



ST. MARY'S
UNIVERSITY

Digital Commons at St. Mary's University

Faculty Articles

School of Law Faculty Scholarship

2008

Why We Do the Things We Do? The Role of Ethics in Water Resource Planning

Amy Hardberger

St. Mary's University School of Law, ahardberger@stmarytx.edu

Follow this and additional works at: <https://commons.stmarytx.edu/facarticles>



Part of the [Water Law Commons](#)

Recommended Citation

Amy Hardberger, *Why We Do the Things We Do? The Role of Ethics in Water Resource Planning*, 6 Santa Clara J. Int'l L. 129 (2008).

This Article is brought to you for free and open access by the School of Law Faculty Scholarship at Digital Commons at St. Mary's University. It has been accepted for inclusion in Faculty Articles by an authorized administrator of Digital Commons at St. Mary's University. For more information, please contact sfowler@stmarytx.edu, egoode@stmarytx.edu.

Why We Do The Things We Do?: The Role of Ethics in Water Resource Planning

Ms. Amy Hardberger*

I. Introduction

Understanding how political decisions are made requires the evaluation of many procedural levels. The most obvious starting point is the actual methodology that governs how choices are made and how subsequent policies are put in place. In the United States, this would include a discussion regarding the introduction of legislation, and the procedure required to make it law. This, however, is only one level of the decision-making process. What happens before that legislation is introduced? What governs what needs to be regulated or protected? Why do some sovereign states pass laws to protect the environment while others do not? Ultimately, this is dictated by the value placed on certain things and the ensuing ethics held by a particular community.¹

A range of factors influence the presence or absence of an assessed value. It can be something quantifiable or it may emanate from something more innate.

When making a decision of minor importance, I have always found it advantageous to consider all the pros and cons. In vital matters, however, . . .the decision should come from the unconscious, from somewhere within ourselves. In the important decisions of personal

* Ms. Amy Hardberger is an attorney with the Texas office of the Environmental Defense Fund. She works with the Climate and Air Program and the Land, Water & Wildlife Program on Texas law and policy issues. She holds a Bachelor's Degree in Geology from Earlham College, a Master of Science in Geology from the University of Texas at San Antonio, and a Doctor of Jurisprudence from Texas Tech University School of Law.

1. See ROBIN ATTFIELD, *THE ETHICS OF THE GLOBAL ENVIRONMENT* 27 (1999).

life, we should be governed, I think, by the deep inner needs of our nature.²

Value can be assessed from many factors including external things like happiness, well-being, beauty, or intrinsic values such as ecosystems which facilitate life.³ Once a value is assessed, obligations that dictate actions regarding this issue are generated, and an ethic is created. Ethics come from a variety of sources including culture and religion and are often not explicitly taught. Norms that guide communities are often reflected in laws and regulations to tangibly solidify these principles.

One thing that deserves universal value is water; however, the factors that impact decisions about water may differ. Water, as it pertains to life, may implicate many ethics, and even though cultural values vary with different societies, most of them arguably appreciate the importance of water. This appreciation is apparent in decision-making through various applied ethical theories as well as through codified regulations.⁴

This paper evaluates the role of ethics in decision-making and how it could impact water resource management.⁵ Part II provides an overview of ethics, its sources, and how it can impact decisions and policy.⁶ Part III examines ethical theories that could apply to water decision-making.⁷ Understanding the basics of ethics is critical in recognizing the mechanisms available to impact decision-making, as well as how ethics can be used to provide water for people in need.⁸

Part IV applies ethical theory to water in an effort to understand the relationship between ethics, water planning, and other related decisions.⁹ The purpose of this section is to ascertain the extent to which ethics can impact decision-makers with regard to water.¹⁰ One way is in existing laws; therefore, this section reviews various domestic and international laws regarding water that have ethical implications. Examining a subset of international law, it discusses the potential for

2. Galen Guengerich, *The Needs of Our Nature*, Homily Before the All Souls Unitarian Church 1 (May 6, 2007) (quoting Sigmund Freud), available at <http://www.allsoulsnyc.org/publications/sermons/ggsermons/the-needs-of-our-nature.pdf>.

3. ATTFIELD, *supra* note 1, at 39-40.

4. Leslie H. Gelb & Justine A. Rosenthal, *The Rise of Ethics in Foreign Policy: Reaching a Values Consensus*, 82 FOREIGN AFF. 2, 2-3 (2003) (recognizing the growing presence of morality and ethics in United States' politics and policy).

5. See discussion *infra* Parts II-IV.

6. See discussion *infra* Part II.

7. See discussion *infra* Part III.

8. See discussion *infra* Parts II-III.

9. See discussion *infra* Part IV.

10. See discussion *infra* Part IV.

a human right to water.¹¹ As morality-driven directives, human rights provide an excellent example of how ethics and decisions can coincide. The conclusion discusses how ethics can be used to successfully impact decision-making in a way that will place emphasis on the long-term sustainability of people while also providing for their needs in the present.¹²

II. How Decisions are Made: Ethics, Culture, and Religion – Oh My!

A. Understanding Ethics

All human beings possess basic views about right and wrong. As rational beings, we have goals, and we make choices. Why we make the decisions we make is the result of many influences. One of these influences is ethics. “[E]thics is the systematic and critical study of our moral attitudes, actions and beliefs about how we ought to live and about what sort of people we ought to be.”¹³ Ethical conduct reflects what we feel we should or must do under the circumstances.¹⁴ Most human action is based on moral presuppositions, whether or not it is explicitly recognized.¹⁵ In Western civilization, ethics or morals are seen as behavioral rules or principles whereas non-western civilizations may see ethics more as customs, taboos, and rites.¹⁶

Morality is an attempt to determine if an action was good, bad, or indifferent.¹⁷ It is applied through the voluntary actions of persons.¹⁸ Because human beings have the capacity to reflect on their existence and to make choices based on these

11. See discussion *infra* Part IV A 2i.

12. See discussion *infra* Part V.

13. MIKAEL STENMARK, ENVIRONMENTAL ETHICS AND POLICY MAKING 14 (2002).

14. Nicholas Greenwood Onuf, *Everyday Ethics in International Relations*, in ETHICS AND INTERNATIONAL RELATIONS 81, 81 (Hakan Seckinelgin & Hideaki Shinoda eds., 2001).

15. MARK R. AMSTUTZ, INTERNATIONAL ETHICS 47 (1999).

16. J. BAIRD CALLICOTT, EARTH’S INSIGHTS: A SURVEY OF ECOLOGICAL ETHICS FROM THE MEDITERRANEAN BASIN TO THE AUSTRALIAN OUTBACK 2 (1994).

17. PATRICK J. SHEERAN, ETHICS IN PUBLIC ADMINISTRATION: A PHILOSOPHICAL APPROACH 61 (1993). In general, ethics are morality in action. Morality designates value judgments about what is right and wrong, whereas ethics denotes our conscious and systematic reflections upon those judgments. STENMARK, *supra* note 13, at 14. Morality involves interests other than the actors, commands universal allegiance, demands impartiality, and is largely self-enforcing and binding on everyone. AMSTUTZ, *supra* note 15, at 3. Ethics involves choosing to do what is right and good and refraining from the bad. *Id.* at 3. Although there is a slight distinction between the two, they will be used interchangeably in this article.

18. AMSTUTZ, *supra* note 15, at 3.

reflections, they can therefore be held morally responsible for their actions.¹⁹ An ethic is a behavioral ideal that is rarely perfected; however, it does influence behavior.²⁰ Social ethics, ideals of mutual forbearance, justice, and compassion are part of the human experience.²¹ Ultimately, the mechanism for the operation of ethics is social approval for right actions and social disapproval for wrong actions.²²

“Without some kind of ethic (a theory of right and responsibility) and some kind of axiology (or value-theory), we lack guidance and direction for tackling problems, whether global, environmental, or otherwise.”²³ In many cultures, the idea of an ethics-based life is common; however, defining ethics that transcend all cultures becomes more complex. For many issues, local governance of an issue is sufficient; however, for broad-reaching concerns, such as the environment, achieving a shared doctrine becomes more important.

All ethics are based on the principle that an individual is a member of a community of interdependent parts.²⁴ Some theorists believe that ethical responsibility applies beyond the members of one community or tradition, but to all moral agents capable of bearing them.²⁵ Others believe that obligations are linked to relationships that would occur in a community with cultural ties.²⁶ We are all citizens of the world, which frames us as members in a broader community.²⁷ Therefore, issues that affect the global community must be dealt with internationally. Water is one of these issues.

B. Sources of Ethics

“[E]thical tradition refers to a system of substantive moral rules and normative principles that have been passed along from generation to generation and that have been recognized as imposing binding obligations, achieving. . . ‘the force of law.’”²⁸ These traditions can be based on religion, law, culture, politics and

19. STENMARK, *supra* note 13, at 33.

20. CALLICOTT, *supra* note 16, at 2-3.

21. *Id.* at 3.

22. Aldo Leopold, *The Land Ethic*, in ENVIRONMENTAL ETHICS 41, 48 (Michael Boylan ed., 2001).

23. ATTFIELD, *supra* note 1, at 27.

24. Leopold, *supra* note 22, at 43.

25. ATTFIELD, *supra* note 1, at 30.

26. *Id.* at 29-30.

27. *Id.* at 30.

