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DOI: <https://dx.doi.org/10.18820/24150517/JJS47.i1.4>

ISSN 0258-252X (Print)  
ISSN 2415-0517 (Online)

Journal for  
Juridical Science  
2022:47(1):77-99

Date Published:  
30 June 2022



Published by the UFS  
<http://journals.ufs.ac.za/index.php/jjs>

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## CHRONICLE:

# WADING INTO THE DEBATE ON SECTION 2(4)(R) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT 107/1998 AND ITS IMPACT ON POLICY FORMULATION FOR THE PROTECTION OF SOUTH AFRICAN WETLANDS

## 1. INTRODUCTION

The loss and degradation of wetlands is an international dilemma and measures are put in place to ensure their conservation.<sup>1</sup> In South Africa, the Department of Water and Sanitation's Revised Strategic Plan 2015/2016 to 2019/2020 submitted that, of the 792 wetland ecosystems, 65 per cent have been identified as threatened and 48 per cent as critically endangered.<sup>2</sup> A later revised plan provides that 50 per cent of South Africa's wetlands have been lost.<sup>3</sup> This is worrisome considering the all-important functions they fulfil and the benefits they provide.

The importance of protecting wetlands stems from the vital human and environmental benefits they provide, if optimally protected. It is prudent, for purposes of the legislative analysis that follows, to briefly demonstrate the benefits so provided. Wetlands filter pollution and bacteria, which help improve water quality.<sup>4</sup> They trap nutrients which permit the growth of various plant species and attract several creatures for purposes of food security

- 1 Challand 1992:18.
- 2 Department of Water and Sanitation 2015/2016 to 2019/2020:29.
- 3 Department of Water and Sanitation 2020/21 to 2024/25.
- 4 Wepener *et al* 2018:363.

and shelter.<sup>5</sup> The slow decomposition of wetland soil enables the accumulation of large carbon stores, “making them an important sink for atmospheric carbon dioxide and holding up to more than 40% carbon soil”.<sup>6</sup> As a result, wetlands play a key role in promoting water security and biodiversity, and mitigating the effect of global warming, due to their ability to sequester carbon. Countries have implemented different strategies to safeguard this resource, from drafting wetland-specific policies<sup>7</sup> and legislation,<sup>8</sup> to including it in their constitutions.<sup>9</sup> More recently, recommendations have been made to further promote wetlands protection and conservation by way of recommendations made for developing a Universal Declaration of the Rights of Wetlands. The argument for doing so is that wetlands possess a series of rights that must be upheld.<sup>10</sup>

In South Africa, there is no wetland-specific policy or legislation such as there is for biodiversity or the coastal environment, for example, but criticism has been raised as to the legislature’s failure to single wetlands out.<sup>11</sup> However, the Department of Forestry, Fisheries and the Environment’s 5-year Strategic Plan (2019/2020-2023/2024) and its 2020/2021 Annual Performance Plan make provision for the development and implementation of a National Joint Wetland Management Policy (NJWM Policy), to be adopted by 2024.<sup>12</sup> The Annual Performance Plan makes provision for the targets that the department aims to achieve in relation to the development of the NJWM Policy.<sup>13</sup> The development of the NJWM Policy is aligned with the inter-governmental Convention on Wetlands of International Importance especially as Waterfowl Habitat of 1971 (“the Ramsar Convention”) in its Fourth Ramsar Strategic Plan 2016-2024 under its overarching vision to the effect that “wetlands are conserved, wisely used, restored and their benefits are recognized and valued by all”.<sup>14</sup> South Africa has ratified the Ramsar Convention without submitting any reservations to the secretariat.

Sec. 24 of the *Constitution of the Republic of South Africa*, 1996 (hereafter, the *Constitution*) states that:

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5 Falkenmark & Rockström 2004:14.

6 Nahlik & Fennessy 2016:2.

7 For example, The Republic of Namibia.

8 For example, The Republic of India (discussed below).

9 For example, Switzerland, Brazil and Uganda. See De Klemm & Shine 1999:163-164.

10 Davies *et al* 2021:593.

11 Kidd 2008:122.

12 Department of Forestry, Fisheries and the Environment’s Strategic Plan (2019/2020-2023/2024) and its 2020/2021 Annual Performance Plan. <https://www.environment.gov.za/sites/default/files/docs/strategicplan202021to202324.pdf> (accessed on 4 February 2021).

13 Department of Forestry, Fisheries and the Environment’s Strategic Plan (2019/2020-2023/2024) and its 2020/2021 Annual Performance Plan. <https://www.environment.gov.za/sites/default/files/docs/strategicplan202021to202324.pdf> (accessed on 4 February 2021).

14 Ramsar Convention Secretariat. [https://www.ramsar.org/sites/default/files/hb2\\_5ed\\_strategic\\_plan\\_2016\\_24\\_e.pdf](https://www.ramsar.org/sites/default/files/hb2_5ed_strategic_plan_2016_24_e.pdf) (accessed on 21 September 2021).

Everyone has the right-

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-
- c. prevent pollution and ecological degradation;
- d. promote conservation; and
- e. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

Briefly, sec. 24(b) enabled the formulation of the *National Environmental Management Act 107 of 1998 (NEMA)*, among other legislation relevant to wetland protection and conservation, as discussed below. Chapter 1 of the *NEMA* is titled *National Environmental Management Principles*. This suite of principles is contained in sec. 2 and they apply to all organs of state.<sup>15</sup> The *NEMA*'s sec. 2(4)(r) predates the fragmented body of specific environmental management Acts (*SEMAs*),<sup>16</sup> which aims to promote wetland protection and conservation. However, the value underpinning sec. 2(4)(r) provides a wetland protection and conservation framework by way of the enabling provisions of the *Constitution*, the further provisions of *NEMA* as well as the *SEMAs*, all of which must be viewed through the lens of sustainable development.

This chronicle, therefore, commences with the concept of “sustainable development”, with a focus on wetlands. It then considers the application and content of sec. 2(4)(r) of *NEMA* and suggests that, in relation to the scope and arrangement of the key role players in wetland management, lessons can be learned from the efforts by the Republic of India, as examples of best practice. The chronicle concludes that these may – and should – be realised and mirrored within the existing institutions or structures of South Africa.

