drought in its recorded history, struggling to secure reliable water supplies for the future, it faces all of these crises. The story of California water, its history, and its future, includes cautions and solutions for any region seeking to manage water among the pressures of a dynamic society and environment. Written by leading policy makers, lawyers, economists, hydrologists, ecologists, engineers and planners, Sustainable Water reaches across disciplines, uncovering connections and intersections. The solutions and provocations put forward in this book integrate water management strategies to increase resilience in a changing world. Adapting California's water sector to a changing climate / John T. Andrew The water, energy, climate nexus in California / Robert Wilkinson California's dysfunctional surface water rights / Michael Hanemann, Caitlin Dyckman and Damian Park The reasonable use doctrine in California water law and policy / Brian E. Gray Urban water demand and pricing in California / Juliet Christian-Smith and Matthew Heberger Coping with delta floods, protecting California's water supply in a regional flood management system / Howard Foster and John Radke Portfolio approaches to reduce costs and improve reliability of water supplies / Ellen Hanak and Jay Lund The challenge of sustainable groundwater management in California / Daniel Wendell and Maurice Hall People, resources and policy in integrated water resource management / Celeste Cant The history of water reuse in California / Sasha Harris-Lovett and David Sedlak A drinking water disparities framework for community water systems in California / Carolina Balazs and Isha Ray The incendiary mix of salmon and water in Mediterranean-climate California / Matthew Deitch and G. Mathias Kondolf Adaptive management in federal energy regulatory commission relicensing / Kristen Podolak and Sarah Yarnell Emerging cultural waterscapes in California cities connect rain to taps and drains to gardens / Cleo Woelfle-Erskine California's water footprint is too big for its pipes / Julian Fulton and Fraser Shilling. https://ebookcentral.proquest.com/lib/pace/detail.action?docID=2051688
Articles	
Jessica J Goddard, Isha Ray & Carolina Balazs, Water Affordability and Human Right to Water Implications in California, 16 PLoS ONE 16(1) (2021)	Water affordability is central to water access but remains a challenge to measure. California enshrined the human right to safe and affordable water in 2012 but the question remains: how should water affordability be measured across the state? This paper contributes to this question in three steps. First, we identify key dimensions of water affordability measures (including scale, volume of water needed to meet 'basic' needs, and affordability criteria) and a cross-cutting theme (social equity). Second, using these dimensions, we develop three affordability ratios measured at the water system scale for households with median, poverty level, and deep poverty (i.e., half the poverty level) incomes and estimate the corresponding percentage of households at these income levels. Using multiple measures conveys a fuller picture of affordability given the known limitations of specific affordability measures. Third, we analyze our results disaggregated by a key characteristic of water system vulnerability–water system size. We find that water is relatively affordable for median income households. However, we identify high unaffordability for households in poverty in a large fraction of water systems. We identify several scenarios with different policy implications for the human right to water, such as very small systems with high water bills and low-income households within large water systems. We also characterize how data gaps complicate theoretical ideals and present barriers in human right to water monitoring efforts. This paper presents a systematic approach to measuring affordability and represents the first statewide assessment of water affordability within California's community water systems.

	https://doi.org/10.1371/journal.pone.0245237
Tobe Liebert, California Water Law : A Legal Research Guide, Getzville, William S. Hein & Co., Inc. (2019)	Water law is of huge importance in California because of the lack of water in the majority of the state and the prospect of greater shortages in an era of warming climate. It is certain that conflicts and litigation over the rights to and usage of water are going to increase in the coming years. This guide introduces researchers to the basic concepts and resources (both print and online) needed to research water law issues in California; explains the identity, function and publications of the various government bodies involved with water law issues in California; and provides researchers starting points when conducting historical research on California water law. I. Introduction A. Definition of Water Law B. Types of Water C. Ownership of Water and Limitations on Use D. The Competing Rights to Use Water https://heinonline.org/HOL/Page?handle=hein.lbr/cawtrlrg0001&collection=water
Charles Lee and et all, California Environmental Justice Resources (August 2019)	The struggle for environmental justice in California began decades ago and continues today. Environmental justice results from community level actions that build power and models, influence the political process, and secure unprecedented legislation, and implement cutting-edge programs. Progress has not been easy. Many challenges had to be overcome, and political opposition has been consistent. The resources described in this compilation are the result of leadership from many communities, sometimes in collaboration with public agencies and sometimes in tension. There have been some significant successes at the local, regional and state- wide levels. However, much more is needed to address the many challenges related to environmental injustice and the climate crisis if we are to build truly equitable, healthy and sustainable communities for the 21st century. Using Mapping and Data to Promote Justice Planning Communities to Improve Health Ensuring the Human Right to Water Directing Resources to Disadvantaged Communities Reducing Air Emissions in Impacted Communities Passing Legislation to Promote Environmental and Climate Justice
Brian Gray and et all, Allocating California's Water Public Policy Institute of California (Nov 2015)	California's system for allocating water prevents it from meeting the state's diverse needs, especially in times of scarcity. It is fragmented, inconsistent, and lacking in transparency and clear lines of authority—all problems highlighted during the latest drought. To more effectively serve the 21st century economy, society, and environment, this water allocation system needs an upgrade. We propose an interlinked set of legal and policy reforms that would significantly strengthen California's ability to address future droughts, climate variability, and shifting economic demands for water. Our proposals focus on three areas where the water allocation system is especially weak: water rights administration, allocation of water for the environment, and water trading. The common thread in these reforms is to increase coherence, transparency, and flexibility, while protecting water right-holders and public values. Although our proposals would change a number of key decision-making processes, they leave in place the existing priority system that defines and governs water rights. Proposed reforms include streamlining oversight of water rights, improving accuracy and transparency of information, clarifying the rules regarding environmental flows, and facilitating both water sharing and water storage for future droughts. These changes will reduce uncertainty, lower administrative costs, and enable more nimble water management. And they will be less disruptive and easier to implement than a major overhaul of the state's complex water rights system. This reform package does not address all of California's water challenges, but it provides important foundations for more efficient, anticipatory, and effective management of this valuable and essential resource.

