

# THE SUSTAINABLE DEVELOPMENT GOALS AS CATALYST FOR THE SUSTAINABLE MANAGEMENT OF WATER RESOURCES

DR OTTO SPIJKERS

*Utrecht Centre for Water, Oceans and Sustainability Law, Utrecht University\**

This article analyses how the sustainable development goals (SDGs) process might give a boost to the evolution of international water law towards a more sustainable development-friendly legal framework. Three recommendations, derived from the SDG process, are made to call upon states: (1) unambiguously to approach international water law as a legal framework to promote the sustainable development of water resources, and to interpret the bedrock principles of international water law in that context; (2) to encourage the further development of the ecosystems approach to international water law; and (3) to use the legal framework of international water law to facilitate public participation at all levels of water governance.

## 1 INTRODUCTION

On 18 September 2000, all the members of the United Nations resolved, 'at the dawn of a new millennium', to set a limited number of goals collectively to tackle the most pressing global issues in the field of development. These goals became known as the Millennium development goals (MDGs). The MDGs had to be achieved by the year 2015.<sup>1</sup> Regardless of whether this is actually done – in fact, it is almost certain that not all MDGs will be realised by the end of 2015 – it is generally believed that setting quantifiable, ambitious, but realistic goals for development has proved to be a helpful strategy to keep the world moving in the right direction.<sup>2</sup> The goals are like the proverbial carrot, dangling before the donkey's nose, urging it to move forward without ever reaching the carrot. The United Nations (UN) wants to repeat the process in the period 2015–2030, but it wants to replace the old carrot with a new one, *i.e.* to come up with a new set of goals. This time, the focus is on sustainability, and thus the goals-to-be are referred to as the *sustainable* development goals (SDGs).

One of the more formidable global challenges when it comes to sustainable development is the need for the sustainable management of freshwater resources. In many recent speeches and reports, one reads that urgent action is necessary to prevent a nightmarish world with polluted lakes and rivers, deadly droughts and floods, water scarcity and the resulting water wars.<sup>3</sup>

States thus need to be made aware of the importance of managing their freshwater resources in a sustainable way, and a strong sustainable development goal on water can do that.<sup>4</sup> The SDG on water can be called 'strong' if it is clear and specific, because, as Laura Horn pointed out, 'the adoption of watered-down language in the drafting of the sustainable development goals would provide little incentive for states to take action on these goals'.<sup>5</sup> Furthermore, the SDGs must be backed by binding norms of international law, in order to provide a compelling incentive for change in state behaviour.

Fortunately, an appropriate international legal framework already exists, so we do not need to start from scratch: the management of transboundary freshwater resources is regulated by international water law. It is important that the existing regime of international water law is sufficiently equipped to guide states in implementing an ambitious SDG on water, and more generally, to guide them towards sustainable management of their freshwater resources. And if international water law is not (yet) equipped for this task, then it needs to evolve, through a renewed interpretation of the most important principles, or even through modification of these principles. The SDG process might give this evolution a push in the right direction.

In other words, an assumption underlying this article is that the SDG process has the potential actually to facilitate the evolution in the interpretation and application of international water law and, more particularly, the provisions in the UNECE Convention and the Watercourses Convention. This assumption can be challenged. It can be argued that the SDG process ought not to be analysed as a legally relevant process at all. After all, the final result of the SDG process will be – if all goes as planned – a legally non-binding resolution of the United Nations General Assembly (UNGA). But reality, as always, is much more complicated than that. In a way, the character of the SDG process depends not so much on the legally non-binding character of its end-product – an UNGA resolution – but on who is contributing to this process. It is not too difficult to see legally relevant processes at work. If the states party to the UNECE Convention and/or the Watercourses Convention use the SDG process to call for a 'sustainable development' friendly interpretation of these Conventions, then this can be regarded as a subsequent soft-law agree-

\* Assistant Professor of Public International Law. Contact o.spijkers@uu.nl

1 *United Nations Millennium Declaration* GA Res 55/2 (adopted 18 September 2000) para 19.

2 Many development organisations, both governmental and non-governmental, have used them in their policies. See 'The future we want', outcome document of the United Nations Conference on Sustainable Development 2012, annexed to GA Res 66/288 (adopted 27 July 2012) para 245.

3 See eg Mikhail Gorbachev *Water crisis: clear and present danger* (Green Cross 20th anniversary: 2020 Statement) Geneva (2 September 2013).

4 See the same statement by Gorbachev. The Netherlands is also a particularly strong supporter of a strong SDG on water. See eg Minister van Infrastructuur en Milieu *Water in Beeld (Voortgangsrapportage Nationaal Waterplan en Bestuursakkoord Water over het jaar 2013)* 84.

5 Laura Horn 'Rio+20 United Nations Conference on Sustainable Development: is this the future we want?' (2013) 9(1) *Macquarie Journal of International and Comparative Environmental Law* 41.

ment between the parties regarding the desired interpretation of the Conventions, or as relevant subsequent practice in the application of these Conventions.<sup>6</sup>

The SDG process can also be used to affirm existing customary norms, and this is important considering the small number of ratifications of especially the Watercourses Convention. One may see nascent norms of customary law crystallising through the SDG process. A custom, which is slowly developing in the actual practice of states, might get a sudden boost when the Assembly formulates the practice in a clear and specific norm, and urges all states in the world to act in this way. Even when the Assembly's recommendations do not reflect already existing practices, they might *become* reflections of customary norms, if states pick up the recommendations and begin to act accordingly, for example by including the recommended principles in their bilateral or regional sustainable water management agreements, negotiated in the framework provided by the UNECE Convention and Watercourses Convention. The importance of seeing any political agreement on the sustainable management of water resources translated into binding international law cannot be overstated. International law adds some predictability and formality to any cooperation scheme between states sharing a particular watercourse, and to the system regulating the management of waters as a whole.<sup>7</sup>

After these general remarks on the cross-fertilisation between international water law and the SDG process, it is time to focus on the particular research question this article seeks to address, namely 'In what way can the sustainable development goals process be used to encourage the further evolution of international water law so that it effectively promotes the sustainable management of freshwater resources?' Here, the question is not how international water law can help achieve the SDG on water, but rather how the SDG on water can serve as a catalyst to make the interpretation and application of international water law more sustainable.<sup>8</sup>

To answer this question, an overview of the SDG process is provided, first, with a focus on discussions relating to sustainable water management (section 2). It is important to note that, at the time this article was finalised, the SDGs had not yet been adopted by the UN General Assembly, and thus the focus in this article is on analysing the SDG process, not the final outcome of that process. The aim of this section is to identify certain ideas that are fertile ground for more specific recommendations.<sup>9</sup> These recommendations on how the SDG process might trigger a renewed interpretation of certain provisions of international water law are provided next (section 3), followed

by a conclusion (section 4). Besides the SDG process, the recommendations are also inspired by the scholarship on the actual and potential cross-fertilisation between the concept of sustainable development and international water law,<sup>10</sup> or the protection of the environment and international water law.<sup>11</sup>

This article is normative and not descriptive, in the sense that it will not give a description of what the law is, but rather provide recommendations on how it might adapt. In this sense, the principal proposal of this article is to permit the SDGs on water to have a 'transformational effect' on existing international water law.<sup>12</sup> At the same time, in order for any SDGs to be effective and realistic, it has rightly been suggested that it must be 'consistent with international law and build upon commitments already made'.<sup>13</sup> What is ultimately crucial, of course, is that states adapt their actual practice to the evolution of international water law. It is only through actual state practice that the practical consequences of adopting a 'green' or sustainable development-friendly international water law become clear.<sup>14</sup>

At the same time as the SDGs are being formulated, important developments are taking place in international water law. In one and the same year (2014), the most important regional framework convention on transboundary waters will 'go global'. This is the Convention on the Protection and Use of Transboundary Watercourses and International Lakes of the United Nations Economic Commission for Europe (UNECE), adopted in Helsinki in 1992 (UNECE Convention). Also, the only truly global convention on international watercourses will finally enter into force. This is the Convention on the Law of the Non-navigational Uses of International Watercourses, adopted in New York in 1997 (Watercourses Convention).<sup>15</sup> Thus,

10 See eg Patricia Wouters and Alistair Rieu-Clarke 'The role of international water law in promoting sustainable development' in 'Review and analysis of aquatic environmental law and economic regulation in the UK and EU' (2001) 12(5) *Journal of Water Law* 281–83; Antoinette Hilderling *International Law, Sustainable Development and Water Management* (Eburon 2004); Alistair Rieu-Clarke *International Law and Sustainable Development: Lessons From the Law of International Watercourses* (IWA 2005); James A R Nafziger 'Basic functions and principles of international environmental law in the context of managing water resources' (2011) 39(3) *Denver Journal of International Law and Policy* 381–95; Tuomas Kuokkanen 'Integrating environmental protection and exploitation of natural resources: reflections on the evolution of the doctrine of sustainable development' (2004) 22(3) *Journal of Energy and Natural Resources Law* 345–48; Malgosia Fitzmaurice 'Protection of international watercourses' in Norman A Martínez Gutiérrez (ed) *Serving the Rule of International Maritime Law: Essays in Honour of Professor David Joseph Attard* (Routledge Abingdon 2010).