## 2. SUSTAINABLE DEVELOPMENT FOR WETLANDS: THE NEED

Before venturing into sec. 2(4)(r), it is vital to lay the foundation for the concept of sustainable development because, as Kotzé submits, the national environmental management principles, which include sec. 2(4)(r)], “are rooted in the concept of sustainable development”.<sup>17</sup> “Wetland” is not defined in the

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15 *National Environmental Management Act 107/1998:se. 2.*

16 Elliot & Blackmore (2019:53) listed them as including the *National Environmental Management Act 107/1998*; the *National Environmental Management: Protected Areas Act 57/2003*; the *National Environmental Management: Biodiversity Act 10/2004*; the *National Environmental Management: Integrated Coastal Management Act 24/2008*; the *National Water Act 36/1998*; the *Conservation of Agricultural Resources Act 43/1983*; the *Mountain Catchment Areas Act 62/1970*; the *National Forest Act 84/1998*; the *Natural Heritage Resources Act 25/1999*; the *World Heritage Convention Act 49/1999*, and the *Mineral and Petroleum Resources Development Act 28/2002*.

17 Kotzé 2003:88.

*NEMA*, but “environment” must be read to include wetland for the purposes of this chronicle, due to the elaborate definition provided in sec. 1 of the *NEMA*.

The *NEMA*, which was enacted to give effect to sec. 24 of the *Constitution*, defines “sustainable development” in sec. 1 as the “integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations”. This definition and description have been favoured over that of the *Constitution*, due to the former being “far more comprehensive”.<sup>18</sup> The constitutional meaning should, however, not be considered to be less useful, considering the discussion below. The integration of the three pillars (social, economic and environmental) “contemplates an exercise of reconciliation to find a proper balance between them – although the reality is not always reconciled”.<sup>19</sup> Humby’s observation, in line with sec. 2(3) of the *NEMA*,<sup>20</sup> focuses on balancing these pillars by recommending the creation of thresholds on the “limits of both environmental protection and development deemed permissible under s24 [of the *Constitution*]”.<sup>21</sup> Setting of thresholds breathes life into sec. 24(a) of the *Constitution*, which guarantees the right to an environment that is not harmful to our health and well-being. The assumption is, therefore, that these thresholds will determine the extent of “harm”. The significance of, and tools for setting thresholds for development and lessening the pressure on wetlands are discussed below.

In the case of *Umfoloji Sugar Planters Limited and Others v iSiMangaliso Wetlands Park Authority and Others*,<sup>22</sup> the court consulted The Social and Economic Value of the iSiMangaliso Wetland Park, with specific reference to the restoration of the Lake St Lucia system,<sup>23</sup> in an attempt to strike this balance.<sup>24</sup> *In casu*, Moodley J highlighted the importance of protecting ecosystems for socio-economic benefits.<sup>25</sup> In addition to this balancing act that faced our courts,<sup>26</sup> the need to preserve environmental resources for the benefit of future generations has been identified as an important element of

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18 Kotzé 2003:88.

19 Oosthuizen *et al* 2018:139.

20 “Development must be socially, environmentally and economically sustainable.”

21 Humby 2016:20.

22 *Umfoloji Sugar Planters Limited and Others v iSiMangaliso Wetlands Park Authority and Others* [2017] 2 All SA 947 (KZD).

23 *Umfoloji Sugar Planters Limited and Others v iSiMangaliso Wetlands Park Authority and Others*:par. 60.

24 *Umfoloji Sugar Planters Limited and Others v iSiMangaliso Wetlands Park Authority and Others*:par. 61.

25 *Umfoloji Sugar Planters Limited and Others v iSiMangaliso Wetlands Park Authority and Others*:par. 63.

26 *Fuel Retailers case Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007(6) SA 4 (CC); *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs* [2004] 3 All SA 201 (W):par. 43; *Bato Star Fishing (Pty) Ltd v Minister of Environmental Affairs and Tourism and Others* 2004 (7) BCLR 687 (CC):par. 37.

sustainable development, coined as the principle of “intergenerational equity”.<sup>27</sup> The concept of “equity” that accommodates both inter- and intragenerational equity is discussed next.<sup>28</sup>

The principle of equity is encapsulated in sec. 24(b) of the *Constitution*, by creating the right to “have the environment protected, for the benefit of present and future generations”. The submission is that intergenerational equity refers to the use and enjoyment of the resources of the earth by the present generation in such a way as not to jeopardise future generations’ fair entitlement to the resources.<sup>29</sup> Intragenerational equity refers to the present generation enjoying a fair share of the earth’s resources.<sup>30</sup> Sec. 24(b)(i-iii) of the *Constitution* goes on to indicate that the principle of equity is further realised through the enactment of legislation and other measures that prevent pollution and ecological degradation, promote conservation, and secure ecologically sustainable development and use of natural resources, while promoting justifiable economic and social development. In light of sec. 24(b), Van Reenen argues that the promotion of social and economic development can only be justifiable once ecological sustainability has been secured.<sup>31</sup> Wetlands contribute to each of these aspects.

In the case of *Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others*<sup>32</sup> (the *Fuel Retailers* case), the following principles were identified as evolving elements of sustainable development: integration (integrating environmental protection and socio-economic development); sustainable use and exploitation of natural resources (sustainable utilisation of natural resources); inter- and intragenerational equity (preserving natural resources for the benefit of present and future generations), and the need for the interpretation and application of rules of international law in an integrated systematic manner.<sup>33</sup>

In light of mirroring the above, in *BP Southern Africa (Pty) Ltd*, Claassen J quoted Sands who gave meaning to ecological sustainable development, as embodying:

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27 *WWF South Africa v Minister of Agriculture, Forestry and Fisheries and others* [2018] JOL 40525 (WCC):par. 92.

