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The right to water as a human right or a bird’s right?
Does co-operative governance offer a way out of a conflict of interests and legal complexity?

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Abstract (max. 250 words)

The right to water has been recognized as a human right under various international human rights instruments. These legal instruments primarily focus on access to safe drinking-water, disregarding the need to wetlands designated under the Ramsar Convention. In theory, the principle of reasonable and equitable use and the concept of common river basin management, as laid down in the Convention on the Law of the Non-navigational Uses of International Watercourses, offer a way out of this potential conflict. However, these theoretical concepts are not easy to implement in practice. A vast amount of legal rules applies to any given area: international law, regional law (EU, SADC), national law and local or provincial law in all countries involved, not only on water, but also on other issues such as environmental protection. National legislation should regulate the balancing of the various interests involved, especially the right to water and the duty to protect aquatic ecosystems.

A co-operative governance approach, where all relevant stakeholders together try to figure out how the available water is to be reasonably and equitably shared, is an important mechanism to achieve an outcome that is acceptable for all. To achieve such an outcome, the stakeholders temporarily withdraw from the legal specifics and focus on the main principles of the relevant international law. Although often successful at first, the process may run into legal complexity once the carefully reached agreements are to be consolidated into legal decision-making at all levels of government, in all countries involved.

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The right to water as a human right or a bird’s right? Does co-operative governance offer a way out of a conflict of interests and legal complexity?

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TABLE OF CONTENT

1. Introduction
2. The right to water versus the obligation to protect wetlands
   2.1 The right to water in international and national legal instruments
   2.2 The obligation to protect wetlands in international legal instruments
   2.3 The principle of reasonable and equitable use and the concept of common river basin management
   2.4 Conclusion
3. Case study: Orange River and Orange River Mouth Wetland
   3.1 Approach
   3.2 Introduction into the case
   3.3 Findings
4. Conclusion

1. INTRODUCTION

The right to water has been recognized as a human right under various international human rights instruments. On the other hand, various international legal instruments to protect nature force government institutions to reserve enough water for protected areas, for instance wetlands designated under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention). These international legal obligations may conflict, giving rise to legal problems within one country, but also between countries. The latter is the case when two or more countries use the same river as a source of drinking water and for ecological purposes (i.e., the protection of a wetland). In theory, the principle of reasonable and equitable use and the concept of common river basin management, as laid down in the Convention on the Law of the Non-navigational Uses of International Watercourses, are considered to offer a way out of this potential conflict. However, the question is whether in practice these principles really are the solution to the conflict between the right to water and the duty to protect wetlands of international importance, and if so, under which conditions they function adequately.

This paper consists of a theoretical and an empirical part. The theoretical part (section 2) will start with an analysis of the international legal instruments on the right to water and the obligation to protect wetlands. Then, I will turn to the principle of reasonable and equitable use and the concept of common river basin management. How have these concepts been regulated, what is their purpose, and do they (in theory) offer a way out of the conflict between the right to water and the obligation to protect wetlands, especially in multilateral situations? All of these questions will be answered on the basis of a desk study into relevant legal texts and literature, thus concluding the theoretical part.

In the empirical part of the paper (section 3), a case study will be presented. This case study, into the Orange River, which runs through four countries in southern Africa, and into a protected Ramsar wetland on that river’s estuary located on the border between Namibia and South Africa, will show whether the principle of reasonable and equitable use and the concept of common river basin management actually solve the conflict between man and nature in a transboundary context. The case will be studied within the theoretical framework of co-operative governance. The second part of the paper thus is
structured as follows: first the case will be laid out, then the findings will be presented.¹ Final conclusions are drawn in section 4.

2. THE RIGHT TO WATER VERSUS THE OBLIGATION TO PROTECT WETLANDS

2.1 The right to water in international and national legal instruments

Although the Ministerial Declaration adopted at the 4th World Water Forum in Mexico in 2006 does not mention the right to water, the issue whether such a right exists in international law was heavily debated during the conference.² The fact that, despite these debates, there is no mention at all of the right to water in the declaration shows that the right is disputed. States sometimes fear that the rights-based approach not only forces them to change their national legislation, but also that such an approach conflicts with the current trend of privatisation and with the increasing role of the market mechanism, reducing government intervention.

Still, the right to water has already been acknowledged as a human right under various international human rights documents, first and foremost the International Convention on Economic, Social and Cultural Rights (ICESCR). Article 12(1) encompasses the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. To achieve the benefits of this right, states should improve all aspects of environmental and industrial hygiene, and provide for the healthy development of children (Article 12(2) under a and b). In 2000, the Committee on Economic, Social and Cultural Rights adopted a General Comment on this human right, stating that Article 12 not only deals with health care, but also with all other factors that determine the enjoyment of a good health, such as access to safe drinking water, personal hygiene, sufficient safe food, and shelter.³ Before that, the availability of water had been acknowledged as being part of the human right to an adequate standard of living (Article 11).⁴

In 2002, the Committee adopted General Comment No. 15 that entirely deals with the right to water, and that is considered to be the most influential document on this right.⁵ In this document, the right to water has been defined as follows:⁶

The right to drinking water entitles everyone to safe, sufficient, affordable and accessible drinking water that is adequate for daily individual requirements (drinking, household sanitation, food preparation and hygiene).

The right to water has been specifically mentioned in several other binding human rights documents as well, such as the Convention on the Rights of the Child (CRC), and the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).⁷ Article 24 CRC has a formulation that is comparable with that of Article 12 ICESCR, although it adds in section 2 that measures are to be taken to combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the

¹ The findings of the case study are only briefly presented here. A much more detailed report of this and another case study will be published in 19 Col. J. on Envtl. L. & Pol. (2007) as part of a bigger article on the Ramsar Convention.
⁴ General Comment Nos. 4 and 6.
⁶ The various elements of this definition have been further worked out in General Comment No. 15.
⁷ For an overview of all texts that implicitly and explicitly refer to the right of water in human rights conventions, see the Water Aid & Rights and Humanity website at http://www.righttowater.org.uk. For even more texts that refer to the right to water, for instance those of the International Labour Organisation (ILO), see Birgit Toebes, The Right to Health as a Human Right in International Law (Antwerp: Intersentia 1999).
application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution. Article 14(2)(h) CEDAW states that states shall ensure the right of rural women to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications. These human rights documents only mention the right to water as an individual human right without referring to the tension between this right and water management aimed at more than just the provision of drinking water, for instance the protection of the environment and nature. Only the CRC explicitly states that the dangers of environmental pollution should be taken into account, but the word ‘pollution’ hints at the fact that dehydration of wetlands as a possible side effect of water supply for human purposes had not been thought of when drafting the Convention. General Comment No. 15 has the same flaw, although it does mention that the realisation of the right to water has to take place in a sustainable manner, so that the right can be exercised by today’s and future generations.\(^8\)