11 Owen McIntyre *Environmental Protection of International Watercourses under International Law* (Ashgate 2007).

12 See also Francesco Sindico 'Water governance in the aftermath of Rio+20' (2014) 16(2) *International Community Law Review* 251.

13 See Amy Cutter, Umberto Sconfienza and Farooq Ullah *Tests of Success for the SDGs: A Tool for Designing and Assessing Sustainable Development Goals and Targets* (Stakeholder Forum 2014) 10 (transformational) and 8 (consistent).

14 See also Malgosia Fitzmaurice 'The relationship between the law of international watercourses and sustainable development' in Malgosia Fitzmaurice (ed) *Research Handbook on International Environmental Law* (Edward Elgar Cheltenham 2010) 626.

15 See GA Res 51/229 (adopted 21 May 1997). For a general introduction or commentary see Alistair Rieu-Clarke, Ruby Moynihan and Bjorn-Oliver Magsig *UN Watercourses Convention: User's Guide* (2012) [http://www.gwp.org/Global/Our%20Approach/Strategic%20Allies/User's%20Guide%20to%20the%20UN%20Watercourses%20Convention%20\(2012\).pdf](http://www.gwp.org/Global/Our%20Approach/Strategic%20Allies/User's%20Guide%20to%20the%20UN%20Watercourses%20Convention%20(2012).pdf); and Flavia Loures, Alistair Rieu-Clarke and Marie-Laure Vercambre 'Everything you need to know about the UN Watercourses Convention' WWF (2009) [http://www.unwater.org/downloads/wwf\\_un\\_watercourses\\_brochure\\_for\\_web\\_1.pdf](http://www.unwater.org/downloads/wwf_un_watercourses_brochure_for_web_1.pdf).

6 See Vienna Convention on the Law of Treaties art 31.

7 See also Christina Leb *Cooperation in the Law of Transboundary Water Resources* (Cambridge University Press 2013) 252.

8 The former approach was used for example in Nicole Kranz, Lesha Witmer and Uschi Eid 'International development and environmental goals' in Flavia Rocha Loures and Alistair Rieu-Clarke (eds) *The UN Watercourses Convention in Force: Strengthening International Law for Transboundary Water Management* (Earthscan 2013).

9 As Malgosia Fitzmaurice recently pointed out, the big challenge for the future is how to apply the theory of sustainable development to the *practical* context of international water law. M Fitzmaurice 'Protection of international watercourses' in N A Martínez Gutiérrez *Serving the rule of international maritime law* (ed) (Routledge London 2012) 40–41. See also Stephen C McCaffrey 'International watercourses, environmental protection' in *Max Planck Encyclopedia of Public International Law* (April 2011).

one cannot imagine a better moment to promote, through the adoption of the SDGs, the universal participation in these Conventions and their 'sustainable development-friendly' interpretation and application.

## 2 SUSTAINABLE MANAGEMENT OF WATER RESOURCES IN THE SDG PROCESS

Before making recommendations on ways in which the SDG process might promote a sustainable development-friendly interpretation of international water law (see section 3), the SDG process is described, and the role of the commitment to manage one's water resources sustainably in it.

The drafting process of the SDGs takes place through two work streams, which will be brought together in 2015, when the UN General Assembly has to adopt the list of SDGs in the form of a resolution. From then onwards, the SDG process will be all about implementation, dissemination, monitoring compliance and creating awareness of the SDGs.

Turning first to the preparation and drafting stages, two work streams can be identified, both of which are crucial in the drafting of the SDGs. The first is a work stream led by the UN Secretary-General, with many reports and consultations feeding into this work stream. The second work stream is led by the Open Working Group on the Sustainable Development Goals.

From the beginning, water has been identified as an important issue. 'The future we want', the outcome document of the Rio+20 Conference held in 2012, which set the SDG process in motion, placed water at the heart of sustainable development.<sup>16</sup> It further called on 'the development of integrated water resource management and water efficiency plans, ensuring sustainable water use'.<sup>17</sup> Since then, those participating in the work streams have struggled to find water law's proper place in the SDG process. The recommendations in this article build on this struggle, and provide some helpful guidance that might be used at the implementation stages of the SDGs.

### 2.1 Work stream led by the Secretary-General of the United Nations

The first work stream is the one led by the Secretary-General of the United Nations (UNSG) Ban Ki-moon, who will be assisted by his Special Advisor on Post-2015 Development Planning, Amina Mohammed of Nigeria and by the Secretary-General's Advisory Board on Water and Sanitation. This panel has produced three so-called Hashimoto Action Plans. The third and last of these plans contains a concrete suggestion for a SDG on water.<sup>18</sup> The suggestion made in the plan is that an SDG on water must include, inter alia, a call upon all involved to

improve wastewater management, pollution prevention and integrated water resources management.<sup>19</sup>

There are also various participatory processes that provide valuable information, which the Secretary-General used when writing up his recommendations to the UN General Assembly. The most important are the Sustainable Development Solutions Network, the UN Global Compact and the High-level Panel of Eminent Persons on the Post-2015 Development Agenda. Each of these will be examined briefly.

The Sustainable Development Solutions Network is a network of scientists. The network presented its final report in October 2013.<sup>20</sup> In the report, the scientists noted that 'many countries face growing water stress and virtually all must improve the integrated and sustainable management of their water resources'. The report emphasised the need for long-term strategies involving not only states, but also local communities and businesses. The aim was 'to balance sustainable supply and use, reduce water loss, improve water retention, and lower pollution'. The scientists did not propose to include a separate water goal, but one of their proposed SDGs (SDG 9) included a clear reference to sustainable water management.<sup>21</sup>

The proposal was that 'water resources are managed sustainably and transparently to support inclusive economic and human development'. Of the concrete targets accompanying SDG 9, Target 9A is interesting, as it included the suggestion that all states adopt legislation requiring 'individuals, businesses and governments to pay the social cost of pollution and use of environmental services'. This target was applicable to water as well. This is a strategy worth exploring further. After all, most of the time, it is businesses and not the government itself, which are directly responsible for polluting and depleting water resources.<sup>22</sup> Target 9C is also worth referring to. It read as follows: 'all governments and businesses commit to the sustainable, integrated, and transparent management of water resources to support inclusive economic development and the achievement of all SDGs'. In order to make this rather vague target more concrete and measurable, the suggestion was made to include an obligation that the ratio of freshwater withdrawals to renewable freshwater supply should be lower than one.<sup>23</sup>

19 United Nations Secretary-General's Advisory Board on Water and Sanitation *Hashimoto Action Plan III: Strategy and Objectives through 2015* at 4 <http://www.unsgab.org/content/documents/hap3.pdf>.

20 See *An Action Agenda for Sustainable Development* Report for the UN Secretary-General (23 October 2013), prepared by the Leadership Council of the Sustainable Development Solutions Network at x, 19–20 <http://unsdsn.org/files/2013/11/An-Action-Agenda-for-Sustainable-Development.pdf>.

