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## South Africa's Water and Dam Safety Legislation: A Commentary and Analysis on the Impact of the World Commission on Dams' Report, Dams and Development

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**SOUTH AFRICA'S WATER AND DAM SAFETY  
LEGISLATION: A COMMENTARY AND  
ANALYSIS ON THE IMPACT OF THE WORLD  
COMMISSION ON DAMS' REPORT, *DAMS  
AND DEVELOPMENT***

PROFESSOR ROBYN STEIN\*

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The report [of the World Commission on Dams] paves the way for a new approach, one that builds on looking at all energy development options, one that recognizes peoples' rights from the outset; that more truthfully assesses all risks . . . [T]he Report of the Commission forms a landmark in the history of the development operations of dams . . .<sup>1</sup>

Our work is now over . . . yours has begun.<sup>2</sup>

## INTRODUCTION

On November 16, 2000, in London, the final report of the World Commission on Dams ("WCD"), *Dams and Development: a New Framework for Decision-Making*, was released ("the Report").<sup>3</sup> The Report culminates work that began in May 1998, sponsored by the World Bank and the World Conservation Union ("IUCN"), under the Chairpersonship of Professor Kadar Asmal, who was then South Africa's Minister of Water Affairs and Forestry. The Report is described as "a milestone in the evolution of dams as a development option."<sup>4</sup> Furthermore, supporting organizations find "in many cases, the economic benefits of dams are much oversold, and the environmental and social costs are much underestimated."<sup>5</sup>

The Report emphasizes that the dams debate is a debate about the

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1. Maritta Koch-Weser, Director General of IUCN – The World Conservation Union, Speech in London at the Official Launch of the Final Report of the Commission (Nov. 16, 2000), at [http://www.dams.org/events/launch\\_iucn.htm](http://www.dams.org/events/launch_iucn.htm).

2. Press Release, World Commission on Dams, A Milestone in the History of Dams and Development (Oct. 6, 2000) (quoting comment by Kader Asmal, Chairperson for the World Commission on Dams, at the release of the Commission's final report entitled, *Dams and Development: A New Framework for Decision-Making*) at <http://www.dams.org/press/default.php?article=341>.

3. WORLD COMMISSION ON DAMS, DAMS AND DEVELOPMENT: A NEW FRAMEWORK FOR DECISION-MAKING (Earthscan 2000) [hereinafter WCD REPORT].

4. Kader Asmal, *Beyond the Commission – An Agenda for Change, in Dams and Development: a New Framework for Decision-Making*, in WCD REPORT, *supra* note 4, at 320.

5. Response to the WCD Report from the Coalition of Conservation Groups, USA, to the Next President of the United States and New Congress (Nov. 20, 2000), at [http://www.dams.org/report/reaction\\_uscoalition.htm](http://www.dams.org/report/reaction_uscoalition.htm).

very meaning, purpose, and pathways for achieving development. It affirms that dams are only a means to an end and the "end" that any project achieves must be the sustainable improvement of human welfare (i.e. significant advance of human development on the basis that it is equitable and sustainable).<sup>6</sup> The Report concludes that the debate around dams challenges views of how societies develop and manage water resources in the broader context of development choices.<sup>7</sup> Former South African President Nelson Mandela made reference to the importance of the dams and development debate when he stated, "political freedom is still not enough if you lack clean water. Freedom alone is not enough without light to read at night."<sup>8</sup> Through its global review of the performance of dams, the WCD presented an integrated assessment of when, how, and why dams succeed or fail in meeting development objectives. This provided the rationale for a fundamental shift in options assessment and in the planning and project cycles for water and energy resources development.<sup>9</sup>

The Commission's framework for decision-making was based on five core values: (1) equity; (2) sustainability; (3) efficiency; (4) participatory decision-making; and (5) accountability.<sup>10</sup> It proposes a rights-and-risks approach as a practical and principle basis for identifying all legitimate stakeholders in negotiating development choices and agreements.<sup>11</sup> These core values are aligned with the

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6. See *Commissioner's Forward*, in WCD REPORT, *supra* note 3, at vii-x (expounding on the general underpinnings of the Commission's work and the broader context, that of sustainable development as an ongoing and comprehensive process, in which to view a capital infrastructure developmental project).