	Introduction Three Directions for Reform Streamline Water Rights Administration Establish Environmental Water Budgets Facilitate Regional Water Sharing Conclusion
The Human Right to Water Bill in California: An Implementation Framework for State Agencies International Human Rights Law Clinic, University of California, Berkeley, School of Law (May 2013)	On September 25, 2012, California Governor Jerry Brown signed into law Assembly Bill 685 (Eng.) to ensure universal access to clean water. The bill statutorily recognizes that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." AB 685 places the human right to water at the center of state policy and underscores the role of state agencies in addressing the human impact of unsafe water. The purpose of this document is to guide state agencies in efforts to implement the historic human right to water bill. AB 685 requires state agencies to consider the human right to water when "revising, adopting, or establishing policies, regulations, and grant criteria" that impact water used for domestic purposes. This document frames the obligations of relevant agencies under AB 685 by defining three key aspects of the legislation: (i) the duty to consider, (ii) the human right to water, and (iii) the basic principles that should guide implementation. The resulting framework should shape agency efforts to implement AB 685, and lays the foundation for the Governor's office to issue a guidance directive to state agencies on the legislation. The document examines AB 685 in context by providing a history of California water policy and an overview of the multiple barriers to the realization of the human right to water in the state. California has a long history of prioritizing water for domestic purposes and regulating water affordability and quality. Despite this legacy, millions of Californians—many poor and living in marginalized communities—do not have access to clean, safe, and affordable water. AB 685 aims to remove barriers to access by requiring—effective January 1, 2013—all relevant state agencies to consider the human right to water in executing policy, budgetary, and programmatic duties. While the legislation specifically refers to the Department of Water Resources (DWR), the State Water Resources Control Board (State Water Board), and the California Department of Public Health (CDPH), all agencies engaged in activities that impact water quality, affordability or accessibility are obligated to comply with AB 685. International human rights standards define both what (the substantive standards) agencies should consider and how (the process) agencies should advance the human right to water. Inter- national law provides an authoritative definition of components of the human right to water—quality, quantity, accessibility, and availability—that closely mirrors the policy objectives outlined in AB 685. Human rights principles also guide the implementation process by calling on state agencies to guard against discriminatory practices and policies, foster meaningful public participation, and ensure effective accountability mechanisms. These principles are central to good governance and should steer efforts by state agencies to address the water challenges facing disadvantaged communities in urban, peri-urban, tribal, rural, and unincorporated areas. Implementation of AB 685 will be an ongoing and dynamic process. Under AB 685 and the implementation framework outlined above, relevant state agencies should: » Ensure that the policy goals established by AB 685—safe, clean, affordable and accessible water adequate for domestic uses—are reflected in agency planning; » Give preference to policies that advance AB 685 and refrain from taking actions that adversely impact the human right to water; » Report on actions undertaken to promote AB 685 and make information relevant to the human right to water available to the public; » Foster meaningful opportunities for public participation in agency decision-making by California's diverse population;

	» Facilitate access by rural and urban disadvantaged communities to state funds for water infrastructure improvements; and » Ensure the effectiveness of accountability mechanisms protecting access to clean and affordable water. Executive Summary Introduction California's Water Legacy The Duty to Consider Defining The Human Right To Water Guiding Human Rights Principles Conclusion Resource Guide https://perma.cc/LZM9-GX3Q https://www.law.berkeley.edu/files/Water_Report_2013_Interactive_FINAL(1).pdf
Dave Owen, The Mono Lake Case, the Public Trust Doctrine, and the Administrative State, 45 University of California 1099 (2012)	In 1983, the California Supreme Court decided National Audubon Society v. Superior Court, now commonly referred to as the Mono Lake Case. The Mono Lake Case is widely viewed as an environmental law classic. Commentators credit the case with transforming California water law and often cite it in support of arguments for expanded reliance on the public trust doctrine. This Article tests that conventional view by examining the actual influence of the public trust doctrine upon subsequent California judicial and agency decision-making. Based on documentary evidence from court cases and administrative proceedings, it concludes that the doctrine, though important, has exerted less influence upon California water management than conventional wisdom suggests. Outside of the Mono Lake basin, the public trust doctrine's effects are largely intertwined with, and often eclipsed by, the impacts of other environmental laws. Those effects also are concentrated on prospective new water uses, with little evidence that the doctrine has encouraged re-examination of existing patterns of water use, even when such patterns were environmentally problematic. The doctrine's effects