21 In Annex 3 (under Question 25) of *An Action Agenda for Sustainable Development*, the scientists explain that water resources management does not need a separate goal, because it is 'a cross-cutting requirement for all goals'.

22 The UNECE Convention does refer to the polluter pays principle at art 2(5)(b). The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (UNECE Water Convention) was adopted in Helsinki in 1992 and entered into force in 1996. Almost all countries sharing transboundary waters in the region of the United Nations Economic Commission for Europe (UNECE) are parties to the Convention. See also McIntyre (n 11) 284–86, who emphasises that the polluter who must pay does not need to be a state; it can also be a company or individual.

23 This can be found in Annex 3 to *An Action Agenda for Sustainable Development*, under question 25.

16 'The future we want' (n 2) para 119. See also Kranz and others (n 8) 249.

17 'The future we want' (n 2) para 120.

18 Secretary-General's Advisory Board on Water and Sanitation *Water and Sanitation for All: Securing our Future, Preserving our Planet* (UNSGAB's call for a Post-2015 Global Goal on Water) (2013) <http://www.unsgab.org/>.



The UN Global Compact is a network of business representatives. They were – and felt – excluded from the drafting of the MDGs, and thus it is a good thing that they are now playing a prominent part in the process from the very beginning.<sup>24</sup> The Global Compact prepared its own list of SDGs.<sup>25</sup> The report does not contain many original or fresh ideas relating to water management. The business representatives admitted that industries were responsible for the use of most of the world's freshwater, but they did not accept the kind of legal responsibilities suggested by the scientists. A proposal of the business representatives was to look critically at over-consumption, especially in the agricultural sector.

The High-level Panel of Eminent Persons on the Post-2015 Development Agenda is a group of experts, assembled by the Secretary-General. They were asked to draft a report, entitled 'A new global partnership: eradicate poverty and transform economies through sustainable development'.<sup>26</sup> They proposed to include a separate SDG on water: their SDG 6 called for universal access to water and sanitation. Their SDG on water was phrased in human rights language, and thus the focus was on access to safe drinking water and sanitation of the present generation. At the same, there was a reference to sustainable water management. One of the proposed targets was very similar to the one proposed by the scientists, ie to 'bring freshwater withdrawals in line with supply', and to increase water efficiency in agriculture, industry and urban areas by a set percentage. SDG 9, on the sustainable management of natural resources, did not refer explicitly to water management. However, it did contain some interesting ideas that could be applied to all natural resources, including freshwater. One of these ideas was to attach an economic value to natural resources:

Today, natural resources are often used as if they have no economic value, as if they do not need to be managed for the benefit of future generations as well as our own. But natural resources are scarce, and damage to them can be irreversible. Once they are gone, they are gone for good.

The target to 'safeguard ecosystems' is relevant to water governance, as it applied to freshwater ecosystems.<sup>27</sup>

There exist various global consultations, mostly provided online, through which the general public can express its view. One of these global consultations is an online survey: the *MyWorld* survey.<sup>28</sup> This survey invited the entire world to list 16 priorities in order of importance. More than seven million votes were cast by March 2015, and access to clean water ranked seventh; the protection of rivers, oceans and forests ranked fourteenth. These are

24 Global Compact and the World Business Council for Sustainable Development *Joint Report to the High-level Panel of the Post-2015 UN Development Agenda* (March 2013) 2 [http://www.unglobalcompact.org/docs/issues\\_doc/development/Joint\\_Report\\_HLP.pdf](http://www.unglobalcompact.org/docs/issues_doc/development/Joint_Report_HLP.pdf).

25 United Nations Global Compact *Corporate Sustainability and the United Nations Post-2015 Development Agenda: Perspectives from UN Global Compact Participants on Global Priorities and How to Engage Business towards Sustainable Development Goals* Report to the United Nations Secretary-General (17 June 2013) [http://www.unglobalcompact.org/docs/news\\_events/9.1\\_news\\_archives/2013\\_06\\_18/UNGC\\_Post2015\\_Report.pdf](http://www.unglobalcompact.org/docs/news_events/9.1_news_archives/2013_06_18/UNGC_Post2015_Report.pdf).

26 *A New Global Partnership* Report of the High-level Panel of Eminent Persons on the Post-2015 Development Agenda at 17 <http://www.post2015hlp.org/wp-content/uploads/2013/05/UN-Report.pdf>.

27 Target 9c *A New Global Partnership* at 31.

28 *MyWorld2015*, a global online survey for citizens organized by the United Nations <http://www.myworld2015.org/>.

the priorities that come closest to a possible goal on sustainable management of international water resources.

Some thematic consultations were also organised, and there was one such Post-2015 Thematic Consultation on water.<sup>29</sup> These thematic consultations allowed stakeholders and experts on a particular theme to express their views, and they can do so online or at various meetings. This then led to a report, in which an attempt was made to achieve the impossible task of summarising all this input. The report noted that water management was 'largely ignored in the MDGs', and that the SDG drafting process should do better in this respect.<sup>30</sup> The way to do so was to consider it as a cross-cutting issue. The report called for 'a transparent, equitable and sustainable balance of water use that satisfies human needs – economic and social – as well as ecosystem requirements'.<sup>31</sup>

Throughout the report, references were made to the protection of freshwater ecosystems. The report argued that one way to do this was to invest in better water governance, or good water governance. This proposal reflects the good governance principle related to sustainable development by the New Delhi Declaration;<sup>32</sup> it is worth exploring this strategy further. The report even contained explicit references to the legal framework of international water law. It was noted that the Watercourses Convention and the UNECE Convention provided the 'frameworks for cooperation'.<sup>33</sup> Such cooperation was imperative to avoid water wars. This insight was the basis of the recommendation to 'establish strong and long-term transboundary cooperation, relying on sound legal and institutional arrangements, such as provided by multilateral and bilateral agreements and joint basin governing institutions'.<sup>34</sup>

Various states also held national consultations. The results of 22 national consultations have been put together in a report.<sup>35</sup> From a synthesis of various national consultations it followed that one of the priorities should be the development of 'transboundary agreements on the sustainable use and equitable share of transboundary watercourses'.<sup>36</sup> Many of the national consultations also showed a focus on the protection of ecosystems. See, for example, the national consultations held in Ghana, Nicaragua, Indonesia, Tanzania, Antigua and Barbuda, Bangladesh and Mozambique.<sup>37</sup>

The UN Secretary General's Synthesis Report identified 'planet' as one of the six essential elements. This element required the protection of our ecosystems for all societies and our children. The relevant part of the report included

29 *Post 2015 Water Thematic Consultation* Final report of *The World We Want 2015 Water Thematic Consultation*, facilitated by UN-Water (2013) <http://www.worldwewant2015.org/water>.

30 *ibid* at 4.

31 *ibid* at 16.

32 See *New Delhi Declaration of Principles of International Law Relating to Sustainable Development* (adopted by the International Law Association at its 70th Conference, held in New Delhi, India, 2–6 April 2002). The Declaration was published, with an introduction by Nico Schrijver, in the *Netherlands International Law Review* (2002) at 299–305.

33 *Post 2015 Water Thematic Consultation* (n 29) 17.

34 *ibid* 18.

35 Global Water Partnership *National Stakeholder Consultations on Water: Supporting the Post-2015 Development Agenda* (2013) <http://sustainabledevelopment.un.org/content/documents/1815nationalstakeholder.pdf>.

36 *ibid* 16.

37 Global Water Partnership *National Stakeholder Consultations on Water* esp at 14, 28.

a reference to the sustainable management of water resources. (UNSG 'The Road to Dignity by 2030' UNDoc A/6g/700 4 December 2014 para 75.)

## 2.2 The Open Working Group on the SDGs

The other work stream consists of the work of the Open Working Group (OWG) on the SDGs. This is the more traditional process of the two. This OWG has 30 UN members, but in practice these seats circulate. In total, more than 70 UN members participate in the work of the group, sharing seats. The Netherlands, for example, shares a seat with Australia and the UK. This way, many states are involved in the work of the OWG. The OWG then writes a report which is submitted to the full membership of the UN General Assembly, and that report constitutes the basis of a UN General Assembly resolution that will contain the new SDGs.