7. See *id.* (discussing the conflict between economic development and conservation of resources).

8. Former President Nelson Mandela, Address at the Launch of the Final Report of the World Commission on Dams (Nov. 16, 2000), at [http://www.dams.org/events/launch\\_mandela.htm](http://www.dams.org/events/launch_mandela.htm).

9. See *Executive Summary*, in WCD REPORT, *supra* note 3, at xxxiii (stating that the appropriate development response is chosen from a range of possible options, and the options assessment process continues through all stages of planning, project development, and operations).

10. See *id.* (noting that the Commission inserted and advanced the core values throughout the process of constructing the report).

11. See *id.* (proposing a rights-risk approach as a pre-condition for effective

international framework of norms articulated in the United Nations Declaration of Human Rights, cited by the WCD as a powerful framework of internationally accepted standards.<sup>12</sup> These five values run throughout the entire Report, and are the focus of this paper's commentary on its impact on South Africa's water and more specifically, dam legislation. This paper analyzes the alignment of the South African national government's public trusteeship role in relation to dam building, decision-making, and management activities with the five core values of decision-making referred to in the Report.

## I. THE NATIONAL WATER ACT: A RIGHTS-AND-RISK BASED APPROACH

The WCD final report recommends fundamental changes in the way decisions are made, stating that “[r]econciling competing needs and entitlements is the single most important factor in understanding the conflicts associated with development projects and programs – particularly large-scale interventions such as dams.”<sup>13</sup> The Commission proposes an approach based on “recognition of right” and “assessment of rights” (particularly rights at risk) be developed as a tool for guiding future planning and decision-making.<sup>14</sup> The Report states that, “clarifying the rights context for a proposed project is an essential step in identifying those legitimate claims and entitlements that may be affected by the project or its alternatives.”<sup>15</sup> A rights-and-risk based approach provides a more effective framework for integrating the economic, social, and environmental dimensions for options assessment and planning and project cycles.<sup>16</sup>

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identification of legitimate shareholder groups that are entitled to formal notes in the consultative process).

12. *See id.* (describing the alignment of this international framework of norms from the United Nations Declaration of Human Rights as cited by the WCD).

13. *See id.* (quoting the recommendations of the WCD Report).

14. *See id.* at xxxii (stating that the rights-risk approach in the planning and project cycles offers a means to apply core values to decision-making about water and energy resource management).

15. *See Executive Summary, in WCD REPORT, supra* note 3, at xxxiii.

16. *See id.* at xxxiii-iv (stating that this approach can lay a basis for greatly

On February 9, 1998, South Africa's then Minister of Water Affairs and Forestry, Professor Kader Asmal MP, expressed his exhilaration and pride at being able to share with millions of South Africans the National Water Act 36 of 1998 ("the National Water Act"), "a transformative, constructive, forward-looking piece of legislation."<sup>17</sup> The National Water Act repeals and replaces a multitude of water laws inherited by South Africa's new democracy from its apartheid past.<sup>18</sup> Under the apartheid regime, access to and distribution of water use rights were determined on a racially discriminatory basis.<sup>19</sup> This is mainly because the distribution of water use rights was linked to land.<sup>20</sup> Oppressive programs of land dispossession may characterize both the colonial and apartheid eras. Those programs gained momentum at the turn of the century when the government introduced legislation aimed to prevent 85% of South Africans, in particular, black South Africans, from acquiring, holding, or disposing of immovable property.<sup>21</sup> Moreover, distribution of water historically took no account of the basic needs of the nation's people as a whole.<sup>22</sup> The development needs of South African society also demanded that the management of the nation's scarce water resources be re-examined while taking cognizance of social, economic, and environmental factors.<sup>23</sup>

The Constitution of the Republic of South Africa's Act 108 of

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improved and significantly more legitimate decision-making, which is more likely to resolve the complex issues surrounding water, dams, and development).

17. Kader Asmal MP, Minister of Water Affairs and Forestry, Opening Remarks at the Presentation of the National Water Bill to the South African Parliamentary Portfolio Committee for Agriculture, Water Affairs, and Forestry (Feb. 9, 1998).