28 The term ‘equity’ must be read to include both inter and intragenerational.

29 Strydom 2018:83.

30 Strydom 2018:83.

31 Van Reenen 2008:178.

32 *Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007(6) SA 4 (CC):par. 92.

33 *Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others*:par. 51.

- i. the need to preserve natural systems for the benefit of future generations;
- ii. the aim of exploiting natural resources in a manner which is "sustainable" or "prudent" or "rational" or "wise" or "appropriate" (the principle of sustainable use);
- iii. the equitable use of natural resources (the principle of equitable use), and
- iv. the need to ensure that environmental considerations are incorporated into economic and other development plans, programmes, and projects (the principle of integration).<sup>34</sup>

Points (i), (ii) and (iv) encapsulate sec. 24(b) of the *Constitution*, and "plans, programmes and projects" gives meaning to "other measures" as envisaged in sec. 24(b) by way of its interpretation in the *Grootboom* case.<sup>35</sup> Point (ii) is significant in that it refers to the exploitation of natural resources in a "wise" manner. With reference to wetlands, the term "wise use of wetlands" was coined for the first time in 1987 at the third Conference of the Parties (COP3) in Kyoto, Japan.<sup>36</sup> Its definition later changed, due to the evolution and change in the language of environmental conservation.<sup>37</sup> "Wise use" is defined as the "maintenance of the ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development".<sup>38</sup> The ecosystem approach is defined as a "strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way".<sup>39</sup> This form of integration is not necessarily covered in the constitutional meaning of "integration".

The concept of 'wise use of wetlands' is found in art. 3(1) of the Ramsar Convention. "Wise use"<sup>40</sup> is not defined in South African law, either in the *NEMA* or in any other *SEMA*, but it is not to say that the environmental framework does not give effect to it; it does.<sup>41</sup> However, the use and application of the "wise use" principle were a missed opportunity in the case of *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality* ("the *Wakkerstroom* case").<sup>42</sup> In this instance, the court had an opportunity to apply wetland-relevant obligations, for example that "wise use" applies to administrators (*in casu*, the municipality) and mandates administrators to

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34 *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs*.

35 *Government of the Republic of South Africa v Grootboom* 2001 (1) SA 46 (CC):par. 42.

36 Ramsar Secretariat 2007:5.

37 Ramsar Secretariat 2010:6.

38 Ramsar Secretariat 2010:16.

39 Paterson 2018: 524.

40 Birnie *et al* (2009:674) define it as the "maintenance of the ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development".

41 Lemine 2018:60.

42 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality* (1765/19) [2019] ZAMP/MHC 20 (29 October 2019).

promote environmental protection and conservation.<sup>43</sup> This should have been done, instead of quoting Al Gore's prediction of what future generations may raise,<sup>44</sup> for example. However, Brauckmann AJ does refer to sec. 2(4)(r) in two separate paragraphs,<sup>45</sup> but focuses predominantly on the "subject to development pressure"<sup>46</sup> section, which, according to this research, is the third leg, as it pertains to sec. 2(4)(r).

The Ramsar Strategic Plan 2016-2024 provides that work relating to the Convention was organised around three pillars of which one is "the wise use of all wetlands through national plans, policies and legislation; management actions; and public education".<sup>47</sup> It was submitted that the concept of 'wise use' has been considered to be "synonymous with the term sustainable use",<sup>48</sup> thus qualifying the "wise" with the principle of "sustainable use" next to each other in point (ii) above. In the *Fuel Retailers* case, Ngcobo J stated that sustainable development and sustainable use and exploitation of natural resources are at the core of the protection of the environment.<sup>49</sup>

Thus, wetland policy (NWJM Policy) considerations must include objectives of the elements for sustainable development, namely integration, wise use, and equity. For purposes of this chronicle, "integration" is not limited to social, economic, and environmental aspects, as discussed earlier, but has a greater scope, as discussed below. It has been submitted that these social, economic, and environmental elements are relevant in promoting the protection of the environment (wetlands).<sup>50</sup> However, the relationship between wetland protection and these elements should also be realised and reconciled at the implementation phase. To achieve the objectives of this chronicle, the next step is to gauge the scope of the application and the content of sec. 2(4)(r) of the *NEMA*.

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43 Lemine 2020:161.

44 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality* (1765/19) [2019] ZAMPMHC 20 (29 October 2019): par. 19 "Future generations may well have occasion to ask themselves, 'What were our parents thinking? Why didn't they wake up when they had a chance?' We have to hear that question from them, now."

45 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality* (1765/19) [2019] ZAMPMHC 20 (29 October 2019): paras. 51 and 56.

46 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality* (1765/19) [2019] ZAMPMHC 20 (29 October 2019): par. 52.

47 Ramsar Strategic Plan 2016-2024:12.

48 De Klemm & Shine 1997:47.

49 *Fuel Retailers case Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others*: par. 61.

50 *Fuel Retailers case Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others*: par. 61.

### 3. THE APPLICATION AND CONTENT OF SEC. 2(4)(R) OF THE NEMA

As mentioned earlier, chapter 1 of the *NEMA* is titled “National environmental management principles”. These principles, contained in sec. 2, serve as guidelines<sup>51</sup> that steer environmental management,<sup>52</sup> and as such they provide a framework for integrated environmental management.<sup>53</sup> Furthermore, the principles include many of the emerging environmental norms and law,<sup>54</sup> including the wise use of wetlands as elaborated on earlier. Sec. 2 sets out a series of principles that apply throughout South Africa to the actions of all organs of state that may significantly affect the environment. For clarity, an “organ of state”, in terms of sec. 239 of the *Constitution*, means

- a. any department of state or administration in the national, provincial or local sphere of government; or
- b. any functionary or institution
  - i. exercising a power or performing a function in terms of the Constitution or a provincial constitution; or
  - ii. exercising a public power or performing a public function in terms of any legislation, but does not include a court or a judicial officer.