have occurred primarily at the administrative level. There is little evidence of influence in the courts. These findings have important implications for understanding the actual and potential influence of the public trust doctrine. Much of the public trust doctrine scholarship emphasizes the judicial role in implementing the doctrine and argues that the doctrine should assume central importance to environmental protection, not just as a broad governance principle, but also as binding and enforceable law. The post-Mono Lake Case record shows that California has not adopted that approach, and instead has treated the doctrine as a complementary and modestly important component of a statute-based, agency-driven environmental law system. Although this Article supports calls for a more influential public trust doctrine, it concludes that such integration with administrative environmental law is desirable, not problematic. It proposes several reforms that would bolster the role of the public trust doctrine within that administrative regulatory system.
Robin Kundis Craig, Water Law: The California System Center for Computer-Assisted Legal Instruction (2010)	While most of the states in the country choose between the water law doctrines of prior appropriation and riparian rights, California applies both. This approach to state water law is called, appropriately, the California system. This lesson gives a brief overview of the California system of water rights. California was the first state to attempt to blend prior appropriation and riparian rights. However, its example can be considered instructive for the modern evolution of water law, because more and more states are trying to blend the best parts of both systems.
Types of Water and Water Rights in California, in Trust for Public Land's Water Acquisition Handbook (2003).	This Chapter 3 will discuss the different types of water recognized by law in California and highlight a variety of water rights. There are two types of water with regard to the law: ground water and surface water. Although there are many different types of water rights, the most common of these rights include riparian, pre-1914 appropriative, post-1914 appropriative, and pre-scriptive rights. In this chapter we also discuss some additional, less common types of water rights.

Clifford T Lee, The Transfer of Water Rights in California: Background and Issues, Governor's Commission to Review California Water Rights Law (1977)	I. Water as a Marketable Resource II. Legal Impediments to Water Rights Transfers in California A. The Security of the Right B. The Flexibility of the Right III. A Selective Review of Recent Water Rights Transfers in California IV. Issues https://heinonline.org/HOL/Page?handle=hein.uscalifornia oth/twrcb0001&id=5&collection=water&index=
Wells A Hutchins, California Law of Water Rights California Office of State Engineer (1956).	STATE WATER POLICY Constitutional Amendment of 1928; Purpose of the Amendment; Validity of the Amendment; Effect Upon Water Rights WATERCOURSES Characteristics of Watercourse; Property Rights in Water; The Dual System of Water Rights; Appropriation of Water; The Appropriative Right; Exercise of the Appropriative Right; The Riparian Right; The Pueblo Water Right; Protection of Water Rights; Loss of Water Rights; Adjudication of Water Rights; Administration of Water Rights; Interstate Matters
Op-eds, Blogs, and Others	
Kimberly Benjamin Hoppin and Elizabeth Meshes, Saving the Water in California: a Call for Behavior Analytic Action, 31 Behavior and Social Issues 437 (2022)	In drought-stricken areas, water consumption has become a significant sustainability issue, as water is a vital need. Research, outside of behavior analysis, has targeted this area far more. They have used efforts such as information campaigns, social comparisons, rebates, and fines. Within behavior analysis, energy reduction has also been targeted with a focus on electricity reduction. Feedback has been highly effective. However, there is limited research, except for Geller et al. (1983; Population and Environment, 6(2), 96–112), that has evaluated feedback on reducing water consumption. With an increase in smart technology and a drought crisis throughout California, this is a call to action to revisit effective behavior analytic interventions in reducing household water consumption. https://web.s.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=1&sid=57e8bb50-3dc0-4c32-8489-ed977dc7367a%40redis
Aimee Barnes and et all, Learning From California's Ambitious Climate Policy, Center for American Progress (2021)	There are a number of lessons, strengths, and challenges from the California model that can be adapted by the Biden-Harris administration as well as other states and governments across the country and around the world looking to address the climate crisis. Rather than focusing on any one particular policy, the authors of this report view these as broadly applicable principles that can be gleaned from many examples across California's climate programs. The Biden-Harris administration can learn from California's science-based, whole-of-government approach to climate policy, which has reduced harmful emissions, prioritized environmental justice, and built partnerships across the state. https://www.americanprogress.org/wp-content/uploads/sites/2/2021/04/CAclimatePolicy-report-final.pdf