28. AMSTUTZ, *supra* note 15, at 48.

widespread practice.²⁹ The particular ethics of a community are based on a combination of things, including historical and cultural factors, characteristics of the substance involved, and the managerial mode of social organizations.³⁰ Many times, ethical considerations are not explicitly taught but are absorbed from the customs and behavior that surround us.

Often the way a culture views an issue turns on the value it is given by human valuers.³¹ For something to have value, it must be able to have ethical concepts attached to it and it must be connected to or appreciated by a moral agent.³² An ethic toward something cannot exist without love and respect for that particular thing.³³ “The moral significance of an interest depends on its intrinsic value, or its contribution to such value.”³⁴ Intrinsic value is understood to mean “a reason for action which is independent to, non-derivative, and based solely in the nature of what has this value.”³⁵ The key is identifying and understanding the source of this assigned value.

Values emanate from humans, but there is no requirement that they be human-focused.³⁶ Many native cultures have a tradition of strong ethical considerations toward the earth and natural resources.³⁷ For example, Native Americans are often seen as model ecological citizens. In general, Native Americans’ relationship with nature tends to preserve biological integrity. This includes traditions of mutual respect, reciprocity, and caring for the Earth as a live being.³⁸ Native American communities adapt their needs to fit the capacity of the surrounding natural world in which human beings are viewed as only one part of the community.³⁹ Ecological consciousness is a combination of a sense of kinship with nature, and

29. *Id.* at 49.

30. FEKRI A. HASSAN, WATER AND ETHICS: A HISTORICAL PERSPECTIVE 42 (2004), available at <http://unesdoc.unesco.org/images/0013/001363/136341e.pdf>.

31. CHRIS J. CUOMO, FEMINISM AND ECOLOGICAL COMMUNITIES 48 (1998).

32. *Id.* An interesting illustration of this theory is the history of the coyote in the American west. Seen by many as a predator, there was a movement to eradicate its presence; while others felt that the coyote had value and should remain because it represents the rugged west and had lived there for hundreds of years. DONALD WORSTER, NATURE’S ECONOMY 258-90 (2d ed. 1995).

33. Leopold, *supra* note 22, at 47.

34. ATTFIELD, *supra* note 1, at 39.

35. *Id.*

36. CUOMO, *supra* note 31, at 49.

37. See CALLICOTT, *supra* note 16, at 1.

38. Annie L. Booth & Harvey M. Jacobs, *Ties that Bind: Native American Beliefs as a Foundation for Environmental Consciousness*, in ENVIRONMENTAL ETHICS 131, 132 (Michael Boylan ed., 2001).

39. *Id.*

an understanding of ecological systems.⁴⁰ Similarly, Australia's aboriginal culture holds a worldview that unites human beings and other forms of life with the land.⁴¹ It is not difficult to understand how these taught values play a large part in decisions regarding the earth or water.

Religion is another common source of ethics. In terms of water, most religions promote both stewardship and the protection of water resources.⁴² The Koran recognizes the importance of water stating that, "[b]y means of water, we give life to everything."⁴³ There are over fifty references to water in the Koran, where it is often associated with giving life, a source of income and purity.⁴⁴ Instead of being viewed as an economic good, it is viewed as a gift from God.⁴⁵ The Koran also speaks against the wasting of water.⁴⁶ If a man has additional water, he must provide it to strangers and their cattle.⁴⁷

In Judaism, an environmental precept referred to as *bal tashchit* literally means "do not destroy."⁴⁸ Commonly cited in Jewish writings in relation to the environment, particularly to avoid destruction of fruit-bearing trees while laying siege to a city, it has been expanded by rabbis to mean a ban on any wanton destruction.⁴⁹ Although not without debate, some ethical theorists have further translated this to mean that fruit-bearing trees, upon which people depend for survival, may also have an existence independent of people.⁵⁰ A similar application could apply to water as a clear survival necessity. In addition, the

40. *Id.* at 136.

41. J. Baird Callicott, *African Biocommunitarianism and Australian Dreamtime*, in ENVIRONMENTAL ETHICS 141, 153 (Michael Boylan ed., 2001).

42. See ATTFIELD, *supra* note 1, at 45 (explaining that the theory of stewardship is arguably central to Judaism, Christianity, and Islam). Cosmopolitan ethical theory holds that an idea moral order exists that applies universally in which all individuals are members, each with rights and duties in relation to all other human beings. John Charvet, *The Possibility of a Cosmopolitan Ethical Order Based on the Idea of Universal Human Rights*, in ETHICS AND INTERNATIONAL RELATIONS 8, 9 (Hakan Seckinelgin & Hideaki Shinoda eds., 2001). This theory is not limited to a modern Western based theory, but can also be found in Islamic, Buddhist, and other cultures. *Id.*

43. Koran 21:30.

44. The World Conservation Union, *Water in the Holy Koran*, available at <http://www.iucn.org/places/medoffice/nabp/web/documents/awareness/32.pdf>; Koran 25: 48-49 ("We send down pure water from the sky, - that with it We may give life to a dead land, and slake the thirst of things We have created, - cattle and men in great numbers.").

45. JEROME DELLI PRISCOLI ET AL., WATER AND ETHICS: OVERVIEW 8 (2004).

46. Koran 7:31.

47. MARC DE VILLIERS, WATER: THE FATE OF OUR MOST PRECIOUS RESOURCE 59 (2000).

48. Eilon Schwartz, *Bal Tashchit: A Jewish Environmental Precept*, in ENVIRONMENTAL ETHICS 111, 111 (Michael Boylan ed., 2001).

49. *Id.*

50. *Id.* at 114.

Talmud, a record of rabbinic discussions pertaining to Jewish law, ethics, customs, and history, states that water cannot be sold from a public cistern.⁵¹ It also states that the laws of hospitality require that water must be provided for strangers after the owner has partaken.⁵²

One of the difficulties in trying to quantify moral influences is that they tend to be founded in ethical traditions, which can vary over cultures.⁵³ Competing moral traditions challenge universal demands of moral obligation; therefore, international diplomacy may require reconciliation of these varying traditions.⁵⁴ However, in the case of water, there appears to be an ethical consistency, either in local customs or religion, which promotes its valuation and protection. This facilitates the policymaker's ability to convert non-binding local traditions into binding regulations and potentially minimizes conflict when a shared water resource is involved.

C. Ethics and Decision Making

“[P]olitical decision making is a domain in which morality and power coalesce.”⁵⁵ Political morality consists of moral values and norms applicable to the political life of communities—local and international—and applies to the decisions of government officials on behalf of the public.⁵⁶ Much like personal morality, “political morality is rooted in binding norms expressed by the formal and informal rules of a domestic society, whereas international political morality is rooted in the shared norms embodied in the conventions, informal agreements, and declarations that states accept as obligatory in their international relations.”⁵⁷ “[M]orality helps define the goals and purposes of states and other actors” and can offer general vision for policy.⁵⁸

It is generally believed that the purpose of the state is to serve the common good, the public welfare, peace, and prosperity. It exists for the good of its citizens—to help people do what they are unable to do for themselves.⁵⁹ National interest should represent the common good of the members of political

51. DE VILLIERS, *supra* note 47, at 59.

52. *Id.*

53. See AMSTUTZ, *supra* note 15, at 47; See e.g., Gelb & Rosenthal, *supra* note 4, at 7 (stating that United States may have a different moral track than other countries).

54. AMSTUTZ, *supra* note 15, at 49.

55. *Id.* at 198.

56. *Id.* at 5.

57. *Id.* at 9.

58. *Id.* at 12.

59. SHEERAN, *supra* note 17, at 137.

communities organized as sovereign states but does not necessarily mean the common good of “nations” which represents people united by ethnicity, language, etc.⁶⁰ However, the two do not have to be mutually exclusive.⁶¹ Political morality does not equal personal morality, and some actions allowed by the former would not be allowed by the latter.⁶²

Although decision-makers are unclear about the role of ethics and values in decision-making, it is often apparent that an ethical dimension does play a part.⁶³ There are three elements of an ethical position.⁶⁴ The first is the acceptance of a set of moral principles.⁶⁵ The second is a personal perception of the factual situation, which calls for a subjective judgment of the circumstances.⁶⁶ Third, there must be a derived moral judgment on the particular issue, which constitutes that ethics-based action.⁶⁷ Within each of these elements are a range of options based on background and the unpredictable human element.

“An ethic is a limitation on freedom of action in the struggle for existence.”⁶⁸ These limitations on state authority place legal and moral constraints on actions available to the state.⁶⁹ In democratic societies, these can include self-imposed restraints, such as a constitution or laws.⁷⁰ In the case of a sovereign power, unethical actions may be limited only by the internal threat of overthrow or encouraged through foreign pressure, such as embargos or tarnished reputation.⁷¹

“[I]n domestic and international politics. . . government decisions do not lend themselves to simple moral verdicts.”⁷² This is due in large part to the complexity

60. David Welch, *Morality and “the National Interest”*, in *ETHICS IN INTERNATIONAL AFFAIRS* 3, 7 (Andrew Valls ed., 2000).

61. *Id.* at 9.