18. See Robyn Stein, *South Africa's New Democratic Water Legislation: National Government's Role as Public Trustee in Dam Building and Management Activities*, 18 J. ENERGY NAT. RESOURCES & ENVTL. L. 285 (2000).

19. See *id.*

20. See *id.*

21. See, e.g., Native Land Act 27 (1913) (S. Afr.) (legislating the "further provision as to the purchase and leasing of land by Natives and other Persons in the several parts of the Union and for other purposes in connection with the ownership and occupation of Land by Natives and other Persons").

22. See Stein, *supra* note 18.

23. See *id.* at 285-286.

1996 Bill of Rights (the “Constitution”), establishes the Executive and Legislature’s mandate and obligation to improve the quality of life of millions of impoverished South Africans, an imperative fundamental to the water reform process.<sup>24</sup> Early recognition of this imperative can be traced back to the Fundamental Principles and Objectives for a New Water Law for South Africa, developed through consultation, which constituted the framework for the development of a new national water policy for South Africa.<sup>25</sup> Principle 1 provides that:

The water law shall be subject to and consistent with the Constitution in all matters including the determination of the public interest and the rights and obligations of all parties, public and private, with regards to water. While taking cognizance of existing uses the water law will actively promote the values enshrined in the Bill of Rights.<sup>26</sup>

The founding provisions of the Constitution are reflected in the fundamental principles of the National Water Act.<sup>27</sup> The Preamble to the Act states water is a natural resource that belongs to all the nation’s people and “the discriminatory laws and practices of the past have prevented their equal access to water and the use of water resources.”<sup>28</sup>

Section 2 of the Act outlines its core values and purposes. These include: (a) meeting the basic human needs of present and future generations, (b) promoting equitable access to water; redressing the results of past racial and gender discrimination; (c) promoting efficient, sustainable and beneficial use of water in the public interest; (d) facilitating social and economic development; (e) providing for growing demands for water use; (f) protecting aquatic

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24. S. AFR. CONST. ch. 2, (Bill of Rts.), §§ 7-39 *reprinted in* CONSTITUTIONS OF THE COUNTRIES OF THE WORLD (Gisbert H. Flanz, ed., Oceana Pub. 1996).

25. *See generally* PROF. KADER ASMAL, MP, DEPARTMENT OF WATER AFFAIRS AND FORESTRY, FUNDAMENTAL PRINCIPLES AND OBJECTIVES FOR A NEW WATER LAW IN SOUTH AFRICA (1997) [hereinafter A NEW WATER LAW], *available at* <http://www-dwaf.pwv.gov.za/documents/>.

26. *Id.*

27. *See* Stein, *supra* note 18, at 287.

28. National Water Act 36 of 1998, pmb. (S. Afr.), *available at* <http://www-dwaf.pwv.gov.za/Documents/>.

and associated ecosystems and their biological diversity; (g) reducing and preventing pollution and degradation of water resources; and (h) promoting dam safety.<sup>29</sup> These core values comprise a golden thread that runs throughout the Act and must be fulfilled in the administration of every aspect of the Act.<sup>30</sup> They constitute a set of obligations (i.e. accountability) necessary to achieve this purpose, to establish suitable institutions, and to ensure they have appropriate community, racial, and gender representation (i.e. participatory decision-making). These obligations must be met by the national government in the exercise of its powers, functions, and duties as public trustee of the nation's water resources.<sup>31</sup>

The National Water Act recognizes the five core values proposed in the Report. It promotes a rights-and-risk based approach and accordingly reconciles competing needs and entitlements to water.<sup>32</sup> Furthermore, the Report recognizes that the assessment of risk adds an important dimension to understanding how, and to what extent, a project may impact people's rights. In this regard, the National Water Act prescribes new measures for managing dams.

Chapter 12 of the National Water Act deals with the safety of dams.<sup>33</sup> This Chapter contains measures aimed at improving the safety of new and existing dams with safety risks so as to reduce the potential for harm to the public, as well as damage to property, or to resource quality.<sup>34</sup> Section 118 of the National Water Act empowers

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29. *See id.* § 2 (iterating a number of the factors taken into account to ensure the proper management and conservation of the nation's water resources found in the purpose of the act).