Therefore, institutions such as the South African National Biodiversity Institute (SANBI) and the iSimangaliso Wetland Park Authority fall within the ambit of an organ of state. The relevance of mentioning these institutions specifically is clarified below. However, the purpose is to understand the extent of the institutions mandated to enforce sec. 2(4)(r). Although the provision does not specifically mention courts and judicial officers, it goes without saying that they play a major role in determining environmental disputes in the future through the goal of attaining sustainable development.<sup>55</sup>

Sec. 2(4)(r) of the *NEMA* states that

sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.

Coupled with the above, sec. 2(4)(a)(i) of the *NEMA* provides that sustainable development requires consideration of all relevant factors, including “[t]hat the disturbance of ecosystems [wetlands] and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and

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51 *National Environmental Management Act*:sec. 2(1)(c).

52 Oosthuizen *et al* 2018:145.

53 *National Environmental Management Act*:sec. 2.

54 Glazewski 2017:73.

55 *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs*.



remedied". This is not to say that this principle is the only coinciding principle; there are many others.<sup>56</sup>

To reiterate, within the entire environmental management framework Act, the only mention of a "wetland" is contained in sec. 2(4)(r).<sup>57</sup> However, this does not presuppose a lack of, or limitation on the protection and conservation of wetlands; the legislative framework is not as restrictive. This is confirmed in that wetlands are represented in the following ways by the definitions within the legislative framework. However, it must be noted that the legislation below is enforced by different environmental departments<sup>58</sup> at different levels (spheres) of government, which adds another layer of complication for purposes of application to the relevant organ of state:

- "environment", as defined in sec. 1 of the *NEMA*;<sup>59</sup>
- "coastal wetland", as defined in sec. 1 of the *National Environmental Management: Integrated Coastal Management Act 24 of 2008 (NEMICMA)*;<sup>60</sup>
- "ecosystem", as defined in sec. 1 of the *National Environmental Management: Biodiversity Act 10 of 2004 (NEMBA)*;<sup>61</sup>
- "watercourse", as defined in sec. 1 of the *National Water Act 36 of 1998 (NWA)*;<sup>62</sup>
- "water resource", as defined in sec. 1 of the *NWA*;<sup>63</sup>
- "water course", as applied in secs. 3, 4, 7 and 8 of the *Conservation of Agricultural Resources Act 43 of 1983 (CARA)*, and
- "wetland", as defined in sec. 1 of the *NWA*.<sup>64</sup>

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56 *National Environmental Management Act*:sec. 2(4).

57 Lemine, 2022:37.

58 Lemine (2021:162) cites the wetland legislation-administration nexus, to the exclusion of "wetland" as cited under the NWA and here below.

59 "(i) the land, water and atmosphere of the earth;(ii) microorganisms, plant and animal life;(iii) any part or combination of (i) and (ii) and the interrelationships among and between them; and (iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing".

60 (a) any wetland in the coastal zone; and (b) includes- (i) land adjacent to coastal waters that is regularly or periodically inundated by water, salt marshes, mangrove areas, inter-tidal sand and mud flats, marshes, and minor coastal streams regardless of whether they are of saline, freshwater or brackish nature; and (ii) the water, the subsoil and substrata beneath, and bed and banks of, any such wetland".

61 "a dynamic complex of animal, plant and micro-organism communities and their non-living environment interacting as a functional unit".

62 "(a)...(b)...(c) a wetland... (d)...".

63 "read to include a watercourse".

64 "means land which is transitional between terrestrial and aquatic systems 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".

It is noted that the definition of “wetland”, in terms of the *NWA*, is not the same as that of the Ramsar Convention<sup>65</sup>; the latter defines a “wetland” as

areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.

The *NWA* definition for wetland does not include “artificial wetlands” as with the Ramsar’s definition;<sup>66</sup> however, the Water Sensitive Urban Design (WSUD) for South Africa: Framework and Guidelines 2014 does. The WSUD framework and guidelines create an addition to the *NWA*’s definition of a wetland definition by stating that “[t]his includes water bodies such as lakes, salt marshes, coastal lakes, estuaries, marshes, swamps, ‘vleis’, pools, ponds, pans and artificial impoundments”.<sup>67</sup> The list of definitions in the WSUD framework and guidelines also includes artificial wetlands by virtue of its definition of “channel”, which is read to “refer to any natural or artificial watercourse”. From a natural resource protection viewpoint, the Ramsar Secretariat advised that the need for human-made (artificial) wetlands is increasing, but that their quality is not the same as the ones that were destroyed.<sup>68</sup> Thus, due consideration must be given to the definitions by the organs of state deployed to formulate the wetlands policy, in order to ensure that it is as inclusive as possible so as to enhance legal protection.

Discerning the content of sec. 2(4)(r) requires an investigation into the meanings of “specific attention”; “management”, and “significant human usage and development pressure” for purposes of promoting wetlands protection and wetland policy consideration.

### 3.1 “Specific attention”<sup>69</sup>

The reasoning is that the legislature was intentional in including the words “specific attention” as opposed to merely “attention” in sec. 2(4). Quoting Bennion in *Natal Joint Municipal Pension Fund v Endumeni Municipality*,<sup>70</sup> “[a]cts are produced down to the last word and comma”. In addition, “legislative intention is not a myth or fiction, but a reality founded on the very nature of legislation”.<sup>71</sup> To determine the meaning of “specific attention” within a legislative context, one would refer to the law of statutory interpretation. Sec. 39(2) of the *Constitution* provides that “when interpreting any legislation ... every court, tribunal or forum must promote the spirit, purport and objects of the Bill of Rights”. It is a mandatory requirement to construe every piece

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65 Lemine, 2022:37.

66 Lemine, 2022:37.

67 XXVII of the report.

68 Ramsar Convention Secretariat 2016:14.

69 See Lemine 2018 for a narrow interpretation.

70 *Natal Joint Municipal Pension Fund v Endumeni Municipality* 2012 4 SA 593 (SCA):par. 21.

71 *Natal Joint Municipal Pension Fund v Endumeni Municipality*:par.21.

of legislation in a manner congruent with sec. 39(2).<sup>72</sup> Thus, a constitutional reading of “specific attention” through the lens of sec. 24(b) of the *Constitution* is required.