62. AMSTUTZ, *supra* note 15, at 5.

63. STENMARK, *supra* note 13, at 19.

64. PRISCOLI ET AL., *supra* note 45, at 10.

65. *Id.*

66. *Id.*

67. *Id.*

68. Leopold, *supra* note 22, at 42.

69. I.M.D. LITTLE, *ETHICS, ECONOMICS, AND POLITICS* 28 (2002).

70. IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 542-45 (6th ed. 2003) (1966).

71. LITTLE, *supra* note 69, at 28; Nausheen Hassan, *U.S. Involvement in the Sanctions Against Iraq: A Potential Basis for a Legal Claim by Iraqi Women?*, 11 *S. CAL. REV. L. & WOMEN’S STUD.* 189, 205-07 (2001) (describing the effects of economic sanctions employed by the United States against Iraq created to debilitate the country by denying the import of basic materials). One example of the power of reputation is Jimmie Carter’s perceived influence on leader’s moral values as seen by his public condemnation of countries known for oppression and human rights violations. AMSTUTZ, *supra* note 15, at 13.

72. AMSTUTZ, *supra* note 15, at 4.

of issues. Decision-makers must select the most desirable action from a number of available alternatives, each of which may have moral implications.⁷³ Local impacts, as well as the global dimension, including rules, practices, and institutions, must be considered. “The aim of such moral reflection is to assess the justice of the existing world system.”⁷⁴ A balance must be created between morality and the national interest.⁷⁵ One of the ways this is accomplished is through ethical theories of conduct.

III. Ethical Considerations

When attempting to understand the role of ethics in water-related decision-making, it is helpful to first understand some ethical theories that might impact such choices. Because water is a natural resource, ethical concepts that apply to people, the environment, or both have bearing. In determining water resource management, these theories, which discuss how we treat nature both alone and in relation to our own survival, can provide guidance to policy-makers. The inclusion of these and other ethical parameters in the decision process will help ensure that the water needs of all communities are met now and in the future.

A. Environmental Ethics

Traditionally, ethics has applied primarily to people; however, as the natural world is better understood and appreciated, a movement to incorporate the environment in ethical principles is occurring. For numerous cultures, this requires a reassessment of humanity’s relationship with the environment. In the past, many societies, and particularly Western civilization, have related to the environment in terms of what they could gain from it.⁷⁶ This anthropogenic attitude is premised on the notion that people are more important than their surroundings. Little to no value is placed on nature itself.⁷⁷ “For environmental ethics, the first question is whose well-being is available for and worthy of consideration”⁷⁸ “An environmental ethic would impose limitations on human freedom of action in relationship to nonhuman natural entities and to nature as a whole.”⁷⁹

73. *Id.*

74. *Id.*

75. See Welch, *supra* note 60, at 7.

76. RICHARD SYLVAN & DAVID BENNETT, THE GREENING OF ETHICS 61 (1994); See Booth & Jacobs, *supra* note 38, at 131.

77. See STENMARK, *supra* note 13, at 15; ATTFIELD, *supra* note 1, at 27.

78. CUOMO, *supra* note 31, at 41.

79. CALLICOTT, *supra* note 16, at 1.

One of the first texts to recognize the relationship between man and the earth was Aldo Leopold's, *The Land Ethic*. In that text, Leopold challenges the status quo of allowing government to make all decisions regarding the environment.⁸⁰ He argues that this system lacks an important ethical component necessary in the extension of social conscience from people to the land they enjoy.⁸¹ A later text, which chronicled human's impact on our natural surrounding, was Lynn White Jr.'s, *The Historical Roots of Our Ecologic Crisis*.⁸² Citing the introduction of widespread technological power, he provides many examples of our negative impact on ecology.⁸³ He postulates that the solution will not be found in increasing the application of science and technology, but rather on understanding the man-nature relationship particularly in light of deeply rooted Christian dogma, which dominates western culture.⁸⁴ By understanding this, White hopes society will reach an appreciation for all parts of nature, not just for nature's ability to serve man.⁸⁵ This appreciation is the root of environmental ethics.

Environmental ethics does not necessarily operate to the exclusion of people. Rather, it is "the systematic and critical study of the moral judgments and attitudes which (consciously or unconsciously) guide human beings in the way they behave towards nature."⁸⁶ Understanding our dependence on nature increases our respect for that system.⁸⁷ Ironically, past human practices, which were based on the preservation and the quality of human life, now threaten the sustainability of human life.⁸⁸ The destruction of the resource can eventually impact ethics among people as supplies become more limited.⁸⁹ "Respect for life does demand an ethic concerned about human welfare, an ethic. . .now applied to the environment."⁹⁰

80. Leopold, *supra* note 22, at 41-48.

81. *Id.*

82. Lynn White Jr., *The Historical Roots of our Ecologic Crisis*, 155 *SCIENCE* 1203 (1967), available at <http://www.uvm.edu/~gflomenh/ENV-NGO-PA395/articles/Lynn-White.pdf>.

83. *Id.* at 1203 -06.

84. *Id.* at 1206.

85. *Id.* at 1207.

86. STENMARK, *supra* note 13, at 15.

87. John Passmore, *Attitudes to Nature*, in *ENVIRONMENTAL ETHICS* 129, 141 (Robert Elliot ed., 1995).

88. SYLVAN & BENNETT, *supra* note 76, at 62.

89. See Paol Harremoës, *Water Ethics - A Substitute for Over-regulation of a Scarce Resource*, 45 *WATER SCI. & TECH.* 113, 117-19 (2002) (explaining even in an expanded ethical paradigm, when pressure increases on the individual, such as in times of war, the values becomes more introvert and priority returns to the individual and family).

90. Holmes Rolston III, *Environmental Ethics: Values in and Duties to the Natural World*, in *ENVIRONMENTAL ETHICS* 228, 228 (Michael Boylan ed., 2001).

Actions that applied previous ethical constructs that did not adversely affect human life, but were negative actions toward the environment, must be rethought.⁹¹ A new ethic must be developed that either qualitatively and quantitatively changes the way we deal with the environment, or current ethics must be polished to apply to the human/environment relationship.⁹² The beauty and recreation values of nature can be an ethic that contributes to decision-making.⁹³ These environmental ethics provide a context for a water ethic.

B. Sustainable Development

The theory of sustainable development provides a strong ethical link between natural resources and the people who utilize them.⁹⁴ The World Commission on Environment and Development defines sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁹⁵ Temporally extending the principle of justice and equality creates ethical obligations toward future inhabitants.⁹⁶ Also intrinsic in the sustainable development approach is the protection of the vulnerable members of society.⁹⁷ This evaluation examines the relationship “between the social and environmental aspects of economic development.”⁹⁸

91. SYLVAN & BENNETT, *supra* note 76, at 62.

92. *Id.*

93. Janna Thompson, *Aesthetics and the Value of Nature*, in ENVIRONMENTAL ETHICS 159, 159 (Michael Boylan ed., 2001). Value given to the environment can range from its value independent of people, such as aesthetics, to realizing the benefits it offers including fishing, kayaking and other recreational uses. SANDRA POSTEL, PILLAR OF SAND: CAN THE IRRIGATION MIRACLE LAST? 118 (1999); see EUGENE C. HARGROVE, FOUNDATIONS OF ENVIRONMENTAL ETHICS, 79-86 (1989).

94. See U.N. Conference on Environment and Development, Rio de Janeiro, Brazil, June 3-14, 1992, *Declaration on Environment and Development*, princ.1, U.N. Doc. A/CONF.151/26 (Vol. I) (Aug. 12, 1992), available at <http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm> (“Human beings are at the centre of concerns for sustainable development.”).

95. World Commission on Environment & Development [WCED], *Report of the World Commission on Environment and Development: Our Common Future*, ch. 2, ¶ 1, U.N. Doc. A/42/427 (Aug. 4, 1987), available at <http://www.un-documents.net/wced-ocf.htm>.

96. See *id.* at ¶¶ 4-6 (supporting the fact that sustainable development is limited by moral considerations by linking environmental protection with the ability of people to have a better life); ENVIRONMENTAL ETHICS 375 (Michael Boylan ed., 2001); STENMARK, *supra* note 13, at 21.

97. See JOHN SCANLON ET AL., WATER AS A HUMAN RIGHT? 14 (2004).

98. Nicholas Low & Brendan Gleeson, *Ecosocialization and Environmental Justice*, in 8 ENVIRONMENTAL JUSTICE: DISCOURSES IN INTERNATIONAL POLITICAL ECONOMY ENERGY AND ENVIRONMENTAL POLICY 203, 226 (John Byrne et al. eds., 2002).

To achieve sustainability, environmental protection must be a vital part of the development process.⁹⁹ Environmental policy documents often view nature as a resource that can be renewable or nonrenewable, but nature should be viewed as a resource that people have the right to use as long as the productive potential of the ecosystems is unthreatened.¹⁰⁰ In this vein, if development causes environmental degradation in one area, there must be an improvement in another area to maintain a balance resulting in a pride of place and the shaping of environmental management.¹⁰¹ “[S]ustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs.”¹⁰²

Sustainable development and economic growth are not only compatible, they are necessary elements that can only be achieved when the poor are able to live in a way that does not threaten the environment upon which they survive.¹⁰³ Through improved technology and social organization, a new era of economic growth can be achieved without compromising the environment for the future.¹⁰⁴ To be truly sustainable, poorer regions must not only have economic growth, but also an assurance that resources will be equitably distributed.¹⁰⁵

Global considerations are also intrinsic in this theory.¹⁰⁶ By recognizing that some parts of the world live beyond their ecological means, changes must be made to create a balance for societies that do not have enough resources available.¹⁰⁷ As commodity production increases, benefiting the wealthy, pollution and resource depletion necessary for manufacture victimize poor communities and nations.¹⁰⁸ Working from the premise of an international economy and shared ownership of

99. U.N. Conference on Environment and Development, *supra* note 94, at princ. 4.

100. STENMARK, *supra* note 13, at 24-26 Many people think this objective is impossible to achieve because it would require a growth ceiling on development. ATTFIELD, *supra* note 1, at 101. The argued solution is carefully planned management of nature within development so that the resources will last longer and be used more efficiently. STENMARK, *supra* note 13, at 26.