The World Health Organisation goes a few steps further by noticing in a recent report that the right to water should be balanced in an integrated catchment policy with all other water needs, such as irrigation, power generation, nature conservation.\(^9\) Integrated river basin management indeed may accomplish much, although in extremely dry areas it will probably prove to be impossible to serve all water needs at the same time. In international river basins, the situation is even more complicated because there the various conflicting needs are present at both sides of the border. An upstream state may, for instance because the right of water is invoked by its citizens, either on the basis of the international human rights documents mentioned above, or on the basis of national law, have a legal duty to supply most of the water to its citizens, leaving too little to the citizens of the downstream state, or to a downstream wetland.

The UNECE Protocol on Water and Health,\(^10\) a protocol to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes,\(^11\) takes the same approach. Although this Protocol does not explicitly recognize a right to water, the Protocol does state in Article 6(1) that the Parties shall pursue the aims of access to drinking water for everyone and provision of sanitation for everyone within a framework of integrated watermanagement systems aimed at sustainable use of water resources, ambient water quality which does not endanger human health, and protection of water ecosystems.

National constitutions sometimes explicitly acknowledge the right to water as well, especially in Africa. The constitutions of Gambia, Uganda, Zambia, South Africa and Ethiopia recognise the right to water. Let’s have a closer look at the right to water as laid down in section 27 of the Bill of Rights of the South African Constitution:

1. Everyone has the right to have access to (a) health care services, including reproductive health care; (b) sufficient food and water; and (c) social security, including, if they are unable to support themselves and their dependants, appropriate social assistance.
2. The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realization of each of these rights.

Subsection 2 makes it clear that the right of water is a social right, i.e., a right that needs government intervention to be realised. This does not mean that this right cannot be enforced by individual citizens. The south African Constitutional Court has, on various occasions, judged that a certain government policy was contrary to certain socio-

\(^11\) See section 2.3 below.
economic rights. The first case in which such a judgment was given was the Grootboom case on the right to housing (Section 26) and the right to shelter for children (Section 28). The Constitutional Court judged that these rights can be invoked before a court. However, this does not mean that the government has to supply a house to anyone who asks for one, but instead the authorities have to be able to show that they have, within the available means, a coherent programme with which the socio-economic rights actually can and will be effectuated.

There also is a Constitutional Court case on section 27 cited above, although this case did not concern the right to water as such, but the right to health care. In the TAC case, an NGO acting on behalf of HIV/AIDS patients claimed access to health care services for unborn and newborn babies of HIV-positive mothers, i.e., the distribution of antiretroviral drugs to these mothers to prevent their babies from becoming infected. Again, the Constitutional Court stresses that socio-economic rights can be invoked in legal procedures against the government. Subsequently, the court judges that the current policy with regard to the prevention of mother-to-child transmission of the HIV virus is unconstitutional because the policy only allows for the distribution of the drugs in a very limited number of cases. The court then even goes much further, not only stating that a new policy has to be drafted, but also instructing the Minister to distribute the drugs to all medical institutions that ask for it, allowing only doctors to decide to who the drugs should be prescribed. Obviously, this has quite some practical and financial consequences in a country where millions of people are HIV infected.

In specific the South African water legislation, i.e., the National Water Act and the Water Services Act, the constitutional right to water has been further elaborated. For instance, in this legislation it is determined that every person must be able to get at least 25 litres of safe drinking water within 200 metres of his or her home. The policy is aimed at providing this amount of water through the regular waterworks. Those who cannot afford to purchase these services get the water from the government for free (6000 litres per household annually). 57% of the South African population thus receives free drinking water, supplied by the state.

Contrary to the human rights documents mentioned above, the South African National Water Act does, to some extend, regulate the balancing of water needs. I will come back to that in section 3.

Finally it is worthwhile to note that sometimes a right to water has been recognized in statutory law rather than in the constitution. This for instance is the case in Namibia, where the new Water Resources Management Act 2004 states as a general principle that safe drinking water is a basic human right.

2.2 The obligation to protect wetlands in international legal instruments

15 According to the definition of ‘basic water supply’, laid down in section 2 of the 2001 Compulsory National Standards and Measures to Conserve Water Regulations, based on the 1997 Water Services Act.
16 See Gabru, note 14 above at 26-27.
18 § 3.
The most renowned international convention with regard to wetlands, including transboundary wetlands, is the 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention). According to the Ramsar Convention, the contracting parties are obliged to formulate and implement their planning law so as to promote the conservation of wetlands designated under the convention (‘Ramsar sites’), and as far as possible the wise use of wetlands in their territory, without prejudice to the exclusive sovereign rights of the contracting party in whose territory the wetland is situated. Note that the Convention makes a difference between listed sites (to be conserved) and (other) wetlands (the concept of ‘wise use’ has to apply). However, since the late 1980’s, wise use is thought to apply to all wetlands, including those that are listed under the Convention. Since then, the term ‘wise use’ was redefined several times, with the latest definition having been adopted during the 9th COP in 2005 as follows: ‘wise use of wetlands is the maintenance of their ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development’. In addition, ‘ecological character’ was defined as the combination of the ecosystem components, processes and benefits/services that characterize the wetland at a given point in time’, for listed wetlands being the time of designation of the wetland for the Ramsar list. Furthermore, the establishment of nature reserves on (all) wetlands should be promoted, while any loss of wetland resources should as far as possible be compensated by creating additional nature reserves for waterfowl and for the protection, either in the same area or elsewhere, of an adequate portion of the original habitat. Deletion or restricting the boundaries of an already designated site are only allowed in the urgent national interest of the State involved. Finally, the contracting parties have to endeavour, through management, an increase of waterfowl populations on appropriate wetlands. For transboundary wetlands (‘shared wetlands’ or ‘international wetlands’), there is a specific provision in the Convention stating that parties shall consult with each other about implementing obligations arising from it, as well as endeavour to coordinate and support present and future policies and regulations concerning the preservation of wetlands and their flora and fauna.