“Specific attention” considered through sec. 39(2) requires delving into sec 24(b) of the *Constitution* and enabling legislation flowing from this. The focus is on the legislative framework through the lens of singling out wetland conservation efforts. South Africa is party to the wetland-specific treaty, the Ramsar Convention. This Convention is an intergovernmental treaty adopted on 2 February 1971 in the Iranian city of Ramsar. This treaty’s ultimate purpose is “to stem the progressive encroachment on and loss of wetlands now and in the future”. The Ramsar Convention collaborates with various other international instruments such as the Convention on Biological Diversity, the Convention to Combat Desertification, the Convention on Migratory Species, the World Heritage Convention, and the Convention on International Trade in Endangered Species.<sup>73</sup> Perhaps, Agenda 2030 (Sustainable Development Goals) and African Union Agenda 2063 also deserve to be mentioned. For the purposes of this chronicle, no in-depth analysis of these instruments is required.

Attentiveness to wetlands is emphasised in the Ramsar Convention by obligating state parties to designate a List of Wetlands of International Importance (“listed wetlands”), within the state’s territory.<sup>74</sup> The selection of these wetlands is on account of “their international significance in terms of ecology, botany, zoology, limnology or hydrology”.<sup>75</sup> South Africa has 28 listed wetlands,<sup>76</sup> the latest addition was on World Wetlands Day, 2 February 2022.<sup>77</sup> Furthermore, the Montreux Record was established for listed wetlands that “have undergone, are undergoing, or are likely undergoing, an adverse ecological change”.<sup>78</sup> It has been submitted that South Africa has identified and listed two of its Ramsar sites on the Montreux Record.<sup>79</sup> This “special treatment” should not suggest that non-listed wetlands are not afforded protection, as art. 3.1 of the Ramsar Convention creates the obligation for protecting all wetlands, by making provision for the “wise use of all wetlands”.

Sec. 24 of the *Constitution* is an exclusive provision pertaining to the environment, which must be read to include wetlands.<sup>80</sup> This provision further bolsters the promulgation of environment-specific protection by enabling

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72 See, for example, *Bato Star Fishing (Pty) Ltd v Minister of Environmental Affairs and Tourism and Others* 2004 (7) BCLR 687 (CC):par. 91.

73 Ramsar Convention on Wetlands. [ramsar.org/sites/default/files/documents/library/introducing\\_ramsar\\_web\\_eng.pdf](https://ramsar.org/sites/default/files/documents/library/introducing_ramsar_web_eng.pdf) (accessed on 10 October 2021).

74 Ramsar Convention:art. 2.1.

75 Ramsar Convention:art. 2.2.

76 Ramsar Convention on Wetlands. [ramsar.org/wetland/south-africa](https://ramsar.org/wetland/south-africa) (accessed on 3 February 2022).

77 Ramsar Convention on Wetlands. [ramsar.org/wetland/south-africa](https://ramsar.org/wetland/south-africa) (accessed on 3 February 2022).

78 Hamman *et al* 2019:1493.

79 Ramsar Convention on Wetlands. [ramsar.org/wetlands/south-africa](https://ramsar.org/wetlands/south-africa).

80 *National Environmental Management Act*:sec. 1, definition of “environment”.

legislation and policy that prevent pollution and ecological degradation;<sup>81</sup> promote conservation,<sup>82</sup> and secure ecological sustainability.<sup>83</sup> The *NEMA* recognises and gives effect to the establishment of *SEMA*s.<sup>84</sup> The latter forms the backbone against which wetland conservation is sought.

The criticism is, however, that *SEMA*s effecting wetland conservation are fragmented,<sup>85</sup> haphazard and un-coordinated,<sup>86</sup> overly complex<sup>87</sup> and uncoordinated,<sup>88</sup> which leads to mismanagement and wetland loss.<sup>89</sup> It has further been submitted that the failure to single out wetlands (like many other environmental media) was a missed opportunity.<sup>90</sup> The lack of a wetland policy is not the problem, rather the manner in which the legislation and institutional bodies are arranged (or the lack of arrangement) is. The list of *SEMA*s regulating these include the *NWA*, *NEMBA*, *CARA*, *NEMICMA*, *Mountain Catchment Areas Act*,<sup>91</sup> *National Environmental Management Act*, *Protected Areas Act*,<sup>92</sup> *National Forest Act*,<sup>93</sup> *World Heritage Convention Act*,<sup>94</sup> and *National Heritage Resources Act*.<sup>95</sup>

Of later vintage is the *Climate Change Bill, 2022 (CCB)*, which finds its relevance in the relationship of wetlands functioning as carbon sinks and stabilising greenhouse gas concentrations in the atmosphere. The latter is an objective which the *CCB* aims to achieve.<sup>96</sup> The *Bill* creates obligations on the spheres of government to identify and map, among others, ecosystems vulnerable to the impact of climate change.<sup>97</sup> The submission is that the *CCB* is the future *SEMA* for climate change mitigation and adaptation.<sup>98</sup> The *CCB* contributes to the legal protection for wetlands but adds another layer of *SEMA* seeking to achieve its own goals. It appears that “specific attention” for wetlands comes to realisation through other measures, which feed information to different departments having wetland mandates as envisaged in the *SEMA*s. One such measure is the *NEMBA*’s National Biodiversity Assessment, a tool used by SANBI (a body acting under the auspices of the Minister responsible for national environmental management).<sup>99</sup>

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81 *Constitution*:sec. 24(b)(i).

82 *Constitution*:sec. 24(b)(ii).

83 *Constitution*:sec. 24(b)(iii).

84 *National Environmental Management Act*:sec. 1.

85 Booy 2011:109.

86 Glazewski & Young 2017:202.

87 Elliot & Blackmore 2019:42.

88 Lemine 2020.

89 Lemine 2021.

90 Kidd 2011:136.

91 *NWA, NEMBA, CARA, NEMICMA, Mountain Catchment Areas Act* 63/1970.

92 *National Environmental Management Act, Protected Areas Act* 57/2003.

93 *National Forest Act* 84/1998.