101. ENVIRONMENTAL ETHICS, *supra* note 96, at 375; STENMARK, *supra* note 13, at 21.

102. WCED, *supra* note 95, at part I(3)(30).

103. STENMARK, *supra* note 13, at 20-21.

104. WCED, *supra* note 95, at part I(3)(27).

105. *Id.* at part I (3)(28).

106. *See id.* at ch. 2, ¶ 2.

107. *Id.* at ch. 2, ¶ 5.

108. John Byrne et al, *The Production of Unequal Nature*, in 8 ENVIRONMENTAL JUSTICE: DISCOURSES IN INTERNATIONAL POLITICAL ECONOMY ENERGY AND ENVIRONMENTAL POLICY 261, 287 (John Byrne et al. eds., 2002).

the world environment, a shift toward risk minimization in commodity production will have positive benefits on long-term global protection and sustainability.¹⁰⁹

Humans are integral parts in the ecological system upon which their survival depends.¹¹⁰ Because of the essential role of people, physical health is an important aspect of sustainability. A natural resource can be defined as “everything which human beings can make use of in nature to satisfy their needs.”¹¹¹ In essence, sustainable development necessitates that we respect the basic rights assigned to every human being.¹¹²

Of the various needs that need to be preserved for future generations, few are more important than water. Since many low-income populations do not have access to a sufficient quantity and quality of water, sustainable development is impaired in these communities.¹¹³ Although “needs” can be viewed as a subjective term, the basic need for water can be quantified.¹¹⁴ Any ethic addressing the sustainability of future generations should include water considerations. Similar arguments can also be made for moral obligations toward current populations.

C. Environmental Justice

Another ethical theory that is closely related to the human aspect of sustainable development, while focusing on the present, is that of environmental justice. Former President Bill Clinton described environmental justice as “identifying and addressing . . . disproportionately high and adverse human health or environmental effects . . . on . . . low-income populations.”¹¹⁵ The United States Environmental Protection Agency later expanded that definition of environmental justice to:

109. See Low & Gleeson, *supra* note 98, at 210-16.

110. STENMARK, *supra* note 13, at 23.

111. *Id.* at 25.

112. *Id.* at 24.

113. MONICA PORTO, WATER AND ETHICS: HUMAN HEALTH AND SANITATION 6 (2004), available at <http://unesdoc.unesco.org/images/0013/001363/136324e.pdf>.

114. See Wilfred Beckerman, ‘Sustainable Development’: *Is it a Useful Concept?*, in ENVIRONMENTAL ETHICS 377, 379-89 (Michael Boylan ed., 2001); See Amy Hardberger, *Life, Liberty, and the Pursuit of Water: Evaluating Water as a Human Right and the Duties and Obligations it Creates*, 4 NW. U. J. INT’L HUM. RTS. 331, 353-60 (2005) (reviewing different methodologies that assess the minimum amount of water required for life); WCED, *supra* note 95, at ch. 2, ¶ 4 (attempting to quantify need by listing food, clothing, shelter, jobs, and aspiration for an improved quality of life).

115. Robert R. Kuehn, *A Taxonomy of Environmental Justice*, in ENVIRONMENTAL JUSTICE: LAW, POLICY & REGULATION 6 (Clifford Rechtschaffenn & Eileen Gauna eds., 2002) (citing Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994), amended by Exec. Order No. 12,948, 60 Fed. Reg. 6381, (Feb. 1, 1995)) (stating that the five most vulnerable groups have been identified as the poorest third of all households; women; children and

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. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.¹¹⁶

The objectives of the environmental justice movement, which were first espoused in the U.S. in the 1970s, are now recognized and pursued around the world.¹¹⁷

The primary focus of environmental justice is “fairness” and “justice.”¹¹⁸ Justice is further broken down to include: distributive, procedural, corrective, and social justice.¹¹⁹ Distributive justice means that all citizens have an equal right to goods or opportunities.¹²⁰ This equal right includes equal distribution of environmental hazards as well as protections.¹²¹ Some advocates argue that the duty imposed is the overall reduction in environmental risks.¹²² Among the goods included in distributive justice are environmental benefits, such as safe drinking water.¹²³

More advantaged communities often receive greater environmental protection as a result in part of their ability to participate in regulatory decisions.¹²⁴ Procedural justice provides for equal treatment of citizens in many procedural

youth; the elderly; and some number of minority groups); AT RISK: NATURAL HAZARDS, PEOPLES VULNERABILITY AND DISASTERS 14-16 (Piers M. Blaikie et al. eds., 1994).

116. Env'tl. Prot. Agency, *Environmental Justice*, at <http://www.epa.gov/compliance/environmentaljustice/index.html> (last modified Jan. 25, 2005).

117. John Byrne et al., *A Brief on Environmental Justice*, in 8 ENVIRONMENTAL JUSTICE: DISCOURSES IN INTERNATIONAL POLITICAL ECONOMY ENERGY AND ENVIRONMENTAL POLICY 1, 3 (John Byrne et al. eds., 2002).

118. Clifford Rechtschaffenn & Eileen Gauna, *Introduction to Robert R. Kuehn, A Taxonomy of Environmental Justice* in ENVIRONMENTAL JUSTICE: LAW, POLICY & REGULATION 6 (Clifford Rechtschaffenn & Eileen Gauna eds., 2002).

119. Kuehn, *supra* note 115, at 6.

120. *Id.* at 8. Philosopher John Rawls focused on distributive justice in his efforts to reconcile liberty and equality. Appealing to the concept of a social contract, he argues that justice as fairness can be applied to everyone regardless of the personalities or social position. *See generally*, JOHN RAWLS, A THEORY OF JUSTICE (1999).

121. Deoohn Ferris & David Hahn-Baker, *Environmentalists and Environmental Justice Policy*, in ENVIRONMENTAL JUSTICE: ISSUES, POLICIES, AND SOLUTIONS 66, 66 (Bunyan Bryant ed., 1995).

122. Kuehn, *supra* note 115, at 8.

123. *Id.*

124. Rechtschaffenn & Gauna, *supra* note 118, at 3.

aspects to ensure that everyone has a voice.¹²⁵ Many agencies have attempted to achieve this through public participation, creating an open forum free from economic favoritism.¹²⁶ Corrective justice, also called compensatory or restorative justice, looks at the punishment mechanism of noncompliant governments.¹²⁷ Finally, social justice looks to the better ordering of society so that peoples' needs are fully met.¹²⁸ This merge of socialism and the environmental movement broadens the focus of environmental justice, viewing it as part of a greater problem of disparity that needs to be addressed.¹²⁹

Although environmental justice finds its roots at a national level in the U.S., this theory has been applied in an international context and has applications to water policy because “[w]ater is a major element of the natural environment.”¹³⁰ The lower socio-economic brackets, women, and children are most often affected by the consequences of an inadequate water supply.¹³¹ Similar disparities are found between urban and rural areas.¹³² “Some 80% of those who have no access to improved sources of drinking-water are the rural poor.”¹³³ City authorities often do not recognize excessively poor shanty towns located on the edges of a larger city, such as Mexico City, and do not extend support infrastructures into these areas.¹³⁴

Environmental justice will have increased application in water planning as resources become scarcer.¹³⁵ The American southwest is already facing the

125. Kuehn, *supra* note 115, at 9. The United Nations specifically recommended procedural safeguards for water by stating, “any person or groups who have been denied their right to water should have access to effective judicial or other appropriate remedies,” and there should not be any interference with a person’s right to water without an opportunity for consultation. U.N. Econ. & Soc. Council [ECOSOC], Comm. on Econ., Soc., & Cultural Rights, *General Comment No. 15 (2002): The Right to Water (arts. 11 and 12 of the International Covenant on Economic, Social, and Cultural Rights)* at ¶¶ 55-56, U.N. Doc. E/C.12/2002/11 (Jan. 20, 2003) [hereinafter General Comment 15].

126. Kuehn, *supra* note 115, at 9-10.

127. *Id.* at 10.

128. *Id.*

129. *Id.* at 10-11.

130. THE ENVIRONMENTAL JUSTICE READER: POLITICS, POETICS & PEDAGOGY 21 (Joni Adamson et al. eds., 2002); see RUCHI ANAND, INTERNATIONAL ENVIRONMENTAL JUSTICE: A NORTH-SOUTH DIMENSION 15 (2004).

131. WORLD HEALTH ORGANIZATION [WHO], THE RIGHT TO WATER, at 22, 25 (2003), available at http://www.who.int/water_sanitation_health/en/rtwrev.pdf.

132. *Id.* at 22.

133. *Id.*

134. *Id.*

135. See THE ENVIRONMENTAL JUSTICE READER: POLITICS, POETICS & PEDAGOGY, *supra* note 130, at 22.

challenge of rich businessmen trying to buy water for resale at a large profit.¹³⁶ The ability of the rich to take water from the poor for a profit violates the idea of distributive justice.¹³⁷ Incorporating a justice ethic in water distribution can assist in the reduction of poverty by bringing poor people's living conditions to a higher standard that is more comparable to those with greater means.¹³⁸ This argument becomes particularly applicable in the north/south debate.