Timothy Quinn, Forty Years of California Water Policy: What Worked, What Didn't and Lessons for the Future, Stanford Digital Repository (2020)	Section II relies on the political science literature and the author's experience to provide insights into the policy formation process. Section II also introduces the concepts of the political marketplace, coalition building and the role of the policy entrepreneur in creating new and better policy equilibria. Section III presents a common sense set of criteria that make a collaborative process more likely to succeed. These criteria are used in Section IV to assess the strengths and weaknesses of seven California water policy initiatives that have occurred since the mid-1980s. Section V offers some observations regarding 21st century Bay-Delta initiatives and recommendations about how to improve water policy decision-making, especially for the Sacramento-San Joaquin Delta. Available at: https://purl.stanford.edu/dj435dw5816
Inequitable Exposure to Air Pollution from Vehicles in California Union of Concerned Scientists (2019)	This analysis explores the significant contributions of cars, trucks, and buses to particulate matter air pollution in California and the disproportionate effects on communities of color and low- income communities. Advancing clean transportation policies—such as those that encourage vehicle electrification, cleaner fuels, and reduced driving—will help reduce air pollution emissions. Additionally, policies and investments should be evaluated for their ability to reduce the current inequities in exposure to vehicular air pollution borne by low-income Californians and communities of color. This report helps to inform such strategies. www.ucsusa.org/CA-air-quality-equity

Juanita Constible, Climate Change and Health in California NRDC (Feb 2019)	Climate change is altering seasonal patterns in California, making hot days hotter, and increasing the severity of extreme events such as the historic drought from late 2011 to early 2017 and fires like the devastating Camp Fire in 2018. As a result, Californians face a variety of increasing health problems such as more heat-related illnesses, breathing and heart troubles, food and water contamination, traumatic injuries, mental health challenges, and exposure to infectious diseases. These threats will only increase for Californians as long as big polluters and our buildings and transportation systems continue to pump climate-changing pollution into the air. Protecting the health of Californians requires tackling climate change. We can protect ourselves from these impacts by implementing cleaner and more efficient energy strategies and by preparing more effectively for future climate and health disasters. We must also ensure that communities and health departments have the resources they need to deal with present-day health threats. California's fire season is getting longer and more dangerous Climate change will worsen California's smog problem Extreme heat is bad for Californians' health - and could become deadlier Severe droughts threaten food and water security in rural California Southern Californians face more valley fever under climate change Storms and sea level rise threaten California's drinking water and could disrupt transit and emergency services Acting on climate can protect our health
Sean B. Hecht, "States' Rights" and Environmental Law: California on the Front Lines, Legal Planet (Mar. 6, 2017)	EPA's Assault on Air Quality Protection Will Aim at California's Standards, While Other States Have Given Up Their Authority to Protect Public Health and the Environment More Strictly. This article just published in the Atlantic explains well one of the many ways that EPA Administrator Scott Pruitt may attempt to deeply harm our environment for decades to come: through declining to grant, or revoking, the waivers that allow California to regulate air pollution from new motor vehicle engines more strictly than the federal government does. Less-well noticed is that while California has worked hard to protect public health and the environment through its air quality laws and regulations – and will continue to do so even as the federal government backs off and attempts to thwart California's efforts – many states have quietly and purposefully rendered themselves legally unable to go beyond whatever the federal government does to limit pollution. So if the new administration's assault on air quality turns out to broadly include welcoming new pollution, many states will be poorly positioned to pick up the slack. https://legal-planet.org/2017/03/06/states-rights-and-environmental-law-california-on-the-front-lines/
Environmental Justice in California State Government Office of Governor Gray Davis, Ca Water Plan Update (2013)	This policy report is intended to provide a brief history of EJ, report on the status of OPR's efforts, and provide an outline of EJ findings, goals and policies for future EJ efforts within state government. Much work remains to ensure that the most vulnerable of Californians, including people of color and low-income persons, are treated with dignity and respect regarding environmental decisions. Chapter 1: Context & History of Environmental Justice Chapter 2: California's Environmental Justice Framework Chapter 3: OPR's Environment Justice Project Chapter 4: State Agency Environmental Justice Activities Chapter 5: Environmental Justice and Social Equity Chapter 6: Environmental Justice Findings, Goals, and Policies

C. Hawaii

Citation	Summary
Books	