Since 1971, a vast amount of resolutions, handbooks and guidelines have been adopted that further define the general provisions cited above. The so-called ‘Ramsar Toolkit’ is a set of no less than fourteen Handbooks for the wise use of wetlands, including those on the drafting of national wetlands policies, on the wise use in general, on the designation process, on river basin management, on participation of local communities, etc. In 2004, the concept of integrated management has been promulgated in the second edition of the Handbook on management of wetlands. Site management plans must be integrated into the public development planning system at local, regional or national level.

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21 Art. 3(1).

22 Art. 2(2).


24 Art. 4(1).

25 Art. 4(2).

26 Art. 4(2).

27 Art. 4(4).

28 Art. 5(1).

According to this Handbook, ‘the integration of site management plans into spatial and economic planning at the appropriate level will ensure implementation, public participation and local ownership’. In addition, a multi-scalar approach to wise use planning and management should be adopted and ‘linked with broad-scale landscape and ecosystem planning, including at the integrated river basin (…), because policy and planning decisions at these scales will affect the conservation and wise use of wetland sites’. The Handbook recites the part of Agenda 21 in which the multi-interest utilization of water resources was recognized, and states that integrated river basin management aims at bringing together stakeholders at all levels, from politicians to local communities, and at considering water demands for different sectors within the basin. To be able to do so, the benefits of wetlands have to be determined in order to justify the required allocation.

For transboundary wetlands, there again is a Handbook with more detailed advice on how to pursue international cooperation on the management of such areas. Referring to the 1992 Helsinki Convention, the Handbook indicates that multi-state management commissions should be established to promote international cooperation, and urges states to harmonize wetland management with the obligations arising from watercourse agreements.

More in general it can be observed that over the last few years wetland management has been integrated into river basin management, recognizing the fact that wetlands usually are only a part of a bigger catchment area and for their conservation largely depend on the quality of the entire catchment. To this end, the Ramsar Convention Bureau and the Secretariat of the Convention on Biodiversity have joined hands in a River Basin Initiative. In 2005, the COP adopted a resolution in which practical guidelines for the integration of wetland management into river basin management had been laid down. Attention is focused on: 1) improving the communication between the wetland management sector and the water management sector, 2) improving the cooperation between the water and the wetlands sector through cooperative governance, for instance by formally harmonizing policy and legislation or by other, less far-reaching forms of cross-sectoral cooperation, 3) up scaling wetlands management to the river basin level.

2.3 The principle of reasonable and equitable use and the concept of common river basin management

In international law, the use of water in a transboundary context is governed by the principle of reasonable and equitable use, and by conventions such as the UNECE Convention on International Watercourses and Transboundary Lakes. The UN Convention on the Law of the Non-navigational Uses of International Watercourses addresses the same topic on a global level. However, the UN Convention still has not
entered into force.  

This Convention has been put in less stronger wording than the UNECE Convention.  

From a substantive point of view, there are similarities between the two conventions, most notably the establishment of a joint body, in order to achieve a common management of the international watercourse.  

Even states that are not a party to either of the conventions have sometimes created a joint body, for instance, the US-Canadian International Joint Commission.  

Both conventions support an ecosystem approach, i.e., an approach in which all consequences of human activities on the entire ecosystem are considered, respecting the integrity of the ecosystem as a whole.  

Again it must be noted that the obligation to do so is more strictly formulated in the UNECE Convention than in the UN Convention.  

The UNECE Convention most elaborately defines the measures that have to be taken to protect transboundary water systems, i.e., (a) prevention and control of pollution, (b) ecologically and rationally sound water management, conservation of water resources and environmental protection, (c) reasonable and equitable use taking into account the transboundary character, (d) conservation, and, where necessary, restoration of ecosystems.  

Several legal principles, such as the precautionary principle and the polluter-pays principle, apply.  

Under the UNECE Convention, the joint bodies have a wide range of tasks, including elaborating monitoring programs concerning water quality and water quantity, exchanging information, elaborating emission limits for waste water and joint water-quality objectives, developing concerted action programs for the reduction of pollution loads and implementing environmental impact assessments.  

The UN Convention only has a short provision on management, stating that consultations between watercourse states may include the establishment of a joint management mechanism, whose task it is to plan the sustainable development of an international watercourse and provide for the implementation of any plans adopted, and otherwise promote the rational and optimal utilization, protection and control of the watercourse.

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39 To date (May 2007), only 15 countries have ratified the Convention, including Namibia and South-Africa. The Convention will enter into force after ratification by 35 countries.


41 However, the wording of the UN Convention is much weaker. The UNECE Convention requires riparian states to establish a joint body, whereas the UN Convention only requires the states to consider the establishment of a joint body.

42 This commission was established as a consequence of the 1909 Boundary Waters Treaty between Canada and the United States, see the commission’s website at http://www.ijc.org.


45 Using both the principle of equitable use and the principle of prevention of harm has been criticized for their inherent upstream/downstream conflict; some authors advocate a ‘needs based’ approach, rather than a ‘rights based’ approach, Heather L. Beach, Jesse Hamner, J. Joseph Hewitt, et al., Transboundary Freshwater Dispute Resolution. Theory, Practice, and Annotated References 74 (Tokyo: United Nations University Press, 2000).

46 Art. 2(2). Again, from an environmental protection point of view, the UN Convention is much weaker. There, equitable and reasonable utilization is the only principle, in which the ecological factor only seems to be a minor one. Cf. Art. 6(1).