The north/south debate argues that more developed nations environmentally exploit less developed nations.¹³⁹ These regions are distinguished by "historically determined social and economic conditions resulting from their colonial and imperial past," creating a "qualitative dividing line" between them.¹⁴⁰ The more economically powerful northern countries have focused on environmental issues more important to them, but the rise of environmental justice would obligate a priority shift to ensure the southern countries' needs are met as well.¹⁴¹ The question then becomes whether the northern countries have an obligation to assist the southern countries in achieving their goals because responsibilities and duties of environmental justice can be held by more than one entity, country, or international body.¹⁴² If world maintenance is viewed as a global responsibility, cooperation and implementation of policies would be the duty of all nations especially those with more resources.¹⁴³

136. See e.g., *id.* at 21 (describing a situation where a multimillionaire proposed to mine a confined aquifer in the rural San Luis Valley to sell the water to the cities of Reno and Las Vegas). A similar situation exists in Northern Texas. Starting in 2001, millionaire T. Boone Pickens bought land with a plan to mine the fossil Ogallala aquifer of 200,000 acre-feet of water and sell it to larger cities. Joe Nick Patoski, *Boone Pickens Wants To Sell You His Water*, TEXAS MONTHLY, August 2001. Many farmers who rely on the aquifer for their farming livelihood protested this idea; however, under the right of capture in Texas, there may not be legal means to stop this type of sale from occurring. *Id.*

137. International documents, such as the UN's General Comment No. 15, attempt to remedy this disparity by stating that although everyone has a right to water "States parties should give special attention to those individuals and groups who have traditionally faced difficulties in exercising this right . . ." General Comment 15, *supra* note 125, ¶ 16.

138. SCANLON ET AL., *supra* note 97, at 14.

139. Kuehn, *supra* note 115, at 6.

140. ANAND, *supra* note 130, at 1 (quoting MARIAN A.L. MILLER, *THE THIRD WORLD IN GLOBAL ENVIRONMENTAL POLITICS* (1995)).

141. *Id.* at 16.

142. ATTFIELD, *supra* note 1, at 155.

143. ANAND, *supra* note 130, at 17-18; Vandana Shiva, *Ecological Balance in an Era of Globalization*, in *GLOBAL ETHICS & ENVIRONMENT* 46, 46 (Nicholas Low ed., 1999). The 1992 Earth Summit in Rio was the first major recognition of the international responsibility for protection of the global environment. *Id.*

Environmental justice is not without criticism. One complaint is that the movement focuses more on procedure, such as public participation, than on improving environmental effects on human health.¹⁴⁴ Because the movement is currently more politics than public health, improvements to health standards are often secondary to policy advocacy.¹⁴⁵ Another complaint is the shift from a health or risk focus to one of nondiscriminatory prioritization actually endangers those it seeks to protect.¹⁴⁶

Despite the possible weaknesses of environmental justice in enforcement and policy implementation, its strength is its ability to empower and mobilize people at a grassroots level.¹⁴⁷ The focus on social and political power, as opposed to economics, makes it a powerful decision-making tool at the local and international level by giving less fortunate states leverage to demand equality in environmental and distributive matters, including the demand for sufficient quantities of water.¹⁴⁸

D. The Role of the Public

One component of environmental justice and sustainable development, which can also be seen as a stand-alone ethic, is that of allowing the public to wholly participate in decision-making. Since the individual is the source of actions, ethical or otherwise, the inclusion of the public is paramount in achieving success. True participation means that no one, particularly the poor or other disenfranchised groups, is excluded from participation in institutions necessary for human survival and fulfillment.¹⁴⁹ “Public involvement holds the promise of improving the management of international watercourses and reducing the potential for conflict over water issues.”¹⁵⁰ No policy can be successful without the acceptance and participation of the people in their daily activities; therefore, ethical values and attitudes become central to this premise.¹⁵¹

144. CHRISTOPHER H. FOREMAN, JR., *THE PROMISE AND PERIL OF ENVIRONMENTAL JUSTICE*, 64-65 (1998).

145. *Id.* at 65-66.

146. *Id.* at 117-18.

147. *Id.* at 122-23, 126-27.

148. *See id.* at 127; Byrne et al., *supra* note 117, at 3.

149. PRISCOLI ET AL., *supra* note 45, at 16.

150. CARL BRUCH ET AL., *From Theory to Practice: An Overview of Approaches to Involving the Public in International Watershed Management*, in *PUBLIC PARTICIPATION IN THE GOVERNANCE OF INTERNATIONAL FRESHWATER RESOURCES* 3, 3 (2005).

151. Harremoës, *supra* note 89, at 2.

Participation improves the quality of decisions, facilitates the decision-making process, improves credibility, and enhances implementation.¹⁵² A true participatory process should allow for input during the planning and implementation stages as well as providing a means for affected members of the public to seek redress for any harm arising from mismanagement. Because the public views these projects as a whole, including all stages of development and operation, the absence of one of these interactive opportunities could threaten the validity of the participatory process.¹⁵³

Alienating the public, who will be affected by a project, often leads to increased resistance, including protests and legal contests, which can have significant cost impacts.¹⁵⁴ This cost is often greater than that associated with public involvement.¹⁵⁵ A range of entities including financial institutions, governments, water authorities, and United Nations groups can share this investment.¹⁵⁶ Together, early inclusion efforts can protect the long-term security of a project.

Increasingly recognized in international and national law, public participation is included in many environmental declarations. The Rio Declaration states:

Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes.¹⁵⁷

The United Nations Economic Commission for Europe later adopted this principle.¹⁵⁸ The Aarhus Convention, as it is referenced, sets forth three minimum standards for national level decision-making: 1) public participation in environmental decision-making; 2) the right to access information; and 3) equal access to justice.¹⁵⁹

152. BRUCH ET AL., *supra* note 150, at 6, 11-14 There is a range of participatory processes and techniques, some more successful than others. *See id.* at 11-14. Although this article does not seek to evaluate these various approaches, any entity seeking to implement these methods should review previous projects to ensure success.

153. *See* PORTO, *supra* note 113, at 19 (noting that the impact of participation throughout the project was greater than during any single stage).

154. BRUCH ET AL., *supra* note 150, at 6.

155. *Id.*

156. *See id.* at 10-11.

157. U.N. Conference on Environment and Development, *supra* 94, at princ. 10.

158. *See* U.N. Economic Commission for Europe, *Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters* (June 25, 1998), available at <http://www.unece.org/env/pp/documents/cep43e.pdf>.

159. *Id.* arts. 4, 7, 9.

Public participation has already been an important component of past successful water projects around the world.¹⁶⁰ As participation increases, so does the proportion of water systems in good condition, percentage of target populations reached, and environmental benefits.¹⁶¹ These projects also discovered that other participatory measures, including input in implementation as well as local ownership and control, resulted in a more successful program.¹⁶² In many situations, the ability to participate is a new way to approach these issues.¹⁶³ This new sense of empowerment creates a willingness to compromise on issues, which contributes to project success.¹⁶⁴ These practical, as well as ethical, considerations support the need for public participation, particularly in water projects.

IV. The Impact of Ethics on Water

When attempting to understand the role of ethics in decision-making, water provides a natural framework because ethical issues are present in every facet of water management, “including planning, regulating, operating, financing and investing, designing, and implementing.”¹⁶⁵ The indivisible relationship between water and basic survival generates an ethical relationship between policy-makers and affected communities. All decisions regarding water supply, allocation, or pricing will have both clear and hidden implications for water users, particularly those with limited means.

Historically, water management functioned on a “command and control” basis.¹⁶⁶ This approach represents an elitist and centralized top-down management approach.¹⁶⁷ Although this can be effective for large water projects, it is less efficient for distributed water handling in agricultural, industry, and domestic situations.¹⁶⁸ Developing an ethical value towards the environment in consumers and industry can be a far more effective and cheaper means of regulation than the

160. PORTO, *supra* note 113, at 18.

161. *Id.* at 19.

162. *Id.*

163. *Id.* at 20.

164. *Id.*

165. PRISCOLI ET AL., *supra* note 45, at 26.

166. Harremoës, *supra* note 89, at 1. “Control over water has again and again provided an effective means of consolidating powers within human groups-led, that is, to the assertion by some people of power over others.” DONALD WORSTER, *RIVERS OF EMPIRE* 20 (1985) (discussing the role and control of water in the western United States as it was settled and developed).

167. Harremoës, *supra* note 89, at 1.

168. *Id.*

command and control method or other economic instruments.¹⁶⁹ Diluting the decision-making control of the current power elite could empower the previously disenfranchised.¹⁷⁰

A water ethic can find roots in various ethical theories. A successful ethic must have broad-based support from government, religion, and secular groups involved in community relationships because, by definition, groups cannot impose ethics upon one another.¹⁷¹ An ethic assumes equality of people and requires participation based on the unified customs and values of the community.¹⁷² "Society must promote values that support the new ethic and discourage those that are incompatible with a sustainable way of life."¹⁷³

Ethics lie in both codified and uncoded codes of conduct.¹⁷⁴ Ethical restrictions first affect behavioral rules, which can ultimately be codified into law.¹⁷⁵ "An ethic defines both rights and responsibilities" where each "individual has a responsibility to respect the rights of others."¹⁷⁶ Often seen as part of the broader concept of social ethics, discussions regarding water and ethics revolve around the notion of water as a common good.¹⁷⁷ Because water has strong ties to human dignity and provides basic survival needs, it is difficult to separate it from social justice.¹⁷⁸ Environmental, and by extension water, protection presents a moral challenge by forcing states to consider the impact of their behavior on the well-being of domestic and foreign peoples and the potential impact on future generations.¹⁷⁹

It is important to differentiate between local and global politics when discussing how decisions are made within the confines of ethical obligations. A cross-cultural consensus on ethics and rights can be difficult in a time where different societies place varying importance on mores and values.¹⁸⁰ However, there is widespread

169. *Id.* at 2.