Wade Graham, Braided Waters: Environment and Society in Molokai, Hawaii, University of California Press, 2018.	Braided Waters sheds new light on the relationship between environment and society by charting the history of Hawaii's Molokai Island over a thousand-year period of repeated settlement. From the arrival of the first Polynesians to contact with eighteenth-century European explorers and traders to our present era, this study shows how the control of resources—especially water—in a fragile, highly variable environment has had profound effects on the history of Hawaii. Wade Graham examines the ways environmental variation repeatedly shapes human social and economic structures and how, in turn, man-made environmental degradation influences and reshapes societies. A key finding of this study is how deep structures of place interact with distinct cultural patterns across different societies to produce similar social and environmental outcomes, in both the Polynesian and modern eras—a case of historical isomorphism with profound implications for global environmental history. Foreword by Donald Worster Introduction: Outer Island, In Between 1. Wet and Dry: The Polynesian Period, 1000–1778 2. Traffick and Taboo: Trade, Biological Exchange, and Law in the Making of a New Pacific World, 1778–1848 3. A Good Land: Molokai after the Mahele, 1845–1869 4. The Bonanza Horizon: Molokai in the Sugar Era, 1870–1893 5. A Bigger, Better Hawai'i: Making an American Molokai, 1893–1957 6. From Lonely Isle to Friendly Isle: Economic Struggles in the Twentieth and Twenty-First Centuries and the Future of "the Most Hawaiian Island" Conclusion: Two Experiences of Settlement https://www.ucpress.edu/book/9780520298590/braided-waters
Charles Fletcher, Robynne Boyd, William J. Neal, and Virginia Tice, Living on the Shores of Hawaii: Natural Hazards, the Environment, and Our Communities, University of Hawai'i Press, 2010.	It discusses the paradox of environmental loss under a management system considered by many to be one of the most stringent in the nation. It reviews a wide range of environmental concerns in Hawai'i with an eye toward resolution by focusing on "place-based" management, a theme consistent with—and borrowing from—the Hawaiian ahupua'a system. After describing a typical situation in Hawai'i where a sandy beach is lost because a seawall has been built to protect a poorly sited home, the authors step back in time to trace land-use practices before and after the arrival of Westerners and the increased tempo of destruction following the latter. They go on to discuss volcanoes and the risk of placing homes in locations vulnerable to natural hazards and the potential dangers of earthquakes and tsunamis to a complacent public. Water issues, including scarcity, flooding, and pollution, are surveyed, as well as climate change and the possible outcomes of projected sea rise for Hawai'i. The authors explain coastal erosion and beach loss and the problems of overfishing and ocean acidification. Later chapters assess residents' risks to hurricanes, offering mitigation techniques, and provide a summary and some management conclusions. As tensions increase because of conflicting standards, misunderstandings, and contradictory ideals and actions, we put our economy and quality of life at risk. Sound decision-making begins with asking the right questions. This book addresses these questions within the context of sustainability and thus their influence on the future of Hawai'i. 1. Introduction 2. History of the Land 3. Volcanism among the Islands 4. Earthquakes and Tsunamis 5. Hurricanes

	6. Climate and Water Resources 7. Stream Flooding and Mass Wasting 8. Sewage Treatment and Polluted Runoff 9. Climate Change and Sea-Level Rise 10. Beach Erosion and Loss 11. Reefs and Overfishing 12. A Responsibility to Nurture the Land https://muse.jhu.edu/book/1604/
Lisa Woods Munger, Hawaii Environmental Law Handbook, Staff, Goodsill, Anderson, Quinn & Stifel LLP (3rd ed., 2000).	Written by one of the nation's leading environmental law firms, this handbook provides concise, easy-to-understand explanations of your state compliance obligations. You'll get complete coverage of hazardous and solid waste disposal; air, water, and natural resources regulations; the state organizational structure; required permits and reports; the relationship between federal and state regulations; and more. https://rowman.com/ISBN/9780865877139/Hawaii-Environmental-Law-Handbook-Third-Edition
Articles	
D. Kapua'ala Sproat, An Indigenous People's Right to Environmental Self-Determination: Native Hawaiians and the Struggle Against Climate Change Devastation, 35 Stanford Environmental Law Journal 157 (2016).	This article proffers a restorative justice framework emanating from local legal regimes to more fully claim and realize the indigenous right to environmental self-determination in the context of climate change. More specifically, it examines Native Hawaiians' potential deployment of local laws that embody restorative justice principles to fashion meaningful remedies for the longstanding environmental and cultural damage from a history of colonialism and a present and future of climate change. For indigenous peoples, restorative justice is a cornerstone of redress because the harms suffered are not simple unequal treatment (entailing the remedy of equal treatment), but rather the loss of land, culture, health, and self-governance. So justice is not so much about seeking equality, but the restoration of those things wrongly taken or destroyed. Part II explains how climate change is an environmental injustice for indigenous peoples, provides cultural and historical context for the relationship between Kanaka Maoli and native resources, and details some of climate change's impacts on Maoli communities and culture. Part III deconstructs restorative justice as well as the aspect of Hawaii's State Constitution, which expressly, if generally, protect native rights and practices. Part IV employs international human rights norms of restorative justice and indigenous cultural values to guide the interpretation of decision-makers' duties to proactively respond to climate change devastation in ways that are consistent with and respectful of indigenous culture and lifeways. Finally, Part V deploys this developing framework to analyze two Hawaii controversies – protection of kalo and pa'akai cultivation – that exemplify how native peoples can realize the indigenous right to environmental self-determination at the local level.