94 *World Heritage Convention Act* 49/1999.

95 *National Heritage Resources Act* 84/1998.

96 *Climate Change Bill*:Preamble.

97 *Climate Change Bill*:secs 15(2)(c) and 19(1)(a)(i).

98 Gilder & Swanepoel 2018:791.

99 *National Environmental Management: Biodiversity Act* 10/2004:secs 1 and 11.

The National Biodiversity Assessment (NBA) is the primary tool for monitoring and reporting on the state of biodiversity in South Africa.<sup>100</sup> The NBA is used to inform strategies, policies and actions in various sectors for the effective management and conservation of biodiversity.<sup>101</sup> Wetlands were omitted in the 2004 National Spatial Biodiversity Assessment but included in the 2011 NBA<sup>102</sup>, and the latest published version of the NBA (2018).<sup>103</sup> The NBA indicates that wetlands (and estuaries) are the most threatened and least protected ecosystem.<sup>104</sup> It is further recommended that the implementation of the national monitoring programme for inland wetlands is “critical for management and future assessments”.<sup>105</sup>

Wepener *et al* raise the issue that there is no wetland monitoring programme equivalent to the River Health Programme that has been instituted.<sup>106</sup> However, in 2016, the Water Research Commission (on behalf of the Department of Water and Sanitation [DWS]) completed the National Wetlands Monitoring Programme (NWMP) report with the aims of:

- Minimising duplication of effort while maximising the value of outputs of wetland assessment and monitoring.
- Finding suitable methods for prioritising wetlands to be assessed and monitored.
- Adaptive management.
- Maximum engagement and participation by stakeholders.<sup>107</sup>

In addition to the duplication expressed in the above objectives, the omission or failure to deliver should be considered, namely where one department labours under the impression that another will perform a wetland output, but they fail to do so.<sup>108</sup> However, the NWMP report sets out broader, more specific objectives.

Within the meaning of “specific attention”, there is broader scope for realising the expectations created by this provision as set out above, albeit that policy refinement is required. However, programmes aimed at promoting wetlands protection and conservation emanate from separate legislation

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100 South African National Biodiversity Institute. [biodiversityadvisor.sanbi.org/planning-and-assessment/national-biodiversity-assessment-nba-2018](http://biodiversityadvisor.sanbi.org/planning-and-assessment/national-biodiversity-assessment-nba-2018) (accessed on 1 October 2021).

101 South African National Biodiversity Institute. [biodiversityadvisor.sanbi.org/planning-and-assessment/national-biodiversity-assessment-nba-2018](http://biodiversityadvisor.sanbi.org/planning-and-assessment/national-biodiversity-assessment-nba-2018) (accessed on 1 October 2021).

102 Wepener *et al* 2018:365.

103 South African National Biodiversity Institute. [biodiversityadvisor.sanbi.org/planning-and-assessment/national-biodiversity-assessment-nba-2018](http://biodiversityadvisor.sanbi.org/planning-and-assessment/national-biodiversity-assessment-nba-2018) (accessed on 1 October 2021).

104 South African National Biodiversity Institute 2018:22.

105 South African National Biodiversity Institute 2018:22.

106 Wepener *et al* 2018:365.

107 Department of Water and Sanitation. [dws.gov.za/iwqs/rhp/wetlands/default.aspx](http://dws.gov.za/iwqs/rhp/wetlands/default.aspx) (accessed on 5 October 2021).

108 Lemine 2018:62.

(SEMAPs), which may not filter through to other departments. Thus, the lack of integration fails to promote protection and to secure ecologically sustainable development (and use) of natural resources. This is not in line with sec. 24(b) of the *Constitution*.

### 3.2 “Management”

“Management” is used in this section in relation to wetlands, as envisaged in sec. 2(4)(r). “Specific attention” must be incorporated into “management” as contemplated in the sec. 2(4)(r) obligation. This provision also includes “planning procedures”, but the selected definition of “management” has “planning” embedded in it. Working with the definition of management, as defined by Nel and Alberts, requires the “guiding of people or a process, rather than the leadership ...; it generally means the art and science of planning and organising people, resources, processes and activities to achieve goals and objectives”.<sup>109</sup>

It is, therefore, crucial that the planning and organising of people (not exclusively organs of state at different departments), resources (wetlands/NBA/NWMP/SEMAPs) and processes (decision-making/enforcement) occur in an integrated manner so as to attain the aim of achieving sustainable development goals and objectives for wetlands.<sup>110</sup> The reasoning is that the anticipated NJWM Policy for South Africa is a suitable instrument for attaining this goal. Integration is an ideal of sustainable development, but it must be considered in light of water resources management. The integrated water resources management-sustainable development nexus is elaborated on next.

Defined as a water resource,<sup>111</sup> wetlands thus fall within the conceptual framework of integrated water resources management (IWRM), which means

a process which promotes the co-ordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability to vital ecosystems.<sup>112</sup>

Bruno provides examples for integration of water management in that it should include:

- Integration between groundwater and surface water;
- Integration among water, land and other resources;
- Integration among policies in different sectors;
- Integration among the vertical and horizontal levels of planning and management;
- Integration of public governance;

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109 Nel & Alberts 2018:11-12.

110 Lemine, 2022:54.

111 *National Water Act*:sec. 1.

112 Claassen 2013:6.

Integration of environment, social and economic concerns into planning,  
and  
Integration between sources of information.<sup>113</sup>

The above does not constitute a closed list of examples, as further discoveries and advancement of these factors could be made for promoting IWRM, for example integration of scientific thought (natural, legal, political, applied, and so on).

