

“Do We Care Enough?”- A Critical Analysis of the Legal Duty of Care Contained in the National Environmental Management Act and Its Application to Wetland Restoration

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ABSTRACT

South African wetlands are disappearing at a rapid rate. Considering the vital functions they provide, they require optimal protection and, where appropriate, restoration. In line with protecting and restoring the environment, section 28 of South Africa's National Environmental Management Act 107/1998 (NEMA) makes provision for the duty of care and remediation of environmental damage (DOC). This enforceable duty rests upon every person (natural and juristic) to, amongst others, prevent pollution or degradation of the environment or to stop, minimise, and rectify such pollution or degradation by taking certain measures. For wetlands, this duty is bound to the idea of 'ecological restoration' (ER), which is defined as "the process of helping to recover an ecosystem that has been degraded, damaged or destroyed". This paper, through the selected theoretical framework for ER, sets out the literature to provide the foundation for 1. the international obligation of restoration; and 2. a critical analysis of section 28 of NEMA through the selected ER framework for wetlands ecosystems. The research reveals the gaps in support of the argument that the DOC principle may lack in addressing the full embodiment of ER and providing the consequences of such failure. Thus, calling for the amendment of section 28 of NEMA (DOC) to include the appropriate provisions and the removal of superfluous and confusing provisions such as 'significant'. However, there is scope for the improvement and development of ER for the 2024 proposed National Joint Wetland Management Policy.

“to create healthy wetlands, two aspects are mainly included one is restoration and remediation of degraded wetland and the other is protection and management”- Xie et al (2017)
“Change minds first, then change the law”- Dorothy Kenyon

INTRODUCTION

The Convention on Wetlands of International Importance, especially as Waterfowl Habitat (hereafter the Ramsar) was enacted to provide specialized protection, conservation, management, and wise use of wetlands (Ramsar Convention, 1971). The aim is the desire “to stem the progressive encroachment on and loss of wetlands now and in the future” and raises the concern that the loss of wetlands may be irreparable

(Ramsar Convention, 1971). Within the purpose of this Convention, no express provision is made for the restoration of the wetlands.

Furthermore, although the purpose of this Convention is silent on restoration, the author's opinion is that it is the failure of the Ramsar Convention to make direct or express provisions for restoration. However, holding this point of view will be flawed, considering that restoration can fall within the meaning of 'conservation', 'management' or 'wise use'. In support of this, Lemine *et al.* (2022) argue that management is interpreted to include restoration, therefore, management, with the view of restoration, is contained in articles

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2.6, 4.5, 6.2(d) and 6.3 of the Ramsar Convention. Furthermore, Cliquet *et al.*, 2021 on international law and restoration have alluded to the efforts published in the Aichi Biodiversity Targets to provide an enforceable aspect to restoration in the international arena. Despite international mechanisms, states are sovereign and, as noted, politics, among others, plays a crucial role in executing restoration.

In South Africa for example, the national environmental framework act (NEMA) expressly makes provision for the duty of care and remediation of the environment (hereafter DOC). Briefly, this section applies to any person (natural or juristic) who has caused pollution or degradation of the environment and is obliged to stop, minimise and rectify such pollution or degradation by taking certain measures (National-Environmental-Management-Act-107-of-1998-as-amended, 1998). In section 28(3) these measures include: investigating, ceasing or modifying or controlling any act, eliminating any source, or remedying the effects of the pollution or degradation (National-Environmental-Management-Act-107-of-1998-as-amended, 1998). This obligation has been given effect in various decided court cases, and one such case (*Bareki & Another v Gencor LTD & Others 2006(1) SA432(T)*) set a precedent that this obligation does not apply before the promulgation of the NEMA (1999) but has since been declared absolute by the amendment of the NEMA (by the inclusion of the words “*has caused*”).

The DOC is neatly nested in the NEMA’s chapter on ‘Compliance, Enforcement, and Protection’, it is crucial that they are adequately applied and provide the rigour it intends to polluters and environmental degraders. The country’s supreme law, the

Constitution of the Republic of South Africa of 1996, provides for legislative and other measures to prevent pollution and ecological degradation, rather than restoring or remedying the environment (Constitution of the Republic of South Africa of 1996). It does however secure ecologically sustainable development and guarantees the right to “an environment that is not harmful to ... health and wellbeing” (Constitution of the Republic of South Africa of 1996). In promoting the broadest meaning of health and well-being, the Millennium Ecosystem Assessment (2005:47) provides that wetland restoration gives rise to meeting human needs (water, food shelter etc...) as well as environmental literacy among citizens (Cairns, 2010:12). This intensifies the need to restore wetlands for the environment as well as for humans and corroborates with the theoretical framework and vision 2050, discussed in detail elsewhere below.