Water Resources and Climate Change Adaptation in Hawai'i: Adaptive Tools in the Current Law and Policy Framework Center for Island Climate Adaptation & Policy, 2012	This paper briefly describes Hawai'i's water resources, and then identifies troubling patterns of climate change that are already evident in Hawai'i, including (a) declining rainfall, (b) reduced stream flow, (c) increasing temperature, and (d) rising sea level. Each poses serious consequences for the replenishment and sustainability of groundwater and surface water resources. These worrisome trends are then further compounded by the prospect of other looming impacts related to climate change, such as potential changes in the trade wind regime, the intensity and frequency of drought and storm events, the El Niño-Southern Oscillation, and the Pacific Decadal Oscillation. And even without such climate-related trends and risks, the forecast for rising population and increasing water demand presents a compelling need to carefully manage water resources. 1. Climate Change Risks to Hawai'i's Water Resources 2. General Principles of Climate Change Adaptation 3. Adaptive Tools and Mandates in Hawai'i's Current Law and Policy Framework

	3.1 Constitutional Protection of Water Resources 3.1.1 Article XI – Constitutional Mandates for the Conservation and Protection of Water Resources 3.1.2 Article XII – Constitutional Protection of Traditional and Customary Rights 3.2 The Public Trust Doctrine 3.3 The Precautionary Principle 3.4 Adaptive Mandates and Authority of the Commission on Water Resource Management 3.5 Adaptive Mandates and Characteristics of the State Water Code and the Hawai‘i Water Plan 3.6 The Scope of the Water Code and the Bifurcated Nature of Hawai‘i’s Water Management Scheme 4. Law and Policy Tool Kit: Twelve Tools for Implementing Hawai‘i’s Adaptive Mandate 5. Conclusion: A Call to Adaptive Action
David MKI Liu and Christian K Alameda Social Determinants of Health for Native Hawaiian Children and Adolescents 70 Hawaii Med J. 9 (2011)	Traditional Hawaiian thought places children in a position of prominence in the family. Yet in Hawai‘i, Native Hawaiian children and adolescents face significant inequity in health outcomes. From prenatal alcohol and tobacco use, late or no prenatal care, macrosomia as well as low birth rates, to exclusive breastfeeding rates at 6 months, and high rates of infant mortality, Native Hawaiians face inequities in pre and early childhood indicators. During childhood and adolescence, Native Hawaiians experience high rates of obesity, and physical, mental and sexual abuse. This review examines the determinants behind the health inequities encountered by Native Hawaiian children and adolescents, and contextualizes those inequities s in a human rights-based approach to health. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3254224/
Leslie R. Kahihikolo, Hawai’i Environmental Justice Initiative Report, State of Hawai’i Environmental Council, 2008.	1. Introduction 2. Background of Environmental Justice 2.1. History of Events 2.2. Executive Order 12898 2.3. Today 2.4. Addressing Environmental Justice in Hawai`i  3. Community Involvement Methodology 4. Defining Environmental Justice for Hawai`i 4.1. International Level 4.2. Federal Level 4.3. State Level 4.4. Within the State of Hawai`i 4.5. Community Participants’ Definitions 4.6. The Definition of Environmental Justice for Hawai`i 5. Hawai`i Environmental Justice Target Populations 6. Environmental Justice Guidance Document  7. Legal Foundation for Environmental Justice in Hawai`i 7.1. Introduction and Structure of Report 7.2. 1978 Constitutional Convention and the Hawai`i Constitution 7.3. Related Hawai`i Revised Statutes (HRS)

	7.3.1. Hawai`i State Planning Act 7.3.2. Environmental Impact Statement Law and Policy 7.3.3. The Coastal Zone Management Act (CZMA) 7.3.4. The Water Code 7.3.5. Burial Law and Historic Preservation 7.4. Environmental Justice Policy for Department of Health 7.5. Hawai'i Case Law 7.6. Unique Challenges to Defining Environmental Justice in Hawai`i 8. Recommendations for Future Environmental Justice Efforts
Melody Kapilialoha MacKenzie, Susan K. Serrano, and Koalani Laura Kaulukukui, Environmental Justice for Indigenous Hawaiians: Reclaiming Land and Resources, NR&E p. 37-47 (Winter 2007)	Through these three examples, this essay explores the current "environmental justice" model and posits a new type of Native Hawaiian "restorative environmental justice" that takes into account the unique experiences of indigenous Hawaiians. The traditional environmental justice model typically focuses on the siting of hazardous facilities near communities of color and the poor. This traditional model often furthers environmental justice by providing communities of color and indigenous communities the tools they need to advocate effectively for the siting and health outcomes they seek.