NGOs with ECOSOC consultative status participate in the official meetings of the OWG. Representatives of the so-called 'major groups' are also invited. These major groups were identified in Rio de Janeiro in 1992 at the Rio Conference on the Environment and Development.<sup>38</sup> This is a very diverse group. It includes women, children and young people, indigenous people, non-governmental organisations, local authorities, workers and their trade unions, business and industry, the scientific and technological community, and farmers.<sup>39</sup> Representatives of these major groups have a special priority access to the meetings of the OWG. This includes their participation in the so-called morning sessions, which take place before the official sessions. There, various types of civil society representatives are invited to express their views.

Before each session of the OWG, the UN System Technical Support Team publishes a Technical Support Team Issues Brief.<sup>40</sup> This brief gives an overview of the debate so far. The brief for the third session, which was on water issues, shows that there was general agreement on the importance of water for any global sustainable development policy. One open question was whether there should be a separate goal on a sustainable approach to water issues, or whether this should be regarded as cross-cutting issue. The brief is not clear about what should be the exact formulation of the goal, or the envisaged role of international water law in it.

So what did the OWG think about management of shared water resources? At the third session, it was noted that sustainable water management was not included in the MDGs, and thus the group could not build on the MDGs, as it could do for many other SDGs. The importance of 'integrated sustainable management of water resources' was acknowledged by a majority of the state delegates.

In general, the views of the state delegates were more cautious, more 'traditional', than those put forward in the reports prepared by the scientists, or the experts referred to above. Most importantly, various state delegates emphasised respect for national sovereignty when it comes to the management of water resources. In addition, there was

38 *Agenda 21* (adopted at the United Nations Conference on Environment and Development, held at Rio de Janeiro, Brazil 3–14 June 1992) UN Doc A/CONF.151/26 (vols I–III).

39 *ibid* ss 24–32.

40 TST Issues Brief: Water and Sanitation <http://sustainabledevelopment.un.org/content/documents/1801tstissueswater.pdf>.

significant resistance to the proposal that water was best protected when treated as an economic good, which could be bought and sold.

In June 2014, the Open Working Group published its Zero Draft of the SDGs.<sup>41</sup> Since then, this has become the essential document for everyone involved in the SDG process to work with and comment on. Seventeen SDGs had been provisionally identified, of which SDG 6 is the most relevant for present purposes.<sup>42</sup> The goal is to ensure the availability and sustainable management of water and sanitation for all. The most relevant targets include:<sup>43</sup>

- provide universal access to safe and affordable drinking water
- improve water quality by significantly reducing pollution
- improve water-use efficiency
- implement integrated water resources management, including appropriate trans-boundary cooperation
- ensure sustainable extraction and supply of fresh water, and by 2020 protect and restore ecosystems and aquifers that provide water-related services.

Proposed goal 15, on the protection of ecosystems, was something of a missed opportunity, as it barely referred to freshwater ecosystems. At the same time, there is no reason to think SDG 15 would not be applicable to freshwater ecosystems.

At the 12th Session of the OWG, the major groups were provided with an opportunity to make comments. It is worth having a look at some of these first comments.

Business and industry proposed adding a commitment to 'strengthen equitable, participatory and accountable water governance in all countries including appropriate trans-boundary cooperation'.<sup>44</sup> The Women's Major Group proposed to replace the reference to 'integrated' water resources management by a reference to management that is 'people-centred democratic, participatory and accountable'.<sup>45</sup> The explanation was that water resources management should be approached from a human rights and public participation perspective.<sup>46</sup> It was also proposed to include a reference to the 'equitable and sustainable use of water resources'.<sup>47</sup> Finally, an entirely new target was suggested: to 'reduce inequality in access to water supplies through hierarchy of water use that prioritizes vulner-

41 Open Working Group on Sustainable Development Goals *Introduction to the Proposal of the Open Working Group for Sustainable Development Goals* (version of 2 June 2014) <http://sustainabledevelopment.un.org/>.

42 *ibid*. Some of the other proposed SDGs also have links with the sustainable use of transboundary waters, such as SDG 3 on the attainment of a healthy life for all, which has the reduction of the number of deaths and illnesses from water pollution as one of its targets. However, the only goal specifically on sustainable water management is SDG 6.

43 References to the human rights-based approach have been omitted in this list, because human rights claims are made and effectuated in a regime that is separate from the legal regime discussed in this article.

44 Business and Industry *Proposed Revisions by Focus Area* (Working Document for 16–20 June Session of Open Working Group) <http://sustainabledevelopment.un.org/content/documents/10489business.pdf>.

45 Women's Major Group *Inputs for SDG6* <http://sustainabledevelopment.un.org/content/documents/10464Karanunanathan.pdf>.

46 See also Women's Major Group *Introduction and Proposed Goals and Targets on Sustainable Development for the Post-2015 Development Agenda* (Comments prepared by the Women's Major Group on the Zero Draft presented by the OWG co-chairs on 2 June 2014, Version 15 June) 13 <http://sustainabledevelopment.un.org/content/documents/10419women.pdf>.

47 Women's Major Group (n 45).

able populations and fragile ecosystems over large-scale commercial uses'.<sup>48</sup>

The farmers made a rather selfish proposal, that the goal 'should include reference to attaining adequate water and water quality for the agricultural sector and farmers in order to balance with the needs of other users'.<sup>49</sup> The Science and Technology Major Group proposed to add a target on the resilience of water systems to disasters: 'To ensure water systems have the capacity to cope with extreme events, in particular climate change impacts and rapid population growth in urban areas'.<sup>50</sup>

In July 2014, the OWG published its Proposal for Sustainable Development Goals.<sup>51</sup> Compared with the Zero Draft, it was changed in various ways. SDG 6 now read as follows (where relevant):

- achieve universal and equitable access to safe and affordable drinking water for all
- improve water quality by reducing pollution
- substantially increase water-use efficiency across all sectors and *ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity*
- implement integrated water resources management *at all levels*, including through transboundary co-operation as appropriate
- protect and restore water-related ecosystems, *including mountains, forests, wetlands, rivers, aquifers and lakes*
- *expand international cooperation and capacity-building support to developing countries in water and sanitation related activities and programmes . . .*
- *support and strengthen the participation of local communities for improving water and sanitation management.*<sup>52</sup>

Furthermore, SDG 15 had an explicit reference to the 'conservation, restoration and sustainable use' of 'fresh-water ecosystems'.

### 2.3 Intermediate conclusion

With the help of the above overview of water-related discussions and proposals within the context of the SDG process, the ideas and themes that are most relevant to international water law can be identified. There are at least three:

1. In the Rio+20 Declaration, 'sustainable water use' had already been identified as one of the most important aims for the future. SDG 6 in the outcome document of the Open Working Group, on ensuring the availability and *sustainable* management of water, reflects this and, from it, a recommendation for all states un-

48 *ibid.*

49 Farmer's Major Group *Introduction and Proposed Goals and Targets on Sustainable Development for the Post-2015 Development Agenda* (Draft Farmer Major Group Statement) <http://sustainabledevelopment.un.org/content/documents/10484farmers.pdf>.

50 Input from the Science and Technology Major Group provided by David Griggs on behalf of the International Council for Science (ICSU) <http://sustainabledevelopment.un.org/content/documents/10409science.pdf>.

51 *Proposal of The Open Working Group for Sustainable Development Goals* (19 July 2014) <http://sustainabledevelopment.un.org/focussdgs.html>. See also 'Report of the OUG of the General Assembly on Sustainable Development Goals' UNDoc A/68/970 distributed 12 August 2014.

52 What is in *italics* is new. See *ibid* 'Report' pp 14–15.

ambiguously to embrace a 'sustainable' interpretation of water law's fundamental principles can be derived.