47 Art. 2(3). These principles are absent in the UN Convention.


49 Art. 24.
A large number of guidelines is available for the application of the UNECE Convention, such as the Guidelines on Monitoring and Assessment of Transboundary Rivers. Again, these Guidelines stress the need for an integrated approach. The state of the river and related ecosystem should be assessed in an integrated manner, based on criteria that include water quality and quantity for different human uses as well as flora and fauna.\textsuperscript{50} The Guidelines also identify three sources of conflicts: a) the competition for water (consumptive use vs. non-consumptive use), b) conflicts between human intervention and nature, c) different interests of riparian countries.\textsuperscript{51} These (potential) conflicts have to be acknowledged when formulating an integrated management plan. Outside the UNECE region, bi- or multilateral conventions establishing joint river basin management commissions are concluded as well, often based on the UN Convention, even though this Convention did not enter into force yet. A good example of such a commission that has to deal with various claims on a transboundary river basin is the ORASECOM, the Orange-Senqu River Commission, consisting of representatives from Botswana, Lesotho, Namibia and South Africa.\textsuperscript{52} The Council of this Commission serves as a technical advisor to the authorities of the states involved on matters relating to the development, utilization and conservation of the water resources of the river system.\textsuperscript{53} The Parties to this agreement, that was not only based on the UN Convention, but also on a Protocol by the Southern African Development Community (SADC),\textsuperscript{54} agree to (inter alia):

Utilize the resources of the river system in an equitable and reasonable manner with a view to attaining optimal and sustainable utilization thereof, and benefits therefrom, consistent with adequate protection of the river system,\textsuperscript{55} 
Take all appropriate measures to prevent the causing of significant harm to any other Party,\textsuperscript{56} 
Individually and jointly take all measures necessary to protect and preserve the river system from its sources and headwaters to its common terminus,\textsuperscript{57} including the estuary of the river system and the marine environment taking into account generally accepted international rules and standards,\textsuperscript{58} 
Individually and jointly prevent, reduce and control pollution of the river system that may cause significant harm to one or more of the Parties, including harm to the environment, or to human health or safety, or to the ecosystem of the river system.\textsuperscript{59}

Again, reference is made to important principles of international law, such as reasonable and equitable use (or equitable utilization). This principle is considered to be the most important principle in international freshwater law.\textsuperscript{60} According to the principle, states may not use the water in such a manner as to prevent or otherwise limit other riparian

\textsuperscript{50} UNECE Task Force on Monitoring & Assessment, Guidelines on Monitoring and Assessment of Transboundary Rivers 10 (Lelystad: UNECE, 2000) 
\textsuperscript{51} Id at 14. 
\textsuperscript{52} Agreement on the Establishment of the Orange-Senqu River Commission, signed in Windhoek on 3 November 2000. 
\textsuperscript{53} Art. 4. 
\textsuperscript{54} Shared Watercourse Systems Protocol, signed in Windhoek on 7 August 2000. This Protocol replaces the 1995 version. It entered into force on 22 September 2003. The Protocol is based upon both the UNECE and UN international watercourses conventions (both of which do not legally apply in the countries involved!). 
\textsuperscript{55} Art. 7(2). 
\textsuperscript{56} Art. 7(3). 
\textsuperscript{57} Art. 7(12). 
\textsuperscript{58} Art. 7(14). 
\textsuperscript{59} Art. 7(13). 
states from making full use of their equitable and reasonable entitlements in relation to that shared river.\textsuperscript{61}

The question that arises is whether this principle can limit the realization of the human right to water. Suppose that realization of the right to water upstream leads to a serious decline of the available water, to such an extent that there cannot be a reasonable and equitable use downstream. According to the principle of reasonable and equitable use this is not allowed. The consequence then would be that the upstream state can only partially guarantee its citizens the right to water. Thinking further along the lines of the principle, the right to water of all people in the river basin should be equally restricted, so that everyone has an equal part of the (too little) water available. Suffice to say that ecological water uses, for instance for the conservation of wetlands in the river basin, will be extremely under pressure in such a situation. This will prove to be the case in the case study presented below.

2.4 Conclusion

In international water law, the ecosystem approach through the integrated river basin management encompasses the obligation to balance all water uses within the river basin. The main goal should be to protect the river-ecosystem as a whole, including wetlands located within the river basin. In human rights law, the right to water is getting more and more accepted as a basic human right. However, human rights documents pay little attention to the necessity to integrate water supply for basic human needs into a wider water policy, taking into account ‘ecosystem needs’ as well. The only exception is the 1999 Protocol on Health and Water that, however, is not a human rights document per se, although it does entail the duty for states to pursue the aim of access to drinking water for everyone.

3. CASE STUDY: ORANGE RIVER AND ORANGE RIVER MOUTH WETLAND

3.1 Approach

In this section a case study into the Orange River and the transboundary protected wetland ‘Orange River Mouth’ will be presented, especially focussing on the practical application of the principle of reasonable and equitable use and the concept of common river basin management as worked out in UN and UNECE conventions on international watercourses. The methodology used for this case study is as follows. First, an extensive desk study into the relevant legislation, policy documents, evaluation studies, minutes of relevant meetings, and case law was carried out. In addition, a meeting was attended,\textsuperscript{62} interviews with relevant key persons were held,\textsuperscript{63} and site visits were conducted.\textsuperscript{64} The

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\textsuperscript{61} Sands, note 60 above, 462.
\textsuperscript{62} 16th meeting of the Orange River Interim Management Committee, Oranjemund, 8 February 2005.
data that thus were found, have been analysed using the concept of multi-level governance as a theoretical framework.\(^{65}\)

### 3.2 Introduction into the case

The Orange-Senqu river basin is a huge river basin covering an area of approximately 1 million km\(^2\) in Lesotho, Botswana, South Africa, and Namibia, with a total population of 14.27 million. In downstream Namibia there is an average annual rainfall of only 185mm, so this downstream area very much depends on the surface and ground water available in the river basin. Upstream uses (for power generation, irrigation, households, industries and mineral mining) determine the fate of the dry areas downstream, and thus the fate of the people living here, as well as the fate of a transboundary wetland of international importance, located at the estuary of the river, in the dry Namibian/South African desert. Upstream use is very high, especially for irrigation purposes.\(^{66}\) Large water transfer schemes have been developed throughout the South African and Lesotho part of the river basin.\(^{67}\) Release of water is determined by the operator of several dams constructed for the generation of hydropower.\(^{68}\) A further growth in the water requirement for urban, industrial and mining use is expected.\(^{69}\)