Oosthuizen *et al.* submit that the DOC must be read in conjunction with other national environmental-specific legislation which strengthens and broadens its scope and effect (2018: 176). However, the environmental-specific legislation must be read in a manner that provides refinement and caters to the full embodiment of ER; failing which, makes it a dead letter. However, certain pieces of legislation concerning wetlands in South Africa make provision for the obligation of “restoration” (Lemine *et al.*, 2022). Further discussion on this is espoused elsewhere below.

This study aims to focus on ER through the lens of DOC, with the view of wetlands to ensure that there is full ER compliance. In achieving the aim, it is crucial to set out the application methods of the appropriate methods to do so.

RESEARCH METHOD

This research makes use of a documentary analysis as a qualitative research method. The nature of these documents makes up the unit of analysis. The documents (printed and electronic) included in this analysis are international conventions, reports, textbooks, peer-reviewed journal articles, national legislation and the Constitution of the Republic of South Africa of 1996. In South African law these are classified as primary and secondary sources of law. In terms of the nature or type of documents that these constitute, include public documents as they are open-published documents (Wagner *et al*, 2012:141).

Bowen (2009:28) submits that researchers undertaking documentary analysis must consider previous studies to describe and interpret the data “rather than having the raw data as a basis for analysis”. Thus, the raw sections are therefore given meaning to, where the data exists. For example, section 28 of NEMA comes directly from legislation, however, published court decisions that are binding, and peer-reviewed published work (where on hand) are added to form part of the analysis. Bowen (2009) goes on to explain the use of different data sources and methods as a measure of seeking convergence and corroboration.

To craft the theoretical framework, a thematic analysis is used to identify, analyse and describe the themes within the data set (Nowell *et al*, 2017) reflecting ecological restoration. It is therefore crucial at this point to provide a theoretical framework for ER as a benchmark for determining DOC to answer the question presented by the research.

Theoretical Framework

The Society for Ecological Restoration (SER) defines ecological restoration as “the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed” (SER,2017). It then defines 'damage', 'degraded', and 'degradation' separately. Understanding the depth of these terms is critical to further discussion and to fulfil current requirements. ‘Damage’ “refers to an acute and obvious harmful impact upon an ecosystem such as selective logging, road building, poaching, or invasion of non-native species” (SER,2017). ‘Degradation’ “refers to chronic human impacts resulting in the loss of biodiversity and the disruption of an ecosystem’s structure, composition, and functionality” (SER,2017). ‘Destruction’ is “the most severe level of impact when degradation or damage removes all macroscopic life and commonly ruins the physical environment” (SER,2017).

The National Research Council (NRC) in Bradshaw (2002) defined restoration to mean “the return of an ecosystem to a close approximation of its condition before disturbance”. In restoration, ecological damage to the resource is repaired (Bradshaw, 2002). Both the structure and the functions of the ecosystem are recreated...”(Bradshaw, 2002).

Cross *et al* (2018:256) define restoration to mean “the return to the original state of the altered land, the state before degradation”. Cliquet (2019:64) quoting the European Commission in its Biodiversity Strategy Impact Assessment defined restoration “as the return of an ecosystem to its original community structure, natural complement of species, and natural functions”.

The latter two meanings seek to restore the status *ante quo*. Certain problems have been raised considering these two meanings: 1. the return to a historical reference point and the difficulty in returning to this state also considering the effects of climate change (Cliquet, 2019:60); and 2. it is considered controversial in terms of the required actions to establish the desired wetland structure and function (Millennium Ecosystem Assessment, 2005:60). Bradshaw (2002:6) describes this definition of restoration as being in a narrow sense and provides reasons why this idea proves to be problematic.

Martin (2017:670) in the redefinition of ER, defines it as “the process of assisting the recovery of a degraded, damaged, or destroyed ecosystem to reflect values regarded as inherent in the ecosystem and to provide goods and services that people value” (Martin, 2017). Martin’s reasoning for this redefinition is that it lacks the ‘social science’ element of ER (Martin, 2017). However, there is an integral link between nature and its benefits to humans, and by ER, it is humanity that enjoys the benefit of a healthy and well-functioning environment. If one reads values under the umbrella of human dignity or ubuntu (not discussed in this paper), an enforceable right is created in line with the Constitution’s provisions for human health and wellbeing.