30. *See Stein, supra* note 18, at 287.

31. *See National Water Act* 36 of 1998, §§ 2-3 (stating that the management of the nation's water resources places the national government in the role of trustee ensuring a nondiscriminatory entitlement to water access).

32. *See generally id.*, §§ 1-5 (enumerating similar principles found in WCD Report and stating that these principles recognize competing interests). Such needs and interests included: basic human needs, protection of water resources, necessity to share resources with other countries, importance of promoting social and economic development through the use of water, and need to establish suitable institutions to achieve the purpose of the Act. *Id.*

33. *See id.* §§ 117-23.

34. *See National Water Act* 36 of 1998, §§ 117-23 (S. Afr.) (delineating those



the Minister to declare a category of dams that pose a safety risk by placing a notice in the Government Gazette. Furthermore, the Minister is entitled to notify the owner of a dam of potential safety risks of that dam.<sup>35</sup> Once done, the Minister may direct the owner of such a dam to, at the owner's cost and within a specified time period, compile a report by an approved professional regarding the safety of that dam. Otherwise, the Minister may direct the owner to undertake, at the owner's cost, and within the period specified by the Minister, any specific repairs or alterations to the dam that are necessary to protect the public, property, or the resource quality from a risk of failure of the dam.<sup>36</sup> If the owner of the dam fails to comply with the directive within the period specified, the Minister may undertake the repairs or alterations and recover the costs from the owner.<sup>37</sup>

Section 118 of the National Water Act obliges the Minister, before issuing a directive, to be satisfied that the repairs or alterations directed are "necessary, adequate, effective, and appropriate to reduce the risk to an acceptable level" and furthermore, to "consider the impact for public safety, property, the resource quality and socio-economic aspects if the dam fails."<sup>38</sup> In satisfying herself or himself, the Minister must also give effect to his or her obligations as the delegated public trustee of the nation's water resources and, in addition, the fundamental principles and objectives of the National Water Act.<sup>39</sup>

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measures available to the minister for dealing with dams that pose a safety risk). In addition, Chapter 12 provides the legislative authority to improve dam safety of both existing dams and those in the planning and construction phase. *Id.*

35. *See* Stein, *supra* note 18, at 293.

36. *See id.*

37. *See id.*

38. *See* National Water Act 36 of 1998, § 118.

39. *See* Stein, *supra* note 18, at 293.

## II. EQUITY CONSIDERATIONS: FROM A PRIVATE TO A PUBLIC SYSTEM OF WATER USE ALLOCATIONS

Closely connected to the rights-and-risks based concept are the principle of "equity" and the promotion of equitable access to water. The National Water Act constitutes a radical transformation of water resource management in South Africa. It affects a legislative shift from a private rights system of water allocation to a public rights system. It ensures that water is treated in an integrated fashion and that, wherever it occurs in the water cycle, it is a resource common to all.<sup>40</sup>

By contrast, the apartheid era's 1956 Water Act made a distinction between "public water"<sup>41</sup> and "private water."<sup>42</sup> Each category was governed by a specific set of rules, which disregarded the unified nature of the hydrological cycle.<sup>43</sup> These distinctions are dispensed with in the National Water Act. Instead, the National Water Act treats all water use uniformly, containing a comprehensive definition of the term "water use."<sup>44</sup> The National Water Act, unlike its predecessor, does not prioritize irrigation above all other water uses.

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40. See National Water Act 36 of 1998, at Pmb. (recognizing that water resources belong to all people); see also A NEW WATER LAW, *supra* note 21 (reciting principle one, which states that all water, wherever it occurs in the water cycle, is a resource common to all).

41. Water Act 54 of 1956, § 1 (S. Afr.) (defining private water as "all water which rises or falls naturally on any land or naturally drains or is lead onto one or more pieces of land which are the subject of separate original grants, but is not capable of common use for irrigation purposes").

42. *Id.* (defining "public water" as "any water flowing or found in or derived from the bed of a public stream, whether visible or not").