170. SYLVAN & BENNETT, *supra* note 76, at 176.

171. MARTIN HOLDGATE, FROM CARE TO ACTION 122 (1996).

172. *Id.*

173. INTERNATIONAL UNION FOR CONSERVATION OF NATURE [IUCN] ET AL., CARING FOR THE EARTH: A STRATEGY FOR SUSTAINABLE LIVING, 11 (1991), available at <http://coombs.anu.edu.au/~vern/caring/caring.html>.

174. CALLICOTT, *supra* note 16, at 2.

175. PRISCOLI ET AL., *supra* note 45, at 7; Gelb & Rosenthal, *supra* note 4, at 5 ("Protecting individual rights . . . [has] become an inescapable part of arguments over policy.").

176. IUCN ET AL., *supra* note 173, at 13.

177. PRISCOLI ET AL., *supra* note 45, at 15-16.

178. *Id.* at 16.

179. AMSTUTZ, *supra* note 15, at 172.

180. *Id.* at 74.

agreement that some human rights claims are legitimate and empower people to demand these rights from their states and the international community.¹⁸¹ Among these are respect for human life and honorable treatment.¹⁸² Water is a natural component of both. Although no major society currently lives according to a value system that properly protects the future of humans, the beginnings of an ethic of water can be seen in select domestic and international laws.¹⁸³

A. Laws and Regulations

1. Domestic

Ethical considerations in relation to water can be found in many state policies. In addition, states are bound by international documents and treaties that reflect the previously described ethical theories as well as human rights, which have an ethical foundation.¹⁸⁴ Ethical issues which can affect policy include: basic conditions of water supply, such as quantity and quality; services that are sustainable over the long term; and management practices, particularly ensuring equity and participation.¹⁸⁵

Some governments already include basic rights to water in their legal system. One example is the South African Bill of Rights. South Africa is one of a handful of countries to include the right to water in the rights afforded to all citizens.¹⁸⁶ Section 27 of their Bill of Rights states that “everyone has the right to have access to . . . sufficient food and water.”¹⁸⁷ The Water Services Act passed in 1997, gives effect to Section 27.¹⁸⁸ It echoes the Bill of Rights’ sentiment that everyone has a right to a basic water supply and provides a protocol for any discontinuation of

181. *Id.* at 74-75.

182. *Id.* at 75.

183. See IUCN ET AL., *supra* note 173.

184. Louis Henkin, *International Human Rights as “Rights,”* in HUMAN RIGHTS NOMOS XXIII 257, 258-60 (J. Roland Pennock & John W. Chapman eds., 1981). The international human rights movement encourages countries to include these obligations in their legal construct or, in the alternative, provides basic rights for people when locally protected. *Id.* at 259. See discussion *infra* Part IV.A.2.i.

185. PORTO, *supra* note 113, at 14.

186. See *The Right to Water, National Legislation on the Right to Water*, at http://www.righttowater.org.uk/code/Legislation_2.asp (last visited Nov. 7, 2004) (noting that Gambia, Ethiopia, Zambia, and Uganda also include constitutional provisions ensuring the right to clean water for their citizens).

187. S. AFR. CONST. ch. 2 § 27.

188. Michael Kidd, *Not a Drop to Drink: Disconnection of Water Services for Non-Payment and the Right to Access of Water*, 20 S. AFR. J. ON HUM. RTS. 119, 122 (2004).

service.¹⁸⁹ This protocol requires that the interruption of service be fair and equitable and that reasonable notice be provided.¹⁹⁰ It also states that service cannot be denied if the person proves to the utility company that they cannot pay.¹⁹¹ The ethical basis of this rule is clear. The state is controlled, at least in part, by the value placed on the health of the community as a whole and its ability to access sufficient water.

South African courts have been successful in enforcing this right, proving that the inclusion of water as a right can empower citizens who normally might not be heard.¹⁹² In *Residents of Bon Vista Mansions v. Southern Metropolitan Local Council*, residents of Bon Vista Mansions claimed the Local Council had unlawfully discontinued their municipal water supply for lack of payment.¹⁹³ The court held that the citizens' constitutional right to water was infringed upon because the Council's procedures for disconnection were not fair and equitable.¹⁹⁴ Specifically, the court was concerned with the lack of reasonable termination notice.¹⁹⁵ The court further stated that, even in the event of nonpayment, service could not be terminated if the person proved to the satisfaction of the utility company that they were unable to pay.¹⁹⁶ Interestingly, the court's opinion did not require a government to provide access to water services, but limited the obligation to the non-affirmative obligation to respect the right to access.¹⁹⁷ Other cases in South Africa have not been as successful in protecting access to water, supporting the concept that the right to water must be carefully defined to ensure proper application and maximum protection.¹⁹⁸

189. Republic of South Africa Water Services Act 108 of 1997 § 3.

190. *Id.* § 4(3)(a)-(b).

191. *Id.* § 4(3)(c).

192. See The Right to Water, *Enforcing the Right to Water: South Africa*, http://www.righttowater.org.uk/code/legal_2.asp (last visited April 24, 2005). The inclusion of such a right in law is a significant component in public participation by providing a mechanism for redress if the requirements are not met. See discussion *supra* Part III.D.

193. See *Residents of Bon Vista Mansions v. S. Metro. Local Council* 2002 (6) BCLR 635 (W) (S. Afr.).

194. *Id.*

195. *Id.*

196. *Id.*

197. Socio-Economic Rights Project, *South African Cases: High Court Cases*, http://www.communitylawcentre.org.za/ser/casereviews/2002_6_BCLR_625.php (last visited Nov. 7 2004).

198. See The Right to Water, *Legal Redress: Remaining Challenges in the Legal Enforcement of the Right to Water: South Africa*, at http://www.righttowater.org.uk/code/legal_6.asp (last visited Nov. 7, 2004). In *Manqele v Durban Transitional Metropolitan Council*, petitioners raised a similar issue to that seen in *Bon Vista Mansions*. See *Manqele v Durban*

In India, water is not an explicit right listed in the constitution; however, courts at the state and federal levels have interpreted the constitutional right to life to include the right to safe and sufficient water.¹⁹⁹ In one Indian case, a group raised concerns that pumping groundwater was increasing the salinity of the resource—causing long-term detriment.²⁰⁰ The judge, stating that the right to water should be afforded to citizens as an extension of the right to life, ordered more research to understand the effects that pumping may have on the water source.²⁰¹ While South Africa and India explicitly establish a citizen's right to water, other countries are less overt.

Most United States citizens are familiar with phrase, “all men are... endowed... with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.”²⁰² The full understanding of the rights included is somewhat less clear. Generally, the rights implied through the U.S. Constitution and accompanying documents are not evident in the document itself, but are established through legislation and case law where the role of ethics is unclear and can vary.²⁰³ Although the United States does not specifically list a water ethic in government documents, there is evidence that it is recognized.

During the 108th Congress, Representative Janice Schakowsky of Illinois submitted a resolution titled, “Expressing the sense of the Congress with respect to the world's freshwater resources.”²⁰⁴ This resolution recognizes the critical situation of the world's water supply and states that Congress shall consider water a public trust and a public good and not a private commodity.²⁰⁵ The resolution also recognizes that policies should be implemented to ensure all individuals have sufficient access to meet their basic human needs and prohibits denial of access to water based on economic restraints.²⁰⁶ Other goals of the resolution include:

Transitional Metro. Council in S. Africa, 2002 (6) SA 423 (D). The court in *Manqele* denied the request to reinstate service holding no current regulations existed to enable the court to interpret the extent of the right of access. *Id.*

199. WaterAid, *The Right to Water Under the Right to Life: India*, <http://www.Righttowater.org.uk/code/legal 7.asp> (last visited Nov. 7, 2004).

200. *Id.*

201. *Id.*

202. DECLARATION OF INDEPENDENCE ¶ 2 (U.S. 1776).

203. SCANLON ET AL., *supra* note 97, at 9. Although not enumerated in the United States Constitution, the Supreme Court has extended the right of privacy to its citizens including the right to marry and the right of a woman to have control over her own body. *See* *Loving v. Virginia*, 388 U.S. 1 (1967); *Roe v. Wade* 410 U.S. 113 (1973).

204. H.R. Con. Res. 468, 108th Cong. (2004).

205. *Id.*

206. *Id.*

organizational involvement in local water management; sustainable agricultural practices; commitment to the UN's Millennium Development Goals; consideration of water issues in financial and trade agreements; and accountability for pollution of a water resource.²⁰⁷ Although this resolution has not yet been approved, its ethical underpinnings are clear. It is premised on the importance and need to protect citizens' right to water and recognizes the importance of the resource itself.²⁰⁸

In a similar vein, Congress passed an act in 2005 called "Senator Paul Simon Water for the Poor Act."²⁰⁹ The purpose was to assist developing countries in increasing access to and effective use of safe water and sanitation, improve water resources management, increase water productivity, and increase water security by strengthening cooperation on shared waters.²¹⁰ The first report in response to the act, released in June 2006, begins a long-term process to develop and implement a strategy to strengthen the United States' efforts on international water issues. Recognition of a water ethic within domestic policy and increased valuation of water, in relation to those who depend on it, are significant steps in expanding these types of regulations globally.