At the very end of this river lies a wetland of international importance, designated as such under the Ramsar Convention by both Namibia and South Africa: The Orange River Mouth wetland (hereafter: ORM). The wetland consists of a dynamic estuary ecosystem. During high tide, water from the Atlantic Ocean enters the river mouth; when in flood, the Orange River transports fresh water well into the ocean. The water level of the river varies with seasonal changes. Sometimes, the water level is so low that the mouth closes. Shifting sandbanks and mudflats, small islands, channel bars, as well as littoral salt marshes are the result of the ‘rhythmic tidal inundation’.\(^{70}\) The Orange River Mouth is the only wet and green area in an arid environment, both on the Namibian and on the South African side of the river. The nearest coastal wetlands are 400 and 500 kilometres to the south and north respectively. Therefore, the area is important for waterfowl, both for migratory and for breeding birds, including several rare and endangered species.\(^{71}\) The same goes for fish and amphibians.\(^{72}\)

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Since the early 1990s, the area has been degraded. The salt marshes have dried up as a consequence of the construction of a road cutting off the salt marshes from the river and as a result of a general scarcity of water. The river lost its seasonal water level changes as a consequence of several upstream dams that control the amount of water in the river. The number of birds dropped from around 25,000 in the mid-1980s to 6,200 in 2001. The population of the Cape Cormorant (phalacrocorax capensis) totally disappeared. In 2004, part of the salt marsh was restored. The number of water birds present in the area is stable now at around 7,000 birds.

### 3.3 Findings

A. **THE PRINCIPLE OF REASONABLE AND EQUITABLE USE AND THE CONCEPT OF COMMON RIVER BASIN MANAGEMENT ARE HELPFUL TO TRANSNATIONAL DECISION-MAKING**

The principles of international law, such as the principle of reasonable and equitable use, as well as more specific basic concepts of international water law and environmental law, such as the concepts of common river basin management and wise use of wetlands, give enough support and guidance to talks and negotiations in general and decision-making in particular. Since these overarching principles are the same for all stakeholders involved and are broadly accepted, they form a common ground on which to start talks. At the same time, they leave much discretion and thus provide ample room for the development of new ideas, new policies and new projects.

Although the scope of the Wetlands Convention on the one hand and the UN and UNECE conventions on international watercourses on the other hand differs, it has proved to be very helpful that within the Wetlands Convention, the concept of integrated river basin management was adopted and now strongly influences laws and policies dealing with wetland conservation. This enables an integration of policies with regard to water management and wetland management. The concepts of integrated river basin management and wise use have also been laid down in regional water law in southern Africa, more specifically the SADC Shared Watercourses Protocol and the SADC Protocol on Wildlife Conservation and Law Enforcement. We have seen a similar development in other regions of the world, for instance in Europe, where the EU Water Framework Directive was clearly inspired by the UNECE convention on international watercourses, and where the EU Wild Birds Directive is used as an instrument to protect Ramsar sites. In addition, bi- and multilateral agreements on specific river basins have been concluded, again based on the same principles and concepts (see further below, under C).

All relevant conventions and protocols thus stimulate states to adopt an integrated perspective to protected areas, integrating wetland management and (general) water management. They also offer a framework for close co-operation of both states in the management of transboundary sites.

However, the case study also shows that the effect of international water law remains limited to the general guidance these principles and basic concepts thus offer. More specific obligations arising for instance from the Wetlands Convention, or from soft law

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74 The Orange River water is intensively controlled and exploited to its optimum, see Hans Beekman, I. Saayman, S. Hughes, *Vulnerability of Water Resources to Environmental Change in Southern Africa* 32 (Pretoria: CSIR, 2003).


76 Data provided by Mark Anderson, March 2006, note 63 above.
documents, such as the various Handbooks that go with the Convention, hardly play a role in legal practice.\footnote{Only the listing in the Montreux record of the ORM area is important factor. It serves as an impetus for the South African national authorities to be involved in the management of the area.}

The main reason for this is that most of the people involved only know and only want to know the overarching concepts. They fear that a too detailed framework hampers their discussions on the relevant water issues. Negotiations and talks on delicate issues such as the distribution of the available water only flourish when there is enough space for manoeuvring. In fact, the distribution of water is not the only delicate issue that is at stake. The case shows that there are other complicated and sensitive legal issues that have to be dealt with as well, such as a border dispute between South Africa and Namibia,\footnote{See Gerhard Erasmus, Debbie Hamman, 'Where Is the Orange River Mouth? The Demarcation of the South African/Namibian Maritime Boundary', 13 South Afr Yrbk of Int’l L. 49-71 (1987-1988).} and a land claims issue at the South African side of the wetland.\footnote{See Hanri Mostert, Peter Fitzpatrick, ‘Law Against Law: Indigenous Rights and the Richtersveld Cases’, 2 Law, Social Justice & Global Development J. 1-17 (2005).} Difficult enough as these issues are, there is no need for legal norms that only further complicate things, hence also the problems with national law, dealt with below (under B). The talks on all of these issues mainly take place within bi- and multilateral commissions. I will go into these commissions, that play a crucial role in decision-making processes on transboundary water issues, below (under C).

\section*{B. National law makes things rather complicated}

Problems particularly arise at the national level where different legal systems on each side of the border exist and, more importantly, where a variety of competent authorities has their own specific legal domains.

Let us first have a brief look at South African and Namibian water law. In South Africa, water legislation is mainly set out in the National Water Act (NWA).\footnote{Act No. 36 of 1998. The other main water statute is the Water Services Act No. 108 of 1997. Both Acts replace over one hundred previous statutes dealing with water. See Jan Glazewski, \textit{Environmental Law in South Africa} 427 (Durban: LexisNexis Butterworths, 2005). The WSA provides the regulatory framework for local authorities to supply water and sanitation services in their area and is not so relevant for wetlands management.} The NWA is aimed at water management in a broad sense and introduces Catchment Management Agencies as the competent authorities for an entire river basin. The Act makes a distinction between various types of waters, such as watercourses, surface waters, aquifers and estuaries.\footnote{S 1(1). \textit{Estuaries} are ‘partially or fully enclosed bodies of water that are open to the sea permanently or periodically and within which the seawater can be diluted, to an extent that is measurable, with fresh water drained from land’.
\textit{Wetlands} are explicitly defined as ‘land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.’} The quantity and quality of the water that is needed to satisfy the basic human need and to protect the aquatic ecosystem of river and wetland is specified in the ‘Water Reserve’.\footnote{S 16.} Once the Reserve has been determined, it must be observed when exercising any power or performing any duty in terms of the NWA,\footnote{S 18.} such as granting licenses for the use of water (use includes taking of water, discharging substances, altering the bed, banks, course or characteristics of a watercourse, using the water for