43. See *Update on Water Law - Comments on Fourth Draft of Water Bill*, SASAQ NEWSLETTER (SASAQ, S. Afr.) (1997) (submitting suggestions about structure, protection and use in drafting of water bill to Judge Antonie Gildenhuys, Chairman of the Drafting Teams), available at <http://www.cwr.ac.za/sasaqs/nl/1997/waterlaw.htm>.

44. See National Water Act 36 of 1998, § 21 (S. Afr.) (defining water use as including but not limited to the taking of water from a natural resource, storing, diverting the flow, reducing stream flow, discharging waste through pipes, canals, or other conduits, and using the water for recreation).

The Act does not limit water use to abstraction, but regulates an unlimited array of activities in relation to water use such as the storing (or empowerment of water) and the alteration of the bed, banks, course, or characteristics of a water course.<sup>45</sup> The National Water Act abolishes riparianism,<sup>46</sup> a doctrine developed in South African common law largely as a result of the influence of the English Law and provided for in the 1956 Water Act.

The National Water Act characterizes water use rights as public in nature. The legal basis for this characterization is found in the Roman and Roman-Dutch Law where free-flowing water was classified as *res comunis omnium*—property that is common to all and is not capable of private ownership. Public use rights to water, as Joseph L. Sax stated, “have no greater protection against state regulation than any other property rights.” They are in no sense “super-property.”<sup>47</sup> South Africa’s Constitution acknowledges the national government’s right to regulate the use of property and all of its incidents. This right of regulation is sometimes referred to as a “deprivation” or a “police power.”<sup>48</sup> Characterizing water use rights as public in nature, to be held in trust by the national government as the custodian of the nation’s water resources, enables regulation of the allocation to achieve the objectives of equity, environmental sustainability, and efficiency (core values of the National Water Act and the WCD Report). Such regulation is commensurate with the powers, functions, and duties of the public trustee of the nation’s water resources as determined by Section 3 of the National Water Act, and dealt with below.

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45. *See id.* (iterating the section of the Act that specifically defines “water use” for the purposes of the legislation).

46. Every riparian land owner, i.e. a person owning land through which a water course flowed, was granted the right to use the normal flow of that water course for his/her primary needs (including agricultural and other uses).

47. Joseph L. Sax, *The Constitution, Property Rights and the Future of Water Law*, 61 U. COLO. L. REV. 257, 260 (1990) (discussing constitutional situation of water rights and claiming that water rights have less protection than other property rights).

48. *See* S. AFR. CONST. ch. IV., § 25 (allowing for expropriation of property for public purpose or interest, but however, forbidding arbitrary deprivation of property), available at <http://www.polity.org.za/govdocs/constitution/saconst.html>.

### III. EFFICIENCY: THE DEVELOPMENT OF THE SOUTH AFRICAN PUBLIC TRUST DOCTRINE

The South African doctrine of public trust, as legislated under the National Water Act, constitutes a revival of certain Roman, Roman-Dutch, indigenous, and customary law principles, many of which were lost as a result of statutory intervention by the apartheid regime. The public trust is also an internationally accepted concept<sup>49</sup> and was developed during the course of the water law reform process. In the context of South Africa's Constitution, the reform process culminated in the establishment of the doctrine of public trust itself and the new water legislation. During the process of developing new water policy and legislation, the public trust doctrine, as applied in the United States was carefully considered. Basic tenets of the United States' public trust doctrine were borrowed to formulate a jurisprudential basis for South Africa's new water law. For example, the observation that the public trust doctrine presents an "integrated system of preserving the continuing sovereign power of the state to protect public trust uses, a power which precludes anyone from acquiring a vested right to harm the public trust, and imposes a continuing duty on the state to take such uses into account in allocating water resources,"<sup>50</sup> was considered to be appropriate to the formulation of a legislative framework, which would give effect to the constitutional obligation placed on the national government.

The South African public trust doctrine has a dual purpose, which is clearly described in Principle 13 of the Fundamental Principles and Objectives for a New Water Law for South Africa.<sup>51</sup>

As custodian of the nations' water resources, the National Government

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49. See White Paper on a National Water Policy for South Africa (1997) [hereinafter White Paper], available at <http://www-dwaf.pwv.gov.za/documents/>.