Based on the above, this research favours the meaning of restoration through the lens of part of the SER, part of the NRC, and part of Martin. Therefore, the preferred meaning is that: *‘the ecosystem must, through using the acceptable process, return to a reasonably close approximation of its condition before its damage, destruction, or degradation by the values that underlie human rights.*

Before venturing into this body of work, it appears to be ineffectual unless there is an obligation upon South Africa to restore ecosystems, of which wetlands form an integral part. It is furthermore deemed necessary to discern whether such a duty exists.

Is there a legal duty of ecological restoration in South Africa? – Hard and Soft Law

Cliquet (2019) guides the discussion on the enabling provisions of the Convention on Biological Diversity (CBD) as it applies to ER. The CBD came into force on 29 December 1993 and South Africa became a state party on 2 November 1995, without any evidence of reservation (CBD.int/information/parties.shtml). An obligation central to this research is Article 8 of the CBD mandates parties to “rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, inter alia, through the development and implementation of plans or other management strategies”.

Considering the principle of polluters pay, Article 14(2) of the CBD provides that parties shall “examine... the issue of liability and redress, including restoration and compensation, for damage to biological diversity”. This liability coupled with the DOC amplifies the need for legislation encompassing the full embodiment of restoration. The polluters pay principle forms part of section 2(4)(p) of the NEMA- although here the application pertains to organs of state and not “every person” as envisaged in section 28 of the NEMA. However, in terms of international law, it is not limited to the organs of the state.

The Conference of the Parties for the CBD has revised its *Strategic Plan for Biodiversity 2011-2020*, which brought about the Aichi Biodiversity Targets (CBD Targets). CBD Target 15 set the goal to restore at least 15% of degraded ecosystems by 2020. This target has not been achieved, and part of the reasoning includes that 50% of the parties have established national goals for implementing this goal, of which 17% met or exceeded this goal (Secretariat of the Convention on Biological Diversity, 2020:100). South Africa has set its commitment to the 15th CBD target in *South Africa's 2nd National Biodiversity Strategy and Action Plan 2015-2025*, on a variety of strategic objectives and results. Further to this, the United Nations Agenda 2030 provides another set of goals, aimed to be achieved in 2030. In line with goals for promoting the restoration of ecosystems, is the United Nations Sustainable Development Goal (SDG)15 "Life on land" which aims to "protect, restore and promote sustainable use of terrestrial ecosystem, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss". In furthering the restoration of ecosystems, SDG 6 encourages states to "ensure availability and sustainable management of water and sanitation for all", and target 6.6 promotes the protection and restoration of water-related ecosystems (wetlands). This goal is emulated in South Africa's SDG 2019 report (http://www.statssa.gov.za/MDG/SDGs_Country_Report_2019_South_Africa.pdf), which is indicative of its global commitments.

In dealing with the part-failure of the CBD Targets, the Conference of the Parties has published its first draft of the Post-2020 Global Biodiversity Framework which aims

to "galvanize urgent and transformative action by Governments" and other stakeholders- in its vision 2050 (<https://www.cbd.int/doc/c/3064/749a/0f65a/c7f9def86707f4eaefa/post2020-prep-02-01-en.pdf>). The 2050 vision of the framework is 'a world of living in harmony with nature'. The primary objective is to "by 2050, biodiversity is valued, conserved, restored and used wisely, maintaining ecosystem services, sustaining a healthy planet and providing essential benefits for all people" (Post-2020 Global Biodiversity Framework, 2020). The target set here is 5% higher than that set in the CBD target in that at least 20% of degraded ecosystems must be under restoration. This seems like an appropriate measure, considering the time frame provided, as well as allowing the rest of the defaulting contracting parties to comply with the goals, glean lessons from others, and ultimately achieve them.

To zoom in on wetlands specifically, the Ramsar dovetails with the CBD in promoting biodiversity protection. South Africa become a party to this convention in 1975 and is expected to implement the stated obligations (ramsar.org/wetland/southafrica). The purpose of Ramsar is the desire "to stem the progressive encroachment on and loss of wetlands now and in the future" and raises the concern that the loss of wetlands may be irreparable. In the Ramsar purpose statement, no express provision is made for the restoration of the wetlands.