Mansel G. Blackford, Environmental Justice, Native Rights, Tourism, and Opposition to Military Control: The Case of Kaho'olawe, 91 The Journal of American History 544 (2004).	This article looks at how disparate issues fused in the movement to halt the environmental degradation of Kaho'olawe (the smallest of the eight major islands of the Hawaiian archipelago and the only one being used as a bombing range). The essay begins by briefly discussing the environmental changes that ranching and military usage brought to Kaho'olawe and then investigates how and why some Hawaiian residents began to oppose those alterations. Initially unconcerned with native Hawaiian rights, ranchers, environmentalists, and local politicians mounted the first challenges to the military for reasons ranging from their dislike of federal government authority to their desire to use Kaho'olawe as a park and finally to their hope that the island could be preserved as a pristine alternative to the nearby island of Maui, which was experiencing a tourism boom. In the mid-1970s, native Hawaiians became the most important, though not the only, group who advocated changing the status of Kaho'olawe. For native Hawaiians, restoring the island physically and using it as a site for cultural renewal went hand in hand. Ultimately, they desired the removal of Kaho'olawe from American military control, its restoration to the state of Hawai'i, and a state pledge to give them the island when they established their own sovereign nation. How they succeeded in convincing other Hawaiian residents to support their goals in the face of opposition from the U.S. Navy is an informative story of intergroup dynamics. Beyond what it reveals about Hawaiian history, this article is important for what it reveals about environmentalism in modern America. As scholars have shown in the past three decades, environmentalism has assumed many shapes and sizes, and developments in Hawai'i illustrate the movement's complexity well. Scholars have increasingly related the development of modern environmentalism in the United States to alterations in American society, politics, and culture. https://www.jstor.org/stable/3660711
Eric K. Yamamoto and Jen-L W. Lyman, Racializing Environmental Justice, 72 University of Colorado Law Review 311 (2001)	This article is divided into five parts. Part I describes the established environmental justice framework generated by much of the scholarly writing and the misassumptions it tends to make about health, distributive jus- tice, culture, and race. Part II explores Native American legal scholars' more contextual approaches and their implications for environmental justice. Part III offers insight into the evolving environmental justice movement by using critical sociological and race theories to explain how groups acquire different identities, status, and power and develop or sustain differing cultures and relationships to the physical environment. We call this "racializing environmental justice." Part IV employs this approach to environmental justice in order to explore one particular racialized environmental controversy: a water controversy in Hawai'i that illustrates the need for scholars, activists, lawyers, and community leaders to integrate community

	history, racial and political identities, and socio-economic and cultural needs in defining environmental problems and in fashioning remedies. Finally, the article concludes with a suggestion: that by treating each racialized com- munity with greater complexity, according to its specific cultural values, racialized history, socio-economic power, and group needs and goals, we move from a universalized, overly broad environment/racism paradigm to a more integrated particularized approach to racialized environmental justice.
Op-eds, Blogs, and Others	
Advancing a Hawaii Green Amendment: Ensuring an Enforceable Right to a Clean & Healthy Environment www.HIGreenAmendment.org	A constitutional Green Amendment added to the Hawaii constitution will help strengthen environmental protection, environmental justice, and strengthen protection for the cultural and human health benefits of a clean and healthy environment in Hawaii. While Article XI, Section 1 of the Hawaii Constitution recognizes that the State holds public natural resources—including land, water, air, minerals and energy sources—in trust for the benefit of all people; the individual right in to a clean and healthy environment found in Article XI, Section 92 is limited to those protections provided by legislation, rather than being a true right of, by and for the people.