50. *Nat'l Audobon Soc'y v. Super. Ct. of Alpine County*, 658 P.2d 709, 732 (Cal. 1983) (finding that public trust doctrine and California water rights system was part of integrated water law system), reprinted in Joseph L. Sax, et al., LEGAL CONTROL OF WATER RESOURCES, CASES AND MATERIAL 467 (West 2d ed. 1986).

51. See White Paper, *supra* note 49.

shall ensure that the development, apportionment, management and use of those resources is carried out using the criteria of public interest, sustainability, equity and efficiency of use in a manner which reflects its public trust obligations and the value of water to society while ensuring that basic domestic needs, the requirements of the environment and international obligations are met.<sup>52</sup>

Hence, the public trust doctrine, encapsulated in the National Water Act, serves a primary purpose of addressing the government's "responsibility for and authority over nations' water resources and their use."<sup>53</sup> The Act is ultimately responsible to ensure that water is protected, used, developed, conserved, managed, and controlled in a sustainable and equitable manner, for the benefit of all persons, and in accordance with its constitutional mandate. Executive responsibility is delegated to the Minister, who must ensure that water is allocated equitably and used beneficially in the public interest, while promoting environmental values. In order to guide the implementation of measures designed to fulfill the public trust function, a national water resource strategy, which provides the framework for the protection, use, development, conservation, management, and control of water in the country as a whole must be established.<sup>54</sup>

#### IV. PARTICIPATORY DECISION-MAKING

The South African public trust doctrine also seeks to give effect to the development of participatory democracy in the country.<sup>55</sup> Public comment and public consultation provisions are found throughout

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52. See A NEW WATER LAW, *supra* note 25.

53. See Pmb. of National Water Act 36 of 1998 (S. Afr.); see also Antjie Krog, *White Paper on a National Policy for South Africa* 14, Dep't of Water Aff. and Forestry (Apr. 1997), available at <http://www-dwaf.pwv.gov.za/documents/> (proposing that national government act as a public trust and serve as custodian of water resources).

54. See generally National Water Act 36 of 1998, ch. 4, §§ 21-22 (S. Afr.) (defining storage of water as water use and license requirements for permissible water uses).

55. See Stein, *supra* note 18, at 291.

the National Water Act.<sup>56</sup> For example, in establishing a national water resource strategy, the Minister must call for comments from the public and is obliged, in accordance with the principles of natural and administrative justice, to take those comments into account in the process of decision-making.<sup>57</sup> By way of further example, license applications for water storage by dam impoundment are also subject to public consultation at the discretion of responsible licensing authorities, whose discretion must be exercised in a reasonable manner.<sup>58</sup> The principle of participatory decision-making entrenched in the National Water Act parallels the WCD Report, which recognizes that in the past, many groups did not have an opportunity to participate in decisions that imply major risks for their lives and livelihoods.<sup>59</sup> In the past, these groups were denied a stake in the development decision-making process commensurate with their exposure to the risk.

## V. SUSTAINABILITY—THE CONCEPT OF THE RESERVE: PROTECTING AND RESPECTING ENVIRONMENTAL RIGHTS AND RESPECTING INTERNATIONAL OBLIGATIONS

The [Commission's] report comes at a time when rivers, lakes and wetlands are in peril. Currently 30% of fresh water fish and over 800 other fresh water species are on the brink of extinction. Millions of people are losing their homes, land and livelihoods through natural disasters, floods and droughts, or in connection with the construction of new dams.<sup>60</sup>

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56. *See id.*

57. *See id.*

58. *See id.*

59. *See* WCD REPORT, *supra* note 3, at 97-98 (noting that the construction of dams may be seen in the context of providing social, environmental, and economic "gains or losses" to disparate social groups both in the present and future).

60. Press Release, IUCN-The World Conservation Union, News Release of the World Commission on Dams' Final Report, (Nov. 16, 2000), *available at* [http://www.iucn.org/info\\_and\\_news/press/damsreport.html](http://www.iucn.org/info_and_news/press/damsreport.html) (declaring that the World Commission on Dams' Final Report as a landmark in the development and operation of dams).