2. The Post-2015 Water Thematic Consultation in particular made many references to the protection of fresh-water 'ecosystems'. As shown above, this emphasis on ecosystems is supported by various national consultations. In the outcome document of the OWG, the term ecosystem is applied in a much broader sense, and with much more confidence, than in the earlier version. Since there is still much uncertainty about the meaning of the term 'ecosystem', the SDG process, with its emphasis on ecosystems, could serve as inspiration for a recommendation to encourage the further development of the ecosystems approach through international water law.
3. In response to the Zero Draft of the OWG, both the major groups of women and business and industry proposed calling for a more 'participatory' water governance system. In the outcome document the importance of public participation, especially of local communities in water governance is acknowledged. This serves as motivation to encourage states to consider exploiting the potential of international water law in facilitating public participation in the sustainable management of waters.

Some parts of the SDG on water appear to encourage all states to acknowledge a universal human right of access to water of sufficient quality and quantity.<sup>53</sup> International water law does not approach the management of trans-boundary waters from such a human rights perspective,<sup>54</sup> although it does emphasise the importance of vital human needs.<sup>55</sup> Therefore, in this article no recommendation will be proposed in this respect. What the SDG process could do is to bring the human rights discourse and international water law closer together.<sup>56</sup> However, that falls beyond the scope of this article.

53 Some institutions applaud or accept uncritically such a human rights-based approach to water issues. See eg World Health Organization and UNICEF *Progress on Sanitation and Drinking-water: 2013 Update* 11; and WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation *Report of the Second Consultation on Post-2015 Monitoring of Drinking-water, Sanitation and Hygiene*, a consultation held in The Hague, Netherlands (3–5 December 2012). But it has been criticised elsewhere. See eg Sindico (n 12) 251.

54 See, however, art 17 of the Berlin Rules: a provision on the human right of access to water in a document containing mainly rules of international water law. In the Commentary to art 17, there are many references to this right in international and regional human rights law (but not in international water law). The Berlin Rules on Water Resources were approved by the International Law Association's Water Resources Law Committee in 2004. These rules set forth customary international law relating to fresh water resources. They replace the Helsinki Rules, incorporating concepts from international environmental and human rights law, in addition to making other changes. See International Law Association *Reports of Conferences* (2004) vol 71 pt II: Water Resources Law 334–421 [http://internationalwaterlaw.org/documents/intldocs/ILA\\_Berlin\\_Rules-2004.pdf](http://internationalwaterlaw.org/documents/intldocs/ILA_Berlin_Rules-2004.pdf).

55 See Watercourses Convention art 10 <http://www.unwatercoursesconvention.org/resources/>. There is no equivalent in the UNECE Convention (n 22). The Berlin Rules (n 54) define waters used for 'vital human needs' as 'waters used for immediate human survival, including drinking, cooking, and sanitary needs, as well as water needed for the immediate sustenance of a household'. See Berlin Rules art 3(20) and art 14, which urges states to give preference to satisfying vital human needs. See also the Commentary to art 22 of International Union for Conservation of Nature and Natural Resources *Draft International Covenant on Environment and Development* (4th edn) 81.

56 On the need for such integration, see also Monika Ambrus 'Through the looking glass of global constitutionalism and global administrative law: different stories about the crisis in global water governance' (2013) 6(2) *Erasmus Law Review* 38.



### 3 RECOMMENDATIONS

International water law provides, potentially, a suitable legal framework through which the SDG's ambitions and targets listed above can be promoted. In this section, the following is examined: the potential role of international water law in promoting the sustainable management of freshwater resources (3.a); its potential role in promoting the ecosystems approach to freshwater resources (3.b); and the potential role of international water law in facilitating public participation in water governance at all levels (3.c). In short, this section contains three recommendations on how the SDG process could trigger the evolution of international water law, to make it more 'green', more sustainable, and on how the full potential of international water law could be used to realise the SDG on water by 2030.<sup>57</sup>

#### 3.1 Unambiguously embrace a 'sustainable' interpretation of water law's fundamental principles

When states ratify the Watercourses Convention and the UNECE Convention, they can participate in the evolution of the regime of international water law towards a more sustainable legal framework of transboundary cooperation. The essence of sustainable development has been identified authoritatively in Principle 3 of the Rio Declaration of 1992, according to which the developmental and environmental needs of present and future generations must be met equitably.<sup>58</sup> The UNECE Convention has a clear reference to sustainable development. According to this Convention, when taking appropriate measures to prevent control and reduce any transboundary impact, states party to the Convention shall be guided, inter alia, by the principle that 'water resources shall be managed so that the needs of the present generation are met without compromising the ability of future generations to meet their own needs'.<sup>59</sup> Clearly, this is an explicit reference to the principle of sustainable development, but it is only applicable in a transboundary context.<sup>60</sup> In other words: it seeks to protect the interests of other states, not future generations per se. It is unclear how it is supposed to do this.<sup>61</sup>

The Watercourses Convention makes explicit reference to the principle of sustainable development in the

preamble<sup>62</sup> and in Article 24.<sup>63</sup> Article 5 refers to the 'sustainable utilisation' of shared watercourses.<sup>64</sup> In general, it can be said that the UNECE Convention is much 'greener' than the Watercourses Convention.<sup>65</sup> This was a deliberate decision of the states at the time the Watercourses Convention was drafted. China, for example, stressed at the time of drafting, that the Convention was meant to be a treaty regulating the economic use of shared watercourses and not a treaty to protect the environment of these watercourses.<sup>66</sup> At the same time, there is enough in the Watercourses Convention to use as a legal basis for a sustainable development-friendly interpretation of the treaty.

One principle of international water law is the principle that any state must take all appropriate measures<sup>67</sup> to prevent that the use of an international watercourse within its territory causes significant harm *to another state*.<sup>68</sup> This is a water law variation of a general principle of international (environmental) law, which obliges any state to ensure that activities within its jurisdiction or control do not cause damage to (the environment of) another state.<sup>69</sup> The emphasis on the transboundary aspect makes it difficult to link this general principle directly to sustainable development, ie the protection of the developmental interests of future generations. It is more designed to protect the interests of neighbouring states. This is evidenced both in the Watercourses Convention<sup>70</sup> and in the UNECE Convention.<sup>71</sup> It has been suggested to remove the obligation not to cause significant harm from the transboundary context, in the sense that it does not matter whether the harm caused to the waters causes damage *to another state* or, for example, to a state's own future generations. The Berlin Rules include a provision obliging states to 'take all appropriate measures to prevent or minimize environmental harm', and this is *not* limited to the prevention of harm caused to another state.<sup>72</sup> Since

62 According to its preamble, the Watercourses Convention was inspired by a shared conviction among states that 'a framework convention will ensure the utilization, development, conservation, management and protection of international watercourses and the promotion of the optimal and sustainable utilization thereof for present and future generations'.

63 See below.

64 See below.

65 See Philippe Sands *Principles of International Environmental Law* (3rd edn Cambridge University Press 2012) 323; David Freestone, Salman M A Salman 'Ocean and freshwater resources' in Daniel Bodansky, Jutta Brunnee and Ellen Hey (eds) *The Oxford Handbook of International Environmental Law* (Oxford University Press Oxford 2007) 355–56.

66 See Marty (n 57) 239.

67 This should be read as establishing a 'due diligence' obligation. An earlier version of art 7 referred to 'due diligence' explicitly, but it was reworded slightly, without altering the essence of it. See also Stephen C McCaffrey 'An overview of the UN Convention on the Law of the Non-navigational Uses of International Watercourses' (2000) 20 *Journal of Land, Resources & Environmental Law* 62–63.

68 Berlin Rules (n 54) art 12. On prevention, control and reduction of transboundary impact, see also UNECE Convention (n 22) art 3.

69 See Rio Declaration Principle 2.

70 Article 7 of the Watercourses Convention obliges states to do their very best to prevent the 'causing of significant harm *to other watercourse States*' (emphasis added).

71 Article 2 of the UNECE Convention obliges states to do their very best to 'prevent, control and reduce any transboundary impact,' and the latter is defined in art 1(2) as 'any significant adverse effect on the environment [...] *within an area under the jurisdiction of another Party*' (emphasis added).