\footnote{25 litres of safe drinking water per person, see section 2.1 above.}
recreational purposes, etc.\(^{86}\). This means that other allocations, such as the use of water for irrigation purposes or for domestic use beyond the basic human need, can only be granted to the extent that water remains after the Reserve has been set aside. In theory, this is a very interesting principle balancing the individual human right and the duty to protected valuable ecosystems, such as wetlands.\(^{87}\) However, in practice it appears to be difficult, if not impossible, at least in some parts of the country, to set a sufficient ‘Reserve’, let alone to have remaining water to be distributed for other purposes. It appears that in such a situation of scarcity, ecosystems, despite their good legal position, get the worst.\(^{88}\)

Some water uses do not need prior authorization because they are regulated under a general authorisation.\(^{89}\) This includes the taking of surface or groundwater by landowners (up to a certain maximum daily amount), the discharge of industrial wastewater that meets certain chemical requirements and the disposal of domestic or biodegradable industrial wastewater into evaporation ponds.\(^{90}\) Precautionary measures must be taken, including storing collected water in such a way that the movement of aquatic species is not prevented,\(^{91}\) and taking all reasonable measures to prevent wastewater overflowing from any wastewater disposal system.\(^{92}\) A landowner or person in control of land where pollution or disturbance takes place or has taken place can be forced to stop the pollution, to remedy the effects of pollution, as well as to remedy the effects of any disturbance to the bed and banks of a watercourse.\(^{93}\) If the polluter or landowner does not comply, the catchment management agency may take the measures it considers necessary to remedy the situation and recover the costs from the polluter.\(^{94}\) Similar provisions apply to persons who do not comply with a condition in a license.\(^{95}\) Other legislation that may cover wetlands is the Conservation of Agricultural Resources Act\(^{96}\) and the Sea-Shore Act.\(^{97}\) The Conservation of Agricultural Resources Act enables the Minister to regulate a variety of activities that may harm a wetland by agricultural uses, such as the utilization and protection of vleis, marshes, water sponges, water courses and water sources, the regulating of the flow pattern of run-off water, the protection of water sources against pollution on account of farming practices and the irrigation of land.\(^{98}\) The Sea-Shore Act is outdated, but it still applies to estuaries such as the ORM and gives the Minister the power to issue regulations banning or regulating virtually any activity within any portion of the sea shore.\(^{99}\)

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86 S 21.
88 Interview at DWAF, 18 May 2006. The Acts opens up the possibility to expropriate any property in the public interest (S 65). This may be a final resort to reduce existing (historic) water uses in areas where the reserve cannot be met.
89 S 39.
91 Reg 1.9(3).
92 Reg 4.15(2).
93 S 19.
94 S 19(5).
95 S 53.
96 Act No. 43 of 1983.
97 Act No. 21 of 1935.
98 S 6(2). The most important Regulation under this Act is a 1984 Regulation in which, inter alia, the cultivation of virgin soil is prohibited as well as the utilization of the vegetation in a vlei, marsh or water sponge or within the flood area of a water course or within 10 meters horizontally outside such flood area in a manner that causes or may cause the deterioration of or damage to the natural agricultural resources. Regulation GNR.1048 of 25 May 1984.
99 S 10. Especially regulations on the use of vehicles or the dumping of refuse have been issued, such as GNR. 2466 of 18 October 1991. With the new National Water Act explicitly covering estuaries and wetlands, it is not very likely that further regulations to protect estuaries under the Sea-Shore Act will be issued.
In Namibia, the new Water Resources Management Act 2004\(^{100}\) mainly deals with allocation of water for human use. As already stated above, this Act acknowledges the right to water as a basic human right. However, the new Act also introduces river basin management and the establishment of Basin Management Committees.\(^{101}\) Once these have been set in place, it is thought that Namibian and South African water management in the Orange River basin can be better aligned.\(^{102}\) The differences between Namibian and South African water legislation are considered to be obstacles for water management co-operation in the Orange River basin.\(^{103}\) The Water Resources Management Act forms the basis for joint water management in line with the SADC Protocol on Shared Watercourses.\(^{104}\) It has comparable provisions to the South African National Water Act. Interestingly, the Act states as one of its fundamental principles:\(^{105}\)

The harmonisation of human needs with environmental ecosystems and the species that depend upon them, while recognising that those ecosystems must be protected to the maximum extent.

According to the Water Resources Management Act, water has to be reserved to meet domestic household needs and to protect aquatic and wetland ecosystems.\(^{106}\) The abstraction of water can be subject to environmental impact analysis,\(^{107}\) and the impact on aquatic ecosystems has to be taken into account when granting licenses to abstract and use water.\(^{108}\) Although the overarching principles and concepts of international water law have been taken as a starting point in national legislation in both countries, on a more detailed level, national legislation in both countries still is vastly different, which makes it difficult to manage the area in an integrated manner.\(^{109}\) The Namibian Water Resources Management Act, for instance, does not contain a distinction between a river and an estuary, whereas the South African National Water Act does. Another example is the important role that the provinces play in nature conservation matters in South Africa in addition to that of the national authorities whereas, in Namibia, nature conservation is completely centralized. In addition, within each country, there are systematic differences between water legislation on the one hand and nature conservation legislation on the other. The South African National Water Act explicitly recognizes wetlands as a type of water for which specific requirements are set, whereas the South African Protected Areas Act does not recognize this habitat type. Under that new law, Ramsar sites are only protected after they have been explicitly designated as protected areas. Therefore, from a strictly legal point of view, the ORM remains largely unprotected in South Africa. Fortunately, the SADC Protocols, especially the one on shared watercourses, enable cross border co-operation on these issues, although this is a slow process.\(^{110}\)

Legal complexities like these have to be overcome within the joint management commissions that deal with the water issues concerning a transboundary river basin. I will first go into these commissions (under C), and then into the way they try to overcome the legal complexities originating not from the international, but from the national levels (under D).