This is particularly so in South Africa, where water is a scarce and precious resource. In many regions of the country, the natural supply is outweighed by the demand for this essential resource. This is due to South Africa's water deficit and bouts of arid to semi-arid climatic conditions. The varying nature of rainfall patterns and groundwater recharge rates render any reliance on the renewability of water as a resource of cold comfort.

The National Water Act introduces the innovative concept of "the Reserve."<sup>61</sup> The Reserve is that amount and quality of water required to: (a) satisfy basic human needs for all people who are, or may be supplied from a relevant water resource; and (b) protect aquatic ecosystems in order to ensure ecologically sustainable water development and use.<sup>62</sup> In other words, it is an unallocated quantity of water not subject to competition with other water demands.<sup>63</sup> A certain minimum amount of water is required in South Africa's rivers to ensure that the ecological integrity of those river systems is protected.<sup>64</sup> The Reserve is designed to give effect to the constitutional imperatives of a right of access to sufficient water for basic human needs, as well as the right to have the environment protected through legislative and other measures that secure ecologically sustainable development and the promotion of justifiable social and economic development.<sup>65</sup>

In contrast with the pre-existing water law regime, the National Water Act recognizes issues previously considered matters of domestic, sovereign concern have considerable international implications.<sup>66</sup> The Reserve is a domestic legislative step to give effect to South Africa's international obligations for the protection and preservation of the ecosystems of international watercourses and

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61. National Water Act 36 of 1998, § 1 (S. Afr.).

62. *See id.* (summarizing the definition of reserve in the National Water Act).

63. *See Stein, supra* note 18, at 294.

64. *See id.*

65. *See generally* National Water Act 36 of 1998 (laying out how the reserve is determined and given effect to).

66. *See* PHILLIPE SANDS, PRINCIPLES OF INTERNATIONAL LAW, VOLUME 1: FRAMEWORKS, STANDARDS AND IMPLEMENTATION 9 (Manchester University Press 1994).

for the sustainable development and equitable utilization of those watercourses.<sup>67</sup> Among the factors that must be given effect and taken into consideration in all aspects of decision-making under the National Water Act, is the recognition of the country's international obligations.<sup>68</sup> In the regional context, South Africa signed and ratified the Protocol on Shared Water Course Systems in the Southern African Development Community ("SADC").<sup>69</sup> South Africa shares many river systems with its neighboring states; these are either contiguous rivers or transboundary rivers.<sup>70</sup> For example, the Orange River arises in Lesotho, runs through South Africa and is a contiguous river boundary between South Africa and Namibia.<sup>71</sup> The Limpopo River is a contiguous boundary river between South Africa and Botswana and becomes a transboundary river when it flows into Mozambique.<sup>72</sup> Decisions to locate dams on either contiguous or transboundary rivers now require that downstream impacts are effectively considered, and, in accordance with the consensus-seeking principles of the Protocol, that appropriate consultation with neighboring states takes place.<sup>73</sup>

## VI. ACCOUNTABILITY

In the context of decision-making, permitting the storage of water by way of dam impoundments or reservoirs, the public trust doctrine, as established under the Act, obliges repositories of decision-making power to take into account and give effect to the fundamental principles and objectives of the National Water Act.<sup>74</sup> Underpinning

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67. See Stein, *supra* note 28, at 294.

68. See National Water Act 36 of 1998, §§ 2(i), 102-08 (S. Afr.) (representing the basic tenets of international water management put forth within the Act).