72 Berlin Rules (n 54) Commentary to art 8. Of course, the Berlin Rules also call upon states to prevent their territory from being used to cause harm to another state (art 16).

57 On the need for such an evolution see Frank Marty *Managing International Rivers: Problems, Politics and Institutions* (Peter Lang Bern 2001) 242.

58 *Rio Declaration on Environment and Development*, published in the *Report of the United Nations Conference on Environment and Development*, held in Rio de Janeiro between 3 and 14 June 1992 UN Doc A/CONF.151/26/Rev I (vol I). The Rio Declaration was accompanied by a Plan of Implementation, called Agenda 21. Despite its length, Agenda 21 contained very few specific targets or measures relating to sustainable management of shared water resources. See also Meredith Giordano, Aaron Wolf 'Sharing waters: post-Rio international water management' (2003) 27(2) *Natural Resources Forum* 167. See in general Fitzmaurice (n 14).

59 UNECE Convention (n 22) art 2(5)(c).

60 In addition to this, the preamble of the UNECE Convention (n 22) commends the efforts already undertaken by states to strengthen co-operation for 'sustainable water management, conservation of water resources and environmental protection'.

61 It is worth emphasising that the UNECE Convention was adopted in 1992, when the concept of sustainable development was still in its infancy. This explains why the text of the Convention does not elaborate extensively on the concept.

this was a particularly contentious point in the ILA Committee, it is worth pointing out here that the authors of the Berlin Rules purported to have included existing rules of customary international law, but not everybody was convinced of that claim. According to a group of dissenters within the ILA, the Berlin Rules did not reflect existing custom. In fact, they saw much of what was included in the Berlin Rules as 'a radical and unwarranted departure from existing customary law'.<sup>73</sup> Considering the authority and reputation of the authors of this dissenting opinion, it is important to keep this in mind.<sup>74</sup> Therefore, in this article, the Berlin Rules are referred to as source of inspiration for change, not as a reflection of existing law.<sup>75</sup>

The 'cornerstone' of international water law is the right to an equitable and reasonable use of transboundary waters.<sup>76</sup> This rule is codified in Article 5 of the Watercourses Convention, and it has much more potential when it comes to a 'sustainable development-friendly' interpretation than the do-not-cause-transboundary-harm rule. Article 5 of the Watercourses Convention obliges states to use and develop an international watercourse equitably and reasonably, and 'with a view to attaining optimal and *sustainable utilization* thereof and benefits therefrom, taking into account the interests of the watercourse states concerned, consistent with adequate protection of the watercourse' (emphasis added). In efforts to link the legal framework of international water law with sustainable development, this reference to 'sustainable utilization' is, of course, essential.<sup>77</sup>

But what to make of it? The Convention does not define the term 'sustainable use', and neither does the ILC Commentary.<sup>78</sup> In the Berlin Rules of 2004, the ILA came up with a definition, which defined 'sustainable use' as follows:

'Sustainable use' means the integrated management of resources to assure efficient use of and equitable access to waters for the benefit of current and future generations while preserving renewable resources and maintaining non-renewable resources to the maximum extent reasonably possible.<sup>79</sup>

73 Berlin Rules (n 54) Dissent [http://www.internationalwaterlaw.org/documents/intldocs/ila\\_berlin\\_rules\\_dissent.html](http://www.internationalwaterlaw.org/documents/intldocs/ila_berlin_rules_dissent.html).

74 The authors were Slavko Bogdanovic, Charles Bourne, Stefano Burchi and Patricia Wouters.

75 See also Alistair Rieu-Clarke 'International freshwater law' in Shawkat Alam (ed) *Routledge Handbook of International Environmental Law* (Routledge Abingdon 2013) 248; Sands (n 65) 309. Freestone and Salman, on the other hand, refer to the rules as reflection of custom. See Freestone and Salman (n 65) 355.

76 McCaffrey (n 67) 60.

77 Fuentes makes a big deal of the fact that the term 'sustainable development' is used in art 24, whilst the preamble and art 5 refer only to sustainable utilisation. But the difference is not clear. See Ximena Fuentes 'Sustainable development and the equitable utilisation of international watercourses' (1998) 69 *British Yearbook of International Law* 122.

78 ILC 'Draft Articles on the Law of the Non-navigational Uses of International Watercourses and Commentaries thereto' (1994) 2(II) *Yearbook of the International Law Commission*. There is a good reason for this: the reference to 'sustainable use' was added at the request of the Netherlands and Finland after the draft articles were finished in 1994. They constituted the basis of the text of the Watercourses Convention, which was itself adopted in 1997. See the Summary records of the 15th meeting of the Sixth Committee of the UN General Assembly, held on Tuesday 8 October 1996 UN Doc A/C.6/51/SR.15 at 2.

79 Berlin Rules (n 54) art 3(19). The Commentary explains that this definition was derived from declarations on sustainable development, such as the Rio Declaration of 1992.

The link between 'sustainable use' – whatever its precise definition – and 'equitable and reasonable use' is unclear.<sup>80</sup> Many scholars have suggested that sustainable use is part of the obligation to use the water resources equitably and reasonably. Owen McIntyre, for example, refers to a legal regime of 'equitable and sustainable utilization'.<sup>81</sup> Patricia Wouters has proposed that, 'given our present knowledge of the effects of economic development on the environment, it is extremely unlikely that a use, which endangers the long-term potential of renewable resources such as water, would [today] be considered reasonable'.<sup>82</sup>

Article 5 also allows a different reading, ie that 'sustainable use' is a separate obligation, which coexists independently with that of 'equitable and reasonable use'. Ximena Fuentes suggested such an interpretation.<sup>83</sup> If equity narrowly defined is about balancing the rights of different states sharing a watercourse, then sustainable development is about intergenerational equity: balancing the rights of the present and the future generation.<sup>84</sup> Even though it is sometimes suggested that the concept of equity by definition includes intergenerational equity,<sup>85</sup> there is little indication that Article 5 was meant to refer to the latter type of equity as well.<sup>86</sup> The equity rule has its origin in the idea of 'equitable apportionment' of the user rights to the river. Traditionally, future generations were not granted their share of these rights. Whether water was wasted or was used unsustainably by one party did have a negative impact for this party on the apportionment of watercourse rights and benefits amongst the present generation (intragenerational equity).<sup>87</sup>

Article 7 of the Berlin Rules proposed, as a separate obligation, that 'all States shall take all appropriate measures to manage waters sustainably'. According to the ILA Committee's commentary, the obligation of sustainable use was 'a separate and compelling obligation that, as

80 The Watercourses Convention was prepared by the International Law Commission (ILC). However, the ILC's version of art 5 had no reference to sustainability. The records show that De Villeneuve, the representative of the Netherlands at the General Assembly's Sixth Legal Committee, proposed that art 5 should also refer to the principle of sustainable development, and this was done. See Summary records of the 15th meeting of the Sixth Committee of the UN General Assembly (n 78). See also Patricia Wouters 'The international law of watercourses: new dimensions' (26 June 2011) 3 *Collected Courses of the Xiamen Academy of International Law* (2010) 347–541 at 401 <http://ssrn.com/abstract=2359899>.

81 McIntyre (n 11) 315. See also Owen McIntyre 'The role of customary rules and principles of international environmental law in the protection of shared international freshwater resources' (2006) 46(1) *Journal of Natural Resources* 160.

82 See Wouters and Rieu-Clarke (n 10) 282. See also Patricia Wouters 'The relevance and role of water law in the sustainable development of freshwater' (2000) 25(2) *Water International* 205–06. For a similar approach see ILC Report on the work of its sixtieth session (5 May–6 June and 7 July–8 August 2008) Supplement No 10 (A/63/10) 4.

83 Fuentes (n 77) 129.

84 *ibid* 177–78.

85 See eg Division for Sustainable Development of the Commission on Sustainable Development *Report of the Expert Group Meeting on Identification of Principles of International Law for Sustainable Development* (1996) paras 41–47. This principle was held applicable also to freshwater resources.