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\(^{102}\) Interview at DWAF, 18 May 2006.

\(^{103}\) Interview at DWAF, 18 May 2006.

\(^{104}\) S 54(b).

\(^{105}\) S 3(d).

\(^{106}\) S 27(1).

\(^{107}\) S 33(3)(c).

\(^{108}\) S 35(b).

\(^{109}\) Interview at DWAF, 18 May 2006.

\(^{110}\) Interview at DWAF, 18 May 2006.
C. THERE ARE A LOT OF JOINT COMMISSIONS

Over the past fifteen years, various bi- and multilateral water commissions were established, such as the abovementioned ORASECOM based on the UN and UNECE conventions on international watercourses and the SADC Protocol on Shared Watercourses. In addition, already in 1992, Namibia and South Africa established a Permanent Water Commission (hereafter: PWC),\(^\text{111}\) acting, like ORASECOM, as a technical advisor for the competent authorities in both countries on transfrontier water-related issues. At the same time, the Vioolsdrift and Noordoewer Joint Irrigation Authority was established,\(^\text{112}\) to administer a joint irrigation scheme, allowing both countries to divert water from the Orange river for irrigation purposes.\(^\text{113}\) A bilateral committee that only deals with the Orange River Mouth wetland is the Orange River Mouth Interim Management Committee (hereafter: ORMIMC). This informal committee, that meets twice a year, consists of all stakeholders involved in the area, i.e., various divisions of the Namibian Ministry of Environment and Tourism, the Namibian Department of Water and Agriculture, the Namibian Ministry of Fisheries and Marine Resources, various divisions of the South African Department of Environmental Affairs and Tourism, the South African Department of Water Affairs and Forestry, the Northern Cape Provincial Department of Tourism, Environment and Conservation, the Alexkor and Namdeb mining companies as well as the Namibian zinc mining company Skorpion Zinc, the Richtersveld community and the Richtersveld municipality, the South African Coastal Working Group NGO, the South African National Biodiversity Institute’s Working for Wetlands Programme, and estuarine researchers of South Africa’s University of Port Elizabeth. The Committee serves as an advisory body to the respective competent authorities. The Committee has no formal legal basis, although it is frequently mentioned in policy documents, such as the South African National Environmental Management and Implementation Plan.\(^\text{114}\) The ORMIMC is considered to be the driving force behind current initiatives at the central government level in South Africa to rehabilitate the area, get it removed from the Montreux record, to get the area designated as a protected area under South African law,\(^\text{115}\) and to draft a management plan for the Ramsar site to be used by Alexkor and the Richtersveld community. When the area has been formally declared a provincial nature reserve, the ORMIMC will probably be replaced by a formal management organization.\(^\text{116}\)

D. A CO-OPERATIVE GOVERNANCE APPROACH IS APPLIED, NO GUARANTEE FOR SUCCESS

Within such committees and commissions, a co-operative governance approach, with all stakeholders involved, is applied. Since the national government alone does not have decisive power over the river basin, nor the Ramsar site, the two (or more if you take the Orange River basin into account) national governments depend on each other. In addition, there are provincial and local authorities that have a say in the management of the river basin too, as well as functionally organized authorities, such as the water authorities. Obviously, these exist on both sides of the national border. Co-operation between all of these authorities is achieved through various commissions and committees, some of which have been described above. Some of these, especially the ORMIMC, have a broad network-like structure without a clear legal basis, involving not

\(^{111}\) Signed in Noordoewer on 14 September 1992.  
\(^{112}\) Agreement on the Vioolsdrift and Noordoewer Joint Irrigation Scheme, signed in Noordoewer on 14 September 1992.  
\(^{113}\) Art. 3(3).  
\(^{114}\) Para. 3.2.1.6 of the plan, General Notice No. 354 of 2002.  
\(^{115}\) Interview at DEAT, 17 May 2006: ‘The ORMIMC picks us up and drives us. Without them, probably nothing would have happened.’ Also: ‘We rely on IMCs because they are our eyes and ears at a local level’.  
\(^{116}\) Interview at DEAT, 17 May 2006.
only public authorities, but private actors as well, such as private companies, local communities and NGOs from both Namibia and South Africa.

The case study shows that the involvement of stakeholders like these is essential. Once differences between the various parties involved have been overcome, the road is open for the national governments to reach a common position on water use. Informal and non-legalistic structures such as the ORMIMC offer a platform within which agreements can be reached.

The involvement of stakeholder also allows the establishment of ‘co-management’ of the wetland. Co-management has been defined as the active participation in the management of a wetland by the community of all individuals and groups having some connection with, or interest in, that wetland.\textsuperscript{117} The ultimate goal of co-operative management is to achieve a sustainable utilization of the wetland’s resources through sharing authority and responsibility with the people who work and live in and near the wetland.\textsuperscript{118} In addition, voluntary compliance will be stimulated. It was concluded from the case that voluntary compliance should be the prime option, rather than government monitoring and enforcement.

According to some, stakeholder involvement should not be restricted to smaller areas, such as the Ramsar site, but extend to the entire river basin.\textsuperscript{119} In my view, this is a rather theoretical option in river basins as big as the Orange River with more than 14 million inhabitants.\textsuperscript{120} Therefore, I think that stakeholder involvement will still have to take place at the level of a protected wetland within such a body as the ORMIMC. In addition, some stakeholder involvement at the river basin level will have to be organized by the catchment authority, such as ORASECOM in the case of the Orange River, but the sheer size of the area should lower the expectations of the outcome of such a stakeholder process.\textsuperscript{121}

Obviously, it is then essential that when within a river basin several co-operative governance processes take place, there is a good, communicative, open relationship between the various bodies, so that the various co-operative governance processes are well coordinated. In addition, it is important that the general public in the area is well informed by the stakeholders that are involved in the process. There is a danger that the general public, that is not involved in the stakeholder process, is not able to keep up with developments within the inner circle of the stakeholders. Resistance from the general public against the results of the stakeholder process may cause serious setbacks, once politicians feel that they cannot ignore this resistance when reaching final decisions implementing the outcome of the stakeholder process.