In relation to the scope and arrangement of the key role players in wetland management, it is suggested that lessons can be learned from the efforts by the Republic of India, as examples of best practice. This is not to say that the concept of IWRM is non-existent within South Africa's legislative framework, as the NWA makes provision for this objective,<sup>114</sup> and it is included in the National Water Resources Strategy II.<sup>115</sup> However, the current state of wetland legislation,<sup>116</sup> coupled with the obligations imposed upon various institutions and other role players,<sup>117</sup> stifles the achievement of IWRM. The policymakers of the NJWM Policy must aim to achieve some cohesion. In this regard, the Wetlands (Conservation and Management) Rules, 2017 of the Ministry of Environment, Forestry and Climate Change, Government of India, was deliberate in the establishment of Wetlands Authorities in the various States and Union Territories in sec. 5. From a bird's eye view, this appears to be an ideal approach for arranging wetlands institutions for the achievement of an ecosystem approach coupled with the objectives of IWRM. The Guidelines for Implementing Wetlands (Conservation and Management) Rules, 2017 under the Part III Wetlands Authorities obliges the Department of Environment/Forests or any department handling wetlands to designate one expert in the following fields for a period not exceeding three years: wetlands ecology; hydrology; fisheries; landscape planning, and socio-economics.

The abovementioned organisation of the Wetland Authority is, arguably, an exemplary method of ensuring that wetlands are managed with a view to achieving sustainable goals and objectives. This is so, as it has been argued that sustainable development and IWRM pillars and objectives are fully compatible, so much so that IWRM is dubbed a key instrument to support sustainable development.<sup>118</sup> The IWRM sustainable development nexus is further generally demonstrated in South Africa reporting on its progress in implementing the sustainable development goals (SDGs),<sup>119</sup> but more specifically SDG 6 which speaks to "[ensuring] availability and sustainable management of water and sanitation for all".<sup>120</sup> A specific target (6.5)

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113 Bruno 2014:3.

114 *National Water Act*:Preamble.

115 Department of Water Affairs 2013.

116 Elliot & Blackmore 2019:61-64.

117 Lemine 2021:162.

118 Tejada-Guibert *et al* 2015:198.

119 Statistic South Africa. [http://www.statssa.gov.za/MDG/SDGs\\_Country\\_Report\\_2019\\_South\\_Africa.pdf](http://www.statssa.gov.za/MDG/SDGs_Country_Report_2019_South_Africa.pdf) (accessed on 6 September 2021).

120 United Nations Department of Economic and Social Affairs. <https://sdgs.un.org/goals/goal6> (accessed on 15 September 2021).

provides that “[b]y 2030, [the aim is to] implement integrated water resources management at all levels ...”.<sup>121</sup> This indicator is measured by considering the “degree of integrated water resources management implementation (measured: 0-100)”, to which South Africa has reported a 70.<sup>122</sup> This figure is based on the reporting of a Country Questionnaire from the United Nations.<sup>123</sup>

“Management”, in this instance, requires the golden thread for sewing together relevant and applicable spheres, sectors, institutions, disciplines, human resources, research, information, and technology to achieve and further the sustainable wetlands goals and objectives. As noted earlier, management and IWRM are both identified as processes, meaning that results are not instantaneous, and that it is an ongoing process without actual finality. However, in the meantime, human activity and development pressure in and around this resource must be well managed, in order to provide future generations with a fair share of this resource.

### 3.3 “Significant human resource usage and development pressure”

“Significant human resource usage and development pressure” is used in this section in relation to wetlands, as envisaged in sec. 2(4). In the case of *Hichange Investments (Pty) Ltd v Cape Produce Company (Pty) Ltd t/a Pelts Products and others*,<sup>124</sup> the court gave meaning to “significant pollution”, and Leach J held that “‘significant pollution’ must be considered in the light of the constitutional right to an environment conducive to health and wellbeing”.<sup>125</sup> The latter read with “significance”, in terms of sec. 2(4)(r), would entail using sec. 24(b) of the *Constitution*’s sustainable development objective as a yardstick.

However, “significance” of human resource usage, for example, on an ecological resource (wetland) can be measured or determined by way of the Ecological Risk Assessment (ERA) tool.<sup>126</sup> The NBA, and Freshwater Biodiversity Information System (FBIS)<sup>127</sup> as additional tool, may be used to assess risk for decision-making. However, the ERA is considered a structured approach to dealing with ecological impacts and is relevant at the planning

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121 United Nations Department of Economic and Social Affairs. <https://sdgs.un.org/goals/goal6> (accessed on 15 September 2021).

122 Statistic South Africa [http://www.statssa.gov.za/MDG/SDGs\\_Country\\_Report\\_2019\\_South\\_Africa.pdf](http://www.statssa.gov.za/MDG/SDGs_Country_Report_2019_South_Africa.pdf) (accessed on 12 August 2021).

123 Statistic South Africa [http://www.statssa.gov.za/MDG/SDGs\\_Country\\_Report\\_2019\\_South\\_Africa.pdf](http://www.statssa.gov.za/MDG/SDGs_Country_Report_2019_South_Africa.pdf) (accessed on 12 August 2021).

124 *Hichange Investments (Pty) Ltd v Cape Produce Company (Pty) Ltd t/a Pelts Products and others* [2004] 1 All SA 636 (E).

125 Glazewski 2017:76.

126 Ecological risk assessment. [https://www.environment.gov.za/sites/default/files/docs/series6\\_ecological\\_riskassessment.pdf](https://www.environment.gov.za/sites/default/files/docs/series6_ecological_riskassessment.pdf) 2002:5 (accessed on 2 June 2021).

127 Powerful, data-rich information system for South African rivers. <https://jrpbiodiversity.org/welcome-to-fbis/> (accessed on 2 October 2021).



stage where any potential risks are identified.<sup>128</sup> The ERA ensures that “the process is rigorous and scientifically sound”.<sup>129</sup> The ERA determines significance, quantifies effects, and provides a degree of confidence in prediction which, ultimately, aids decision-making.<sup>130</sup> Thus, an ERA predicts the likely outcomes, thereby preventing or mitigating adverse effects to wetlands.