86 See Fitzmaurice (n 14) 607 and Hilderling (n 10). See especially principle 3.1 of Hilderling's fascinating 'Draft declaration on guardianship over water', included in the book.

87 About 'equitable apportionment' as origin of 'equitable use' see Stephen C McCaffrey *The Law of International Watercourses* (2nd edn Oxford University Press Oxford 2007) 386–99.



indicated in the UN Convention, art. 5, conditions the rule of equitable and reasonable use without displacing it'.<sup>88</sup> Some of the Committee members did not agree with this approach. They believed that this emphasis on environmental duties distorted the delicate balance between economic use and ecological protection and preservation on which international water law was based.<sup>89</sup>

For a 'sustainable development-friendly' interpretation of Article 5, support can be found in other articles, notably Article 6, and the so-called 'environmental provisions' of Articles 20–24 of the Watercourses Convention.<sup>90</sup> In view of Owen McIntyre, the latter rules together constitute a 'comprehensive regime of environmental protection'.<sup>91</sup> Article 6 lists certain factors relevant to equitable and reasonable utilisation, and although Ximena Fuentes rightly pointed out that 'sustainable development' was not explicitly included,<sup>92</sup> one must admit that these factors include 'ecological factors' and the conservation and protection of the waters.<sup>93</sup>

Article 24 of the Watercourses Convention is perhaps the most interesting, as it is the only article which explicitly uses the term 'sustainable development'. The ILC explained that the obligation of 'planning the development of a watercourse so that it may be sustained for the benefit of present and future generations [was] emphasized in [Article 24] because of its fundamental importance'.<sup>94</sup> Fitzmaurice went so far as to conclude from this provision that cooperation in the protection of watercourses should generally rely on the principles of sustainable development.<sup>95</sup>

The existing legal framework thus provides enough room for a 'sustainable development friendly' interpretation, but it is important that states explicitly adopt this approach, and actively promote this 'greening' of international water law. This way, the practical consequences of such an approach can also be developed in more detail. The idea is that future generations are entitled to use the water resources as well, and this should be taken into account by the present generation. This does not necessarily mean that states must be punished when they do not use the water resources in a sustainable way, or that the more sustainable user of a shared water resource is entitled to a bigger share. This might be different in the event that one of the parties is 'intentionally or negligently wasteful' in using its share of the waters.<sup>96</sup>

Through the SDG process, states can explicitly and unequivocally embrace this 'sustainable' interpretation of the general principles of international water law. They can do so, first, by unambiguously accepting a 'green' interpretation of the bedrock principle of equitable and reasonable use (Article 5), and subsequently by integrating this new approach in the bilateral or regional agreements they make with states with whom they share a water resource. Both domestic and – especially – international dispute settlement mechanisms can play an important role in this process by supporting this 'green' interpretation of international water law. Reference can be made here to the *Gabčíkovo-Nagymaros* case, where the International Court of Justice both referred explicitly to the UN Watercourses Convention and endorsed sustainable development as a relevant and applicable principle of international law.<sup>97</sup>

### 3.2 Encourage the further development of the ecosystems approach

Article 20 of the Watercourses Convention proclaims that 'watercourse States shall, individually and, where appropriate, jointly, protect and preserve the ecosystems of international watercourses'. This obligation is a stand-alone obligation. It does not have an explicit link with the obligation not to cause transboundary harm (Article 7), and thus does not have to be interpreted in that transboundary context.<sup>98</sup> The UNECE Convention calls upon all states 'to prevent, control and reduce transboundary impact', *inter alia* by ensuring that 'sustainable water-resources management, including the application of the ecosystems approach, is promoted'.<sup>99</sup> Here, the link with the obligation not to cause transboundary harm or 'impact' is clear.

So what are freshwater ecosystems and what is the ecosystems approach? According to the ILC commentary to the Watercourses Convention, an ecosystem is an 'ecological unit consisting of living and non-living components that are interdependent and function as a community'.<sup>100</sup> The duty to protect such ecosystems 'requires that watercourse States shield the ecosystems of international watercourses from harm or damage'; and the duty to preserve 'requires that these ecosystems be protected in such a way as to maintain them as much as possible in their natural state'.<sup>101</sup>

88 Berlin Rules (n 54) Commentary to art 7. Later on, the Commentary adds that 'the right to an equitable utilization does not trump the obligations to assure the [...] sustainable use of the waters'. See Berlin Rules (n 54) Commentary to art 12 (which contains the rule on equitable and reasonable utilisation).

89 Berlin Rules (n 54) Dissenting Opinion <http://www.internationalwaterlaw.org/>. See also McIntyre (n 11) 248, where he states that, in his view, these articles 'flesh out' the general obligation of art 5, including the part on 'sustainable use'.

90 McCaffrey (n 67) 66.

91 McIntyre (n 11) 249.

92 Fuentes (n 77) 120.

93 According to the Berlin Rules (n 54), the references to sustainable development in art 6 were not explicit enough, and thus it was proposed to add the following factors: 'the sustainability of proposed or existing uses [and] the minimization of environmental harm'. Berlin Rules art 13.

94 ILC (n 78) 125.

95 Fitzmaurice (n 10) 38.

96 See Ximena Fuentes 'The criteria for the equitable utilisation of international rivers' (1997) 67 *British Yearbook of International Law* 381–822.

97 International Court of Justice, *Gabčíkovo-Nagymaros Project* (Hungary/Slovakia) Judgment of 25 September 1997 at paras 85 and 140.

98 See also McCaffrey (n 67) 66, and McCaffrey (n 87) 459. For a different view see Marty (n 57) 221–22.

99 UNECE Convention (n 22) art 3(1)(i). The Berlin Rules (n 54) have a provision on ecological integrity. Berlin Rules art 22. Ecological integrity is defined as 'the natural condition of waters and other resources sufficient to assure the biological, chemical, and physical integrity of the aquatic environment' and the aquatic environment is in turn defined as 'all surface waters and groundwater, the lands and subsurface geological formations connected to those waters, and the atmosphere related to those waters and lands'. See Berlin Rules art 3(1) and 3(6).

100 ILC (n 78) 118. See also ILC (n 82) 55, where the same definition is applied to aquifers. Different definitions have been proposed elsewhere. For example, ecosystems are defined as 'natural systems which support life on earth in all its diversity'. See art 23 (Ecosystem Services) of IUCN *Draft International Covenant on Environment and Development* 83. This is followed by an article on the 'ecosystems approach'. But, somewhat disappointingly, this term is not defined in the article itself or in the accompanying commentary. See Commentary on art 24 at 85–86.

101 ILC (n 78) 119.

One question is whether the ecosystem has to be protected for the sake of the international watercourse, or for its own sake. According to some, Article 20 obliges states to protect the ecosystem in such a way that harm to the watercourse, through alterations in the ecosystem of which it is a part, is prevented.<sup>102</sup> Others interpret the provision in a much broader sense, and believe the land areas of the ecosystem must also be protected, for example from degradation caused by deforestation, and so on.<sup>103</sup>

No explicit reference is made in Article 20 Watercourses Convention to any rights or interests of future generations, but the duty to preserve ecosystems does at least indirectly ensure that future generations can also benefit from them. Although Article 20 does not make this explicit, the drafters of this provision explain that its aim is ‘to ensure their continued viability as life support systems, thus providing an essential basis for sustainable development’.<sup>104</sup>

Many things are unclear about the so-called ‘ecosystems approach’. Article 20 is phrased as an absolute obligation, but the *travaux préparatoires* make it clear that it is more of a due diligence commitment.<sup>105</sup> As mentioned above, the UNECE Convention places the duty to protect ecosystems in a transboundary context, which suggests that the protection and preservation of the ecosystem is owed to the other state sharing the same transboundary waters that are the central part of that ecosystem. The Watercourses Convention does not link the obligation to protect and preserve the ecosystem to the do-not-cause-transboundary-harm rule.<sup>106</sup> This makes it possible that the protection and preservation of the ecosystem might be owed to the ecosystem itself, or to future generations.