2. International

In addition to domestic law, ethics plays a part in international treaties and policy. Many of these rise to the level of customary international law, making them binding on many states even if they were not signatories. International law has produced a generally accepted code of behavior which prescribes behavior that maintains harmony.²¹¹ In order for a doctrine to be considered customary international law, it must be extensive and virtually uniform.²¹² Additionally, only

207. *Id.*

208. United States' 2004 presidential candidate, Dennis Kucinich included the human right to water in his election platform. Dennis Kucinich, *Water as a Human Right*, at <http://www.kucinich.us/issues/water.php> (last visited Nov. 7, 2004). Mr. Kucinich included ten principles in the right. *Id.* The specifics of the duty imposed on the government closely mirror that of the House Resolution. *Compare id.*, with H.R. Con. Res. 468, 108th Cong. (2004). In 2008, Kucinich again included water in the platform with a commitment to "make a financial commitment to providing healthy drinking water to all the world's people." Dennis Kucinich, *Clean Water*, http://www.Kucinichonline.com/pdfs/Kucinich_Clean_Water.pdf (last visited Jan. 15, 2008).

209. U.S. DEP'T. OF STATE, BUREAU OF OCEANS AND INT'L SCIENTIFIC AFFAIRS, SENATOR PAUL SIMON WATER FOR THE POOR ACT: REPORT TO CONGRESS (2006), available at <http://www.state.gov/g/oes/rls/rpts/67447.htm>.

210. *Id.*

211. AMSTUTZ, *supra* note 15, at 9.

212. BROWNLIE, *supra* note 70, at 6-12.

states that are particularly affected by the proposed norm are subject to this implicit customary international law.²¹³

There is little in international law explicitly proclaiming a water ethic; however, the tools which could create one are well established. Previously discussed principles such as sustainable development and public participation are frequently presented in treaties and framework conventions. Although these theories may not yet hold the status of customary international law, as they continue to be included in international documents and implemented by states, their status is strengthened.²¹⁴

Perhaps the seminal international document presenting sustainable development is Agenda 21 from the United Nations' 1992 Rio de Janeiro meeting.²¹⁵ The Rio Declaration on Environment and Development was developed and subsequently signed by 178 governments. The Commission on Sustainable Development was later formed to ensure effective follow-up procedures of the goals set forth in the documents. In 2002, the World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa, reiterated the goals established in Rio.²¹⁶

Public participation was also a large part of the Rio Declaration.²¹⁷ The ability for citizens to have a voice in the institutions that control their lives is an integral part of sustainability.²¹⁸ Other international water documents, while not explicitly requiring participation, either prescribe public access to information or local involvement.²¹⁹ Participation is also an important part of both the Aarhus

213. *Id.* Time is not a necessary element to proving custom. *Id.* at 7. It is also not necessary to show a rigorous conformity to the practice; however, if conduct was inconsistent, the government must consider the variation to be an infringement of state practice. *Id.* at 7-8. For the second, *opinio juris*, prong, one must show that adherence to a rule is the function of a legal obligation, not simply a moral one. *Id.* at 8-10.

214. See Melvin Woodhouse, *Is Public Participation a Rule of the Law of International Watercourse?* 43 NAT. RESOURCES J. 137, 153-55 (2003).

215. U.N. Conference on Environment and Development, *supra* note 94.

216. See Draft Resolution Submitted by the Vice-Chairman of the Committee, Mr. Jan Kára (Czech Republic), on the Basis of Informal Consultations Held on Draft Resolution, U.N. Doc. A/C.2/57/L.38 (December 10, 2002), available at <http://www.earthsummit2002.org/resolution.pdf> ("Reaffirming in this regard the commitment to achieving the internationally agreed development goals, including those contained in the United Nations Millennium Declaration, and in the outcomes of the major United Nations conferences and international agreements since 1992.").

217. U. N. Conference on Environment and Development, *supra* note 94, at princ.10.

218. See discussion *supra* IIID.

219. While the United Nations Watercourse Convention does not create an international requirement for public participation, it does do so in the domestic context. Woodhouse, *supra* note 214, at 150. The later Helsinki Convention requires that information related to the environmental impact assessment be readily available to citizens free of charge. *Id.*

Convention and the London Protocol, both of which discuss this issue in conjunction with water.²²⁰ The latter seeks to promote human health and well-being within a framework of sustainable development by improving water management.²²¹ Although no uniform practice of public participation is found in international documents, it is mentioned with increasing frequency.

Another way ethics can merge with international law is in the area of human rights. International human rights are often seen as part of international law, but not of international ethics; however, morality-driven directives are a part of international ethics.²²² “[T]he notion of human rights was from its inception an ethical idea - a claim based on morality.”²²³ People are entitled to certain things because they are based on their moral worth as human beings regardless of race, ethnicity, religion, or where they are from.²²⁴ Therefore, the claim that a person has to such a right is not based on a rule, but rather is a benefit earned by being a part of society.²²⁵ Human rights are a result of international discussions that attempted to merge conceptual differences of what should constitute such rights.²²⁶

Rights are implied when the actions a state can take are limited.²²⁷ They have an impact because they are an important and powerful way to state principles.²²⁸ They also provide enforcement mechanisms to citizens, such as litigation.²²⁹ Rights and duties form the foundation of justice because they are generally held by citizens and enforceable against the state.²³⁰ Human rights recognize that although the global community is made up of several different cultures, each person is entitled to dignity, respect, and equal treatment by their governments.²³¹

220. *Id.* at 156-57.

221. Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes, art. 5(i), Oct. 18, 1999, U.N. Doc. MP.WAT/2000/1(1999), available at <http://www.earthsummit2002.org/resolution.pdf> (“Access to information and public participation in decision-making concerning water and health are needed, . . . in order to enhance the quality and the implementation of the decisions, to build public awareness of issues, to give the public the opportunity to express its concerns and to enable public authorities to take due account of such concerns.”).

222. AMSTUTZ, *supra* note 15, at 70-71.

223. *Id.* at 72.

224. *Id.* at 73.

225. *Id.*

226. *Id.* at 50.

227. LITTLE, *supra* note 69, at 29.

228. SYLVAN & BENNETT, *supra* note 76, at 166.

229. *See id.*

230. LITTLE, *supra* note 69, at 59. *See* WHO, *supra* note 131, at 7.

231. AMSTUTZ, *supra* note 15, at 70.

Human rights fall into two distinct categories: 1) welfare rights, defined as rights which assure the provision of certain goods or services considered necessary for human well-being; and 2) liberty rights, which include the right not to be interfered with or maltreated.²³² Welfare rights include economic, social, and cultural rights. They are considered positive rights because they require affirmative action by governments.²³³ In contrast, a government generally secures liberty rights, which include civil and political rights, by ensuring noninterference with the right.²³⁴ The category in which a right is placed determines the governmental duties it imposes and defines whether a state must take affirmative steps to provide the right or simply guard against its deprivation.

Sometimes human rights are codified into a government document such as a Bill of Rights.²³⁵ These rights, called positive rights, are the easiest to enforce because the state has recognized their existence and enforcement mechanisms are included in local law.²³⁶ More frequently, however, rights are unwritten and are only implicit requirements of society.²³⁷ These are called moral rights and enforcement is much more difficult.²³⁸ When a government does not explicitly recognize the rights of its citizens, international law can provide a means to require their protection.

Statements of human rights, particularly the Universal Declaration of Human Rights, play an important part in defending people from subjugation in the name of some "common good."²³⁹ The need to defend both individual rights and to protect and preserve common needs and shared resources is paramount.²⁴⁰ Obligations

232. Stephen C. McCaffrey, *A Human Right to Water: Domestic and International Implications*, 5 GEO. INT'L ENVTL. L. REV. 1, 8 (1992).

233. SALMAN M. A. SALMAN & SIOBHAN MCINERNEY-LANKFORD, *THE HUMAN RIGHT TO WATER* 24 (2004).

234. *Id.*

235. MAURICE CRANSTON, *WHAT ARE HUMAN RIGHTS?* 1 (1973); see VIRGINIA BILL OF RIGHTS ¶ 1 (1776). This early Bill of Rights included the proclamation "that all men are by nature equally free and independent, and have certain inherent rights, . . . namely the enjoyment of life and liberty, with the means of acquiring and possessing property and pursuing and obtaining happiness." VIRGINIA BILL OF RIGHTS ¶ 1 (1776). Similar language was later seen in the United States Declaration of Independence; however, the United States Constitution does not provide for basic human needs. THE DECLARATION OF INDEPENDENCE ¶ 2 (U.S. 1776); Ann I. Park, *Human Rights and Basic Needs: Using International Human Rights Norms to Inform Constitutional Interpretation*, 34 UCLA L. REV. 1195, 1196 (1987).

236. CRANSTON, *supra* note 235, at 5.

237. *Id.*

238. *Id.*

239. IUCN ET AL., *supra* note 173, at 13.

240. *Id.*

and rights should receive equal emphasis.²⁴¹ The human right to water is one opportunity by which to ensure that ethics are included in water management.

a. Water as a Human Right

Establishing water as a human right is a changing process that finds its foundation in a dependent past while seeking an independent future. Early discussions focused on whether water should be an independent human right to ensure maximum benefits and enforcement mechanisms for citizens.²⁴² A rights-based approach, environmental justice, and sustainable development proponents all agree that water must be a right, each advancing different but related assertions to support this need. Since its inception, great strides have been made in the global recognition of the basic right to water and the need to ensure widespread access.