Development pressure in and around wetlands has been highlighted in the Ramsar Convention Secretariat excerpt from “*Wetlands: A global disappearing act*”.<sup>131</sup> The Secretariat submitted a list of factors that contribute to the disappearance of these sensitive ecosystems:

- Major changes in land use, especially an increase in agriculture and grazing animals;
- Water diversion through dams, dikes and canalisation;
- Infrastructure development, particularly in river valleys and coastal areas, and
- Air and water pollution and excess nutrients.<sup>132</sup>

To limit human resource usage, or to take pressure off wetlands, legal tools have been put in place in South African law and backed with enforcement mechanisms in the case of non-compliance.<sup>133</sup> Elliot and Blackmore discuss these legal tools<sup>134</sup> extensively, by focusing on permits and licensing, on the one hand, and administrative tools, on the other.<sup>135</sup> Environmental authorisation as a tool will be singled out for brief discussion to the application of a recent case pertaining to promoting wetland conservation.

Sec. 24 of the *NEMA* requires that, prior to commencing activities that may affect the environment (wetland),

- the potential consequences for or impacts on the environment of listed activities or specified activities must be considered, investigated, assessed and reported onto the competent authority or Minister responsible for mineral resources.

In the *Wakkerstroom* case, an interdict was sought by the Wakkerstroom Natural Heritage Association against the Dr Pixley Ka Isaka Local Municipality

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128 Ecological risk assessment. [https://www.environment.gov.za/sites/default/files/docs/series6\\_ecological\\_riskassessment.pdf](https://www.environment.gov.za/sites/default/files/docs/series6_ecological_riskassessment.pdf), 2002:6 (accessed on 2 June 2021).

129 Ecological risk assessment. [https://www.environment.gov.za/sites/default/files/docs/series6\\_ecological\\_riskassessment.pdf](https://www.environment.gov.za/sites/default/files/docs/series6_ecological_riskassessment.pdf), 2002:6 (accessed on 2 June 2021).

130 Ecological risk assessment. [https://www.environment.gov.za/sites/default/files/docs/series6\\_ecological\\_riskassessment.pdf](https://www.environment.gov.za/sites/default/files/docs/series6_ecological_riskassessment.pdf), 2002:9 (accessed on 2 June 2021).

131 Ramsar Convention secretariat. [https://www.ramsar.org/sites/default/files/documents/library/factsheet3\\_global\\_disappearing\\_act\\_0.pdf](https://www.ramsar.org/sites/default/files/documents/library/factsheet3_global_disappearing_act_0.pdf) (accessed on 2 June 2021).

132 Ramsar Convention Secretariat 2015.

133 *National Environmental Management Act*: Chapter 7.

134 *NEMA, NEMICMA, NFA, NWA, CARA and Mineral and Petroleum Resources Development Act* 49/1999.

135 Elliot & Blackmore 2019:61-64.

(the municipality).<sup>136</sup> Briefly, the facts are that the applicant (a non-profit organisation) had sought an interdict against the local municipality to cease its project (carried out by a contractor) to construct a bulk water pipeline to transfer water from a dam to a township.<sup>137</sup> A report by the municipality's independent consultant advised that the pipeline would "transverse several wetlands and will be constructed within a conservation area that is endangered and protected".<sup>138</sup> Among the many issues, the pertinent one is the acquisition of a water-use licence and the subsequent environmental authorisation sanctioning this project. It is assumed that this is to protect the wetlands that will be affected.

Brauckmann J granted the interdict, thus preventing the project from proceeding until the required regulatory permissions were given.<sup>139</sup> It was further emphasised that the process of environmental authorisation "ensures that the careful balance required by the principle [sec. 2(4)(r)] of sustainable development is met".<sup>140</sup> The irony is that a non-profit organisation successfully challenged the municipality – as an organ of state mandated to uphold the principles of sustainable development. This exemplifies the need for capacity building and participative management within wetland policy.

Taking the pressure off wetlands and promoting their protection and conservation must be realised and addressed. Indeed, experts in a complex economic model study of the Vyeboom wetland in the Western Cape Province found that, if the restoration work for the wetland did not occur, there would be a projected loss of R 2,521.665 (in 2019 ZAR value).<sup>141</sup> This underscores the notion of prevention being better than cure, thus adopting a strategic approach to policy considerations in the interests of enhancing protection and conservation. The reasoning is that enhanced protection and conservation limit the loss or destruction of this valuable resource. This, in turn, relieves the State from digging into its pockets to implement rehabilitation measures.

#### 4. CONCLUDING OBSERVATIONS

The introduction of the NJWM Policy has the potential of fulfilling the realisation of the "specific attention" element, by singling out wetlands. "Specific attention" should not be read as only being concerned with wetlands of international importance (listed wetlands), as sec. 2(4)(r) does not draw such a distinction or excludes its application to other wetlands. India's efforts in the "management" element are exemplary as to what wetlands institutions and structures should resemble. These may and, in the opinion of the authors, should be realised and

136 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality*.

137 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality*:par. 12.

138 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality*:par. 82.

139 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality*:par. 47.

140 *Wakkerstroom Natural Heritage Association v Dr Pixley ka Isaka Local Municipality*:par. 47.

141 Marais *et al* 2020:30.

mirrored within the existing institutions or structures of South Africa, drawing on the diverse expertise within these institutions, and enhancing these where they are lacking. Coupled to the human resource aspect of management is the prioritisation of financial, physical, and informational resources to enable the management of wetlands. A further reflection of India's efforts regarding the "specific attention" element of the wetland legislative framework is the way in which it incorporates matters pertaining to management, such as in the arrangement of institutions and expertise. South African laws regulating pressure on wetlands are adequate and are, in fact, effectively applied, as demonstrated by the *Wakkerstroom* case.

It is the authors' view that the legislature intentionally listed sec. 2(4)(r) as the final sustainable principle in the *NEMA*. This is certainly not because it is an afterthought; instead, it should be viewed as a "showstopper" to draw the reader's attention. The legislature specifically singles out the wetlands, as opposed to the other principles that do not spell out the resources specifically. Like the final extravagant item on display, it is as if the legislature wants us to stop and think about the sensitive and vulnerable wetlands as the show closes, to have something to ponder on as we walk away. Simultaneously, it also provides present and future generations with the necessary tools of "specific attention", "management", and "significant pressure" to navigate through and improve through research in the interests of finding solutions to better protect and conserve wetlands.

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