When looking at the content of the work of these commissions and committees from a lawyers perspective, it must be concluded that the law is intentionally kept out of this process as much as possible. The actors involved try to overcome the legal complexity by abstracting or withdrawing somewhat from the law. They enter into talks and negotiations in order to discover together the best way to deal with water issues, or, in the ORM case, to manage the protected wetland, taking into account the interests of all parties involved. In my observation, all had the best intentions with the conservation of the area, but during these talks, they did not want to be bothered too much with the legal


\textsuperscript{118} Id at 25 and 30.


\textsuperscript{120} Savenije and Van der Zaag argue that some decisions are to be taken at the river basin level, while others should be taken at a much lower level such as the sub-catchment, Hubert H.G. Savenije, Pieter van der Zaag, ‘Conceptual Framework for the Management of Shared River Basins; With Special Reference to the SADC and EU’, 2 \textit{Water Policy} 9, 26 (2000).

details. They simply temporarily withdrew from the complex legal situation in order to discover what it is they actually want to achieve with the management of the protected area.

Has the problem concerning the battle for water between Namibians, South Africans and cormorants been solved? The answer is no, at least not yet. Agreements have been reached to reserve water for the wetland by the dam operators, especially by the new Vioolsdrift dam. However, the water flow remains constant (thus not allowing for seasonal changes) and scarce, due to the other necessary uses, such as irrigation and the provision of drinking water. There are promises to increase the amount of water released upstream and plans to further open the mouth, allowing more seawater into the wetland. However, there is a danger of further disrupting seasonal changes and also a danger of the area becoming totally flooded; there have to be tidal flows in the salt marsh in order to retain it. The focus of future talks is on this issue.

More in general, it was concluded that the stakeholder process is not the end, but merely an (important) first step towards an equitable and wise use of the scarce water. Once the goals have been set in such a process, legal procedures will have to be followed to mould the various agreements into policy plans, permits and other decisions taken by governmental authorities, and in company management plans and other decisions at the level of business corporations. The conversion of the agreements into legal decisions by a great variety of institutions (government agencies in all states involved on various levels, individual business corporations, and NGOs) appears to be a difficult and dangerous task.

This task is difficult because of the complicated legal situation described above. Various authorities will have to apply various pieces of legislation to implement the outcome of the co-operative governance process. Since, as was shown, the stakeholders have some idea of the existing legal requirements but do not care, and cannot care, for the details, a certain outcome may very well prove to be difficult to convert into legal decision-making. Sometimes the norms in the various acts and regulations simply coexist, but sometimes applying them to the same area could result in a contradictory outcome.

The task to implement the outcome into legal decision-making is also dangerous, because the stakeholders may not recognize the outcome of the talks in the decisions that the competent authorities took. This may result in disappointment about the entire process and in a turning away from co-management of the wetland and resorting to other means to achieve their goals, for instance, going to court. There is a risk that the competent authorities at various levels in both countries, think that after an agreement was reached, the various joint bodies are no longer needed. They sometimes even seize the opportunity that the law offers to take a decision that is contrary to the outcome of the stakeholder process. After the talks are over and legal decisions are to be taken, competent authorities tend to fall back into their old position, using their own specific legal domain to “do it their way”.

4. CONCLUSION

The right to water has been recognized as a human right under various international human rights instruments, such as the International Convention on Economic, Social and Cultural Rights and the Convention on the Rights of the Child. These legal instruments primarily focus on access to safe drinking-water. On the other hand, various international legal instruments to protect nature force government institutions to reserve enough water for protected areas, for instance wetlands of international importance designated under the Ramsar Convention. These international legal obligations may conflict. A wetland

Artificially opening or closing the estuary mouth, if carried out injudiciously, may have a detrimental effect on the estuary. Hence, there now are guidelines for such a process, Lara van Niekerk, Piet Huizinga, Guidelines for the Mouth Management of the Orange River Estuary (Stellenbosch: CSIR, 2005).

situatd in the estuary of a river can be severely damaged or even destroyed when too much water is used for human purposes upstream (not only for drinking water, but also for irrigation purposes, generation of energy, industrial uses, etc). The situation gets even more complicated when the river is located in more than one country. Therefore, the first conclusion is that it is important to include the notion of integrated river basin management into the debate on the human right to water. The 1999 Protocol on Health and Water to the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, and the South African National Water Act provide good examples of how, in legal texts, such integration should be provided for.

Providing for such integration in legal texts is relatively easy compared to the integration in legal practice. In theory, the principle of reasonable and equitable use and the concept of common river basin management, as laid down in the Convention on the Law of the Non-navigational Uses of International Watercourses, offer a way out of the potential conflict between human uses and ecosystem uses. They should allow for a fair and reasonable distribution of the available amount of water in the entire river basin for all relevant purposes, discussed in a transnational commission in a co-operative setting, and involving all relevant stakeholders.

However, these theoretical concepts are not easy to implement in practice for several reasons. Obviously, one reason is that in some areas there simply is too little water to reconcile the realization of the human right to water and the protection of wetlands. Another reason is the legal complexity of cases like these. A vast amount of legal rules applies to any given area: international law, regional law (EU law, or in southern Africa, SADC law), national law and local or provincial law in all countries involved, not only on water, but also on other issues such as environmental protection. National legislation should, as is the case both in Namibia and South Africa, regulate the balancing of the various interests involved, especially the right to water and the duty to protect aquatic ecosystems.

A co-operative governance approach, where all relevant stakeholders together try to figure out how the available water is to be reasonably and equitably shared, is an important mechanism to achieve an outcome that is acceptable for all. To achieve such an outcome, the stakeholders temporarily withdraw from the legal specifics and focus on the main principles of the relevant international law. The case study presented here shows that a co-operative governance approach involving all relevant stakeholders is successful. Conflicts of interests have been overcome, paving the way towards long-term integrated and sustainable management of the site, avoiding legal conflicts within or between the states involved. However, such a stakeholder process is time consuming and slow, and should be carefully led, keeping a close eye on all sensitive positions.

Although often successful at first, the process may very well run into a wall of legal complexity once the carefully reached agreements are to be consolidated into legal decision-making at all levels of government, in all countries involved. This complexity can seized by those within the government that want to do it their way. Therefore, it is important that the co-operative governance process continues during the translation of the agreements into legal decisions, and that all relevant government institutions are actually involved in the process and committed to its outcome.