William Chapman, Hawai‘i, the Military, and the National Park: World War II and its Impacts on Culture and the Environment, American Society for Environmental History, 2014.	This report focuses on NPS units in Hawai‘i. This report views the developments of the World War II era through the lens of environmental history. It places emphasis on the existing natural and cultural settings of wartime Hawai‘i and the ways that military and related activities altered these places. It further examines the prewar context of Hawai‘i to better understand how circumstances of the early twentieth century influenced decision making during the buildup of the war. Foremost, it looks at ways the geophysical features of Hawai‘i, as well as existing transportation corridors, water use, and land ownership, affected decision making and how ongoing economic activities, such as plantation agriculture and ranching, also influenced wartime developments. The report further addresses ways that both the military and park officials viewed parklands and how they understood their responsibilities toward these areas. It scrutinizes as well how US service personnel interacted with their surroundings. Finally, the report examines the long-term impacts of the war, detailing the ways in which the territory and then state of Hawai‘i—and the federal government—re-envisioned their roles in the postwar era. The report divides into ten chapters, with an introduction and conclusion. The introduction sets out the background and expectations for the report. Chapter 1 discusses approaches, themes, and research questions and provides a detailed outline of the project. Chapter 2 is an overview of World War II and its many impacts on American society and the greater environment. It also discusses the specific effects of the war on the nation’s parks. This chapter additionally looks at the broader impact of the war on Hawai‘i and how this affected Hawai‘i’s then and future attitudes toward parks and open spaces.
Hawaii Supreme Court recognizes property right to clean air January 22, 2018	The Supreme Court of Hawaii ruled in In re Maui Elec. Co., 2017 Haw. LEXIS 284 (2017) that the state constitution confers a property right to a clean and healthy environment sufficient and that the Sierra Club has standing to bring a lawsuit challenging the granting of a power plant permit to a coal-fired plant because its emissions will contribute to air pollution and arguably violated standards contained in the federal Clean Air Act. Because the claim is based on state law and heard in state court, federal court prudential and constitutional limitations in standing, such as led to similar claims being thrown out of federal court in cases like Kivalina, does not apply to the state court proceedings. https://scholar.harvard.edu/jsinger/blog/hawaii-supreme-court-recognizes-property-right-clean-air Judgment at: https://www.courts.state.hi.us/wp-content/uploads/2017/12/SCWC-15-0000640.pdf
Environmental Justice Bianca Isaki	The U.S. Environmental Protection Agency defines “environmental justice” as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.” In some ways, the concept is of limited utility for addressing the historical and ongoing injustice of state and private corporate management and exploitation of Mauna Kea because of its emphasis on the lack of regard of race, color, national origin, or income and on governmental law, which laws are written by and for state interests. Law, however, itself has a history in indigenous resistance in Hawai`i. This history, its animating legacies of resistance, and the communities assembled in the present provide openings for organizing to advance environmental justice in a way that accords with Hawaiian self-determination.

	Module 1: Settler state environmentalism and Indigenous resistance Module 2: Legal tools and their limits Module 3: Limits of Hawai‘i’s public in environmental justice struggles Module 4: State beyonding v. decolonial temporality Background history on Hawaii’s public trust and public trust lands https://www.maunakeasyllabus.com/units/environmental-justice

D. Montana

Citation	Summary
Books	
Articles	
Barton H. Thompson, Jr. Constitutionalizing the Environment: The History and Future of Montana’s Environmental Provisions 64 Montana Law Review 157 (2003)	Part I of this Article provides general background on environmental policy provisions in state constitutions, including the Montana Constitution. Part I also includes an overview of how the Montana Supreme Court has interpreted the Montana provisions to date. Part II then examines how environmental groups and interested citizens may try to use the environmental provisions in future cases and asks the tough questions that the Montana Supreme Court will need to face in those cases. With both the opportunities and problems of "constitutionalizing" the environment in mind, Part III briefly concludes by reconsidering the fundamental wisdom of including self-executing environmental policy provisions in a state constitution. https://perma.cc/PZ9C-9AYD
David Gelles and Mike Baker Judge Rules in favor of Montana Youths in a Landmark Climate Case N.Y. Times, Aug. 14, 2023	Discusses the decision in Held v. Montana, in which a group of youth climate activists won a lawsuit against the state of Montana to enforce their “right to a clean and healthful environment” under the Montana Constitution as well as invalidating other laws related to the provision of energy through fossil fuels. The ruling requires that the state consider climate change when deciding to approve or renew any projects involving fossil fuels. https://www.nytimes.com/2023/08/14/us/montana-youth-climate-ruling.html
Op-eds and Blogs	
Cases	Held v. State of Montana Ruling: https://perma.cc/9BME-YRVT Edited version by James R. May in Modern Environmental Law 2023 Supplement: https://perma.cc/9PEB-R56B