How then does the ecosystems approach relate to ‘equitable and reasonable use’ (Article 5)?<sup>107</sup> Stephen McCaffrey proposed that ‘causing significant harm to the ecosystems of an international watercourse should be considered to be *per se* inequitable and unreasonable’, and that is one way to link Articles 5 and 20.<sup>108</sup> Weiss went so far as to suggest that, from Articles 5 and 20 of the Watercourses Convention, it can be concluded that ‘unless you protect the ecosystem, you may not have the water you need’.<sup>109</sup>

The SDG process could serve as a catalyst for the much needed conceptual development and subsequent adoption and implementation of the ecosystems approach.<sup>110</sup> An explicit reference to an obligation to ‘restore and maintain ecosystems to provide water-related services’ in the targets of the SDG on water was proposed by UN-

Water, with the desired outcome of ‘ensuring ecosystem health and capacity to be able to supply water of a sufficient amount and quality for human uses’.<sup>111</sup> This is effectively what was delivered, although any attempt to read such obligations into existing international water law should be taken with caution, as Owen McIntyre convincingly warns of the ‘truly far-reaching’ consequences such an approach might have for international water law.<sup>112</sup> Article 20 may even become a treaty-within-a-treaty, setting up all by itself a legal regime on the protection of freshwater ecosystems, whilst the remaining articles of the Watercourses Convention deal only with watercourses themselves.

### 3.3 Encourage public participation in the sustainable management of waters

Public participation and access to information and justice are often seen as indispensable elements of meaningful sustainable development. See for example principles 5 and 6 of the New Delhi Declaration of Principles of International Law Relating to Sustainable Development, adopted by the International Law Association in 2002. More specifically, when it comes to public participation in the sustainable use of water resources, reference can be made to the ILA’s Berlin Rules. The commentary to the Berlin Rules suggests that there is presently a ‘well established human right for people who are to be affected by decisions to participate in those decisions’.<sup>113</sup> The Commentary itself admits that there is little support for this human right in existing international water law, but it is argued that, since it has been accepted in *general* international law, it must also have its proper place in international *water* law.<sup>114</sup> Thus it is proposed that:

... states shall assure that persons subject to the state’s jurisdiction and likely to be affected by water management decisions are able to participate, directly or indirectly, in processes by which those decisions are made and have a reasonable opportunity to express their views on programs, plans, projects, or activities relating to waters.<sup>115</sup>

No such obligation can be found in the Watercourses Convention.<sup>116</sup> This Convention only requires that states do not discriminate when granting affected persons access to judicial procedures, or when providing them a right to claim compensation (Article 32).<sup>117</sup> It does not oblige

111 *Proposed Goal, detailed illustrative targets and associated indicators*, annexed to UN-Water *A Post-2015 Global Goal for Water: Synthesis of key findings and recommendations from UN-Water* (2014) 6.

112 Owen McIntyre ‘The protection of freshwater ecosystems revisited: towards a common understanding of the “ecosystems approach” to the protection of transboundary water resources’ (2014) 23(1) *Review of European Community and International Environmental Law* 88–95. This is an update of his article of 2004.

113 Berlin Rules (n 54) Commentary to art 4.

114 In defence of the assertion that the right is accepted in general international law, reference is made to art 25 of the International Covenant on Civil and Political Rights, according to which every citizen has the right to take part in the conduct of public affairs. However, this article is generally interpreted as referring to participation in national or municipal politics, through electing and getting elected.

115 Berlin Rules (n 54) art 18. See also art 4.

116 See Thomas Tödtling *Water Governance: From a Global and Regional Perspective* (Kovač 2013) 63. And see Kranz and others (n 8) 258–59. There it is suggested that the Watercourses Convention at least implicitly encourages public participation.

117 Watercourses Convention art 32.

102 See eg Marty (n 57) 224–25 and McCaffrey (n 67) 66.

103 See eg McCaffrey (n 87) 447, 455–58, 459. However, this seems inconsistent with what he has said elsewhere.

104 ILC (n 78) 119.

105 See McCaffrey (n 87) 460.

106 See also McIntyre (n 11) 301–304.

107 On the uncertainty about this relationship see McCaffrey (n 87) 450–51.

108 *ibid* 458.

109 Edith Brown Weiss ‘The evolution of international water law’ (2007) 331 *Recueil des cours* 207.

110 On the need for further development of the ‘ecosystems approach’ see Owen McIntyre ‘The emergence of an “ecosystem approach” to the protection of international watercourses under international law’ (2004) 13(1) *Review of European Community and International Environmental Law* 1–14 and McIntyre (n 11) 286–313.

states actually to offer such judicial remedies to affected individuals and other subjects.<sup>118</sup> The UNECE Convention does a little better in this respect.<sup>119</sup> It requires states to make all sorts of information on the management of the transboundary waters available to the public, but it says very little about public participation and access to justice of the public.<sup>120</sup>

Again according to the Berlin Rules, a person who suffers damage, caused by the way water resources are being managed, may institute proceedings before a competent court.<sup>121</sup> It does not matter whether the claimant has the nationality of the state concerned or not – one may think of a foreign investor.<sup>122</sup> Non-governmental organisations ‘with a proven interest regarding waters or the aquatic environment in a State’ can do the same. Although this is not made explicit in the Berlin Rules or the accompanying commentary, it could be argued that such organisations could also institute proceedings on behalf of future generations. It would be a major step forward if international water law would encourage states to permit and facilitate such applications, both from individuals in their own interest and from NGOs in the general interest or the interest of future generations.

It requires some imagination to interpret the SDG on water in such a way that it calls upon all states to take some courageous first steps in this direction. UN-Water suggested that ‘all countries [must] strengthen equitable, participatory and accountable water governance’.<sup>123</sup> In the view of UN-Water, any system of water management should include ‘participatory decision-making’.<sup>124</sup> At least, including the public in the decision-making will make the public at large more aware of the urgency of the problem,

and it will make them feel jointly responsible for meeting the challenge of developing water resources in a ‘greener’ fashion.<sup>125</sup>

#### 4 CONCLUSION

In this article, an attempt has been made to show three ways in which the SDG process can be used to encourage the evolution towards a ‘greener’ or more sustainable international water law.

First, the SDG process encourages the *sustainable* use of freshwater resources. From this, a recommendation for all states unambiguously to embrace a ‘sustainable’ interpretation of water law’s fundamental principles can be derived. It has been shown how the cornerstone of international water law – the principle of equitable and reasonable use of water resources – can be interpreted in a more sustainable development friendly way.

Secondly, the SDG process makes ample references to the need to protect ecosystems, including freshwater ecosystems. It has been shown how international water law can provide clarity as to the exact meaning of ‘ecosystems’, and the rights and obligations that follow from the adoption of a so-called ‘ecosystems approach’ to international water law.

Finally, the SDG process emphasises the importance of public participation in water governance at all levels, be it local, national or even global and hence this article has analysed how public participation can attain its proper place in the legal framework of international water law.

118 The *travaux préparatoires* show that this is as far as many states allowed the Convention to go. See also McCaffrey (n 67) 68–69.

119 This is therefore a good example where the UNECE Convention (n 22) complements the Watercourses Convention. See also Alistair S Rieu-Clarke, Rémy Kinna ‘Can two global UN water conventions effectively co-exist? Making the case for a “package approach” to support institutional coordination’ (2014) 23(1) *Review of European Community and International Environmental Law* 22.

120 UNECE Convention (n 22) art 16. See also Kranz and others (n 8) 257. It is, of course, worth mentioning the role of the Convention on Access to information, public participation in decision-making and access to justice in environmental matters (adopted under the auspices of UNECE on 25 June 1998 at Aarhus, Denmark). See, for example Serhiy Vykhryst ‘Public participation and information under the Water Convention’ in A Tanzi, O McIntyre, A Kolliopoulos and A Rieu-Clarke (eds) *The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes: Its Contribution to International Water Cooperation* (Martinus Nijhoff 2014).

121 Berlin Rules (n 54) art 69.

122 *ibid* art 70.

123 *Proposed Goal* (n 111) 7.

124 *ibid*.

125 See also Tödtling (n 116) 79.