Although increasing numbers of international documents are calling for a human right to water, its first recognition was under the right to life. In 1948, the United Nations' Commission on Human Rights drafted the Universal Declaration of Human Rights (UDHR).²⁴³ One of the critical ideas expressed by the UDHR is that human rights are universal and international.²⁴⁴ The Declaration, reflecting many ethical principles, provides "[e]veryone has the right to life, liberty and security of person."²⁴⁵ Although there is no specific definition of "life" in the UDHR, some clarification can be found in its later articles. For example, Article 25 states, "[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services"²⁴⁶

The U.N. subsequently adopted two human rights covenants: the International Covenant on Civil and Political Rights (ICCPR),²⁴⁷ and the International Covenant on Economic, Social, and Cultural Rights (ICESCR)²⁴⁸ to further explain the rights

241. *Id.*

242. *See* Hardberger, *supra* note 114, at 345-51 (detailing international documents that support the human right to water).

243. SALMAN & MCINERNEY-LANKFORD, *supra* note 233, at 19.

244. *Id.* at 20.

245. Universal Declaration of Human Rights, G.A. Res. 217 A, at 71, U.N. GAOR, 3d Sess., 1st plen. mtg., U.N. Doc. A/810 (Dec. 12, 1948).

246. *Id.*

247. International Covenant on Civil and Political Rights art. 6, ¶ 1, Dec. 16, 1966, 999 U.N.T.S. 171, 6 I.L.M. 368 [hereinafter ICCPR].

248. International Covenant on Economic, Social, and Cultural Rights arts. 11, 12, Dec. 16, 1966, 993 U.N.T.S. 3, 6 I.L.M. 383 [hereinafter ICESCR].

listed in the Declaration of Human Rights.²⁴⁹ The ICCPR is primarily concerned with political rights; however, its declarations can be applied to other situations. This covenant contains strong language guaranteeing all people the right to life.²⁵⁰ Because the covenant does not define the limitations meant by the word “life,” it is reasonable to infer that the deprivation of life-sustaining substances such as water should violate the right to life.²⁵¹

The ICESCR addresses people’s basic social rights, which include the right to an adequate standard of living as well as the right to “the highest attainable standard of physical . . . health.”²⁵² The ICESCR further explains that to achieve these ends, a country should improve environmental hygiene and prevent disease.²⁵³ The covenant also provides that, “[i]n no case, may a people be deprived of its own means of subsistence” or adequate food.²⁵⁴ Both of these allowances could implicitly include water. Another important aspect to this document, in contrast to its sister document, is that the ICESCR attempts to protect “second generation rights,” which are generally positive in nature requiring the government to affirmatively provide the services defined.²⁵⁵

These documents were followed by the landmark General Comment No. 15, which recognized water as a separate right included within the ICESCR stating it was “one of the most fundamental conditions for survival.”²⁵⁶ This comment not only recognizes that water is a limited resource; it also links the right to water to other human rights including the right to life, health, adequate standard of living, and adequate food.²⁵⁷ In addition, the comment promotes the sanction model of

249. LINDA A. MALONE, *INTERNATIONAL HUMAN RIGHTS* 21-22 (2003) (stating that after twelve years of consideration, both covenants entered into force in 1976).

250. ICCPR, *supra* note 247, at art. 6, ¶ 1.

251. See Peter Gleick, *The Human Right to Water*, 1 *WATER POL’Y* 487 (1999), available at http://www.pacinst.org/reports/basic_water_needs/human_right_to_water.pdf.

252. ICESCR, *supra* note 248, at arts. 11, 12.

253. *Id.* at art. 12(2)(c).

254. *Id.* at art. 1(2) and 11.

255. SALMAN & MCINERNEY-LANKFORD, *supra* note 233, at 22.

256. General Comment 15, *supra* note 125, ¶ 3. In 1987, a committee was invited to create general comments on the ICESCR. SALMAN & MCINERNEY-LANKFORD, *supra* note 233, at 45. Comments are released to clarify rights given in the source document to assist in state’s implementation of the Covenant and its articles. *Id.* at 46. Comments are not binding per se and can only elucidate existing rights and cannot create new rights or expand existing ones; therefore, support for all conclusions must be present in existing documents. *Id.* at 5, 56.

257. General Comment 15, *supra* note 125, at ¶ 1-2. Support for the inclusion of water within the rights granted by the ICESCR came from the existing other UN documents including, the Declaration on the Right of Development, G.A. Res. 41/128, art. 8, U.N. Doc. A/RES/41/128 (Dec. 4, 1986) (stating conditions where millions of humans are “denied

the ICCPR to the ICESCR and gives the committee the power to require action from the states.²⁵⁸

The right is divided into three categories—availability, quality, and accessibility—each creating separate requirements for compliance.²⁵⁹ Availability includes quantities for continuous personal and domestic uses.²⁶⁰ The quality condition attempts to ensure the water is free of disease-causing contaminants.²⁶¹ The accessibility prong is the most developed including the subcategories of physical accessibility, economic accessibility, and non-discrimination.²⁶² The basic premise is that water should be physically available to all people and free of economic encumbrances.²⁶³ The scope of all these requirements is conditioned on local settings.²⁶⁴

Human rights is an affective avenue to witness the role of ethics in decision-making. Within this construct are representations of many previously discussed ideals. Water's importance to life and health provides a logical ethical link to life and its protection. Further, a human right to water is premised on the ability of citizens to enforce their rights against the state, empowering people to demand this critical resource.²⁶⁵ As these rights continue to be developed, they will either be codified into local law or can ultimately be enforceable against states as customary law, reflecting an integration of ethics and law.

V. Conclusion

The need for a water ethic arises out of decreasing resources and increasing demand worldwide. In addition, the recognition that large populations do not have access to sufficient clean water for health and sanitation has started a new dialogue

access to such essentials as food [and] water . . . in inadequate measure" present a "massive violation of human rights"); Convention on the Elimination of All Forms of Discrimination Against Women art. 14(2)(h), Dec. 18, 1979, 1249 U.N.T.S. 13; Convention on the Rights of the Child art. 6, Nov. 20, 1989, 1577 U.N.T.S. 3.

258. SALMAN & McInerney-Lankford, *supra* note 233, at 47.

259. General Comment 15, *supra* note 125, at ¶ 12(a)-(c); See Hardberger, *supra* note 114, at 353, 360.

260. General Comment 15, *supra* note 125, at ¶ 12(a).

261. *Id.* at ¶ 12(b).

262. *Id.* at ¶ 12(c)(i)-(iii).

263. *Id.*

264. *Id.* at ¶ 12.

265. WHO, *supra* note 131, at 31; See Amy Hardberger, *Whose Job is it Anyway?: Governmental Obligations Created by the Human Right to Water*, 41 TEX. INT'L L. J. 533, 541-66 (2006) (describing various situations in which the human right to water can be enforced against governments by the public).

about the role that water may play in ideas of morality.²⁶⁶ Quite simply, the *status quo* of water resource planning does not seem to be working. Soon, new choices will have to be made about how water is used, who is entitled to it, how it is managed, the size and technology of new projects, the role of the public, and the role of equity in water treatment and distribution.²⁶⁷ Ethics can play a part in each of these decisions.²⁶⁸

One of the keys to successful water policy is changing how we value water. Value cannot be limited to economics; it must be expanded to include both the importance of the environment and its life-giving capabilities.²⁶⁹ Existing cultural and religious ethics toward water should become more central in decision-making.²⁷⁰ Although many ethical constructs vary over different cultures, water has the advantage of being important in social mores and relations around the world.²⁷¹ This recognition can be leveraged and utilized by decision-makers in developing water policy.

In many ways, water conflicts can be viewed as the harbinger of countless future threats to the human health and the environment caused by globalization. It can equally be seen as an opportunity to change the way states govern by placing more value on people and community sustainability rather than short-term gains, which have been primarily economically focused. Some governments are already moving in this direction.²⁷² Their experiences as well as those of the United Nations, nonprofits, and other communities serve as real examples of what can be accomplished.

The presence of domestic and international policies that recognize or protect a person's right to water is the first step toward realizing a universal water ethic. Included in this understanding is the indivisible relationship between the destiny of humankind and the ecologic systems on which survival is premised. Once this is fully appreciated, it will have an increasing impact on decision-making. Societies

266. Every day up to 34,000 people die from water-related diseases. HASSAN, *supra* note 30, at 9.

267. *Id.* at 7-8.

268. "At the end of the day, the issues are essentially ethical ones – how people care for their fellow human beings." HASSAN, *supra* note 30, at 10 (quoting Elisabeth Dowdeswell, the executive director of the Nairobi-based UNEP). Frederico Mayor stated that crisis of water resources is not inevitable if, among other things, a new priority is given to a water ethic. *Id.*

269. See discussion *supra* Parts III A-C. HASSAN, *supra* note 30, at 50 ("The common good of humanity is bound up with the well-being of our planet.").

270. See discussion *supra* Part II B.

271. See discussion *supra* Part II B.

272. See discussion *supra* Part IV A.

must move away from focusing who has the right to water and move toward discussing usage in light of resource protection. In the end, it will be to humanity's benefit to keep the waters flowing.