69. See Stein, *supra* note 18, at 294.

70. See *id.*

71. See *id.*

72. See *id.*

73. See *id.*

74. See National Water Act 36 of 1998, § 3, ch. 1 (setting forth public trusteeship's responsibilities regarding public access to information).



this obligation is the principle of democratic accountability.<sup>75</sup> The principle of democratic accountability requires the national government to ensure all its functionaries, including catchment management agencies (which will manage water resources at a localized level), act in a fashion consistent with the Constitution, as well as the core values and principles of the Act.<sup>76</sup> In this way, the National Water Act (read together with the White Paper on a National Water Policy for South Africa, and the Constitution) will determine the backdrop against which decisions to engineer the country's water resources, by dam building, will be taken in the future.<sup>77</sup> In accordance with the principles of natural administrative justice, failure to fulfill the South African public trust obligations makes any resultant decision subject to administrative review by either the Water Tribunal (established under Chapter 15 of the Act) or the courts.<sup>78</sup>

In specifying the criteria which must be taken into account when making decisions or determining strategies (i.e. action plans), the National Water Act does not restrict or limit the ambit of issues that must be considered by responsible authorities and those for which the public trustee is ultimately accountable.<sup>79</sup> Having regard to the nation's history, the list of factors, which must form the basis of informed decision-making, is designed to ensure that certain fundamental aspects of water resource management in the new democracy cannot be ignored.<sup>80</sup> For example, in carrying out its mandate to ensure a sustainable supply of water for equitable social and economic development, the Act will not entertain supply-side management principles (which traditionally are used to advocate large dam building projects).<sup>81</sup> The public trust doctrine, as captured in the National Water Act, obliges that alternative conservation

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75. See Stein, *supra* note 18, at 290.

76. See *id.*

77. See *id.*

78. See *id.*

79. See *id.* at 291.

80. See *id.*

81. See Stein, *supra* note 18, at 291.

options, including the principles of demand-side management, are considered.<sup>82</sup>

Openness and transparency in governance are also essential features of the South African public trust doctrine.<sup>83</sup> Such openness and transparency require that information is accessible to the public.<sup>84</sup> Access to water resource information is guaranteed in the National Water Act through the establishment of a national monitoring network and national information systems.<sup>85</sup> The National Water Act recognizes that monitoring, recording, assessing and disseminating information on water resources is critical to the achievement of the objects of the Act and to its core provisions.<sup>86</sup> Information contained in any national information system, established under Chapter 14 of the National Water Act, must be made available to the public by the Minister and subject to any limitations imposed by law and the payment of reasonable charges.<sup>87</sup> Water management institutions (which include catchment management agencies) are also obliged to make information at their disposal available to the public in respect of, among other things, flood warnings, drought warnings, any risks imposed by the quality of water to life, health, or property, and any other matter that may be necessary to achieve the objects of the National Water Act.<sup>88</sup>

## CONCLUSION

Although water storage (by way of dam impoundment) was recognized in the past as being necessary in certain water scarce regions of South Africa, future decisions to proceed with these

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82. *See id.*

83. *See id.*

84. *See id.*

85. *See id.*

86. *See id.*

87. *See* National Water Act 36 of 1998, § 142, ch. 14 (setting forth rule regarding public access to information).

88. *See id.* § 145(1)(a)-(g), ch. 14 (listing information that water management institutions must release to the public).

capital intensive projects now requires policy and legislative guidance. This, in keeping with the imperatives of constitutional democracy, ensures that any decision to permit dam construction is informed by appropriate studies of the human and environmental impacts of such activities. These decisions would take into account the five core values: (1) equity; (2) sustainability; (3) efficiency; (4) participatory decision-making; and (5) accountability, which form the basis of the WCD's framework for decision-making. It is therefore, my submission that the Report will have little impact on this already progressive and transformative piece of legislation.

Prior to the new millennium and during the second term of South Africa's developing participatory democracy, the country entered a new era of water resource management—an era where policy is developed through public participation and translated into constitutionally-driven law. That law established a public trust doctrine for South Africa and requires that the principles of equity and sustainability comprise the basis upon which all decisions to permit dam construction and to regulate dam management must be taken.

In a keynote address at the South African Hearings for Large Dams, delegated public trustee, the Minister of Water Affairs and Forestry Mr. Ronnie Kasrils MP, recently stated:

You need to remember that there are never easy answers to the questions posed, but with proposals for large dams, there can only ever be tradeoffs with both positive and negative consequences. This is why the broadest possible participation is essential when engaging in the decision-making process. The supply and use of water must be based on the principles of equity, efficiency and sustainability. This is the bottom line, the foundation on which all our decisions must be based.<sup>89</sup>

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89. Stein, *supra* note 18, at 295.