Furthermore, although the purpose statement of the Ramsar is silent on restoration, it is the opinion of the author that the articles to the Ramsar are too for its failure to make direct or express provisions for restoration. However, to hold this viewpoint will be short-sighted, considering that

restoration may fall within the meaning of “conservation”, “management” or “wise use”. The conservation-restoration nexus is recognised under Principle 8 of the *International Principles and Standards for the Practice of Ecological Restoration* (Gann *et al.*, 2019). In support hereof, Lemine *et al* (2022) argue that management is interpreted to include restoration. Restoration, through the lens of management, is therefore contained in articles 2.6, 4.5, 6.2(d) and 6.3 of the Ramsar Convention. The Ramsar Convention does make provision for international action through “combining far-sighted national policies” for conserving wetlands and their flora and fauna, which, arguably, is indicative of state responsibility for restoration if conservation is read to include this.

A central tool in achieving ER is the United Nations Decade of the Ecosystems (hereafter UNDE), which seeks to protect and revive ecosystems worldwide (<https://www.decadeonrestoration.org/>). The primary aim includes stopping the degradation of and restoring ecosystems. The UNDE runs from the period 2021-2030. Under the published *Principles for Ecosystem Restoration to guide the United Nations Decade 2021-2030* provision is made for 10 principles. With relevance to this research, Principle 10 is entitled 'Ecosystem restoration is enabled by policies and measures that promote its long-term progress, fostering replication and scaling up', which in the opinion of the author requires the promulgation of laws, policies, regulations, and strategies that already be incorporated into various projects and programs. On the other hand, it indicates that ER activities may facilitate the design of laws, policies, and measures. In addition, it may be used to

improve and amend certain existing laws and policies to bolster the ER objective- which is in line with the argument of this research.

Another tool to consider is Article 4(1)(d) of the United Nations Framework Convention on Climate Change (UNFCCC), which promotes, among others, the management, conservation, and enhancement of sinks, including coastal, terrestrial, and marine ecosystems. As stated earlier, conservation has been read to include restoration, but enhancement may also be read to include 'making better'. The reading of 'enhancement of sinks' creates an (indirect) obligation on the parties to the states to ensure that ER takes place. Having these aspirations in the international arena is a dead letter unless states incorporate this into their local laws, for example.

Cliquet *et al.* (2022) argue that to scale up restoration initiatives, states must, among others, “provide financial payments for conservation and restoration measures”. This activates the polluter pay principle, but this must also be placed within an enforceable obligation to restore. The issue of financial budgets for restoration is however not what this paper is about but has been included for purposes of completeness.

Overall, there is sufficient evidence that South Africa has an international obligation to enforce ER measures. Evidence of compliance with hard- and soft-law measures has been submitted to demonstrate their commitment to these instruments. This is further evidenced in the domestic laws set out below, after the interrogations of section 28 of the NEMA that are central to this research.

RESULTS AND DISCUSSION

Gauging that South Africa has an existing legal obligation to implement ER to test the hypothesis, the DOC as envisaged in section 28 of the NEMA with the selected subsections, coupled with ER as set out in the theoretical framework to bring to light the existing gaps. At the time of writing, portions of the NEMA have been amended by the National Environmental Management Laws Amendment Act No 2 of 2022 (hereafter NEMLA4), signed into law on 24 June 2022. Where applicable, these will be cited accordingly.

Section 24(b)(i) of the Constitution requires the environment to be protected through legislative and other measures (read here to include ER activity- own emphasis) to prevent pollution and ecological degradation. There is no express provision for ER in terms of positive action for restoring destructed, damaged or degraded environment. One would then have to raise a section 24(a)¹ Constitution defence, indicating that ER is required, as without it infringes on the right to an environment that is harmful to one's health and well-being. These efforts are meant to show in the NEMA.

NEMA makes provision for the general duty of care and remediation of environmental damage. Bates (2001:24) submits that the fundamental objective of this duty is to avoid harm as opposed to acting to comply with the duty; therefore, it is not necessary to determine the depth and breadth of complying with the technicalities of section 28, but rather to, in the first instance, avoid damage to prevent unnecessary navigation through all its subsections as discussed

elsewhere below. Gunningham (2017:202) sets out the views of commentators where there are perceived advantages and disadvantages of a general duty and suggests that a general duty to the environment is not necessary "given that the Environment Protection Act 1993 (reference here was to South Australia) was amended to add several principles". These principles include ecological sustainability, the precautionary principle; the conservation of biological diversity; and intergenerational equity (Gunningham, 2017:202). In South Africa, the NEMA makes provision for both a general DOC and principles explicitly mentioned by Gunningham. However, the application of section 28 of the NEMA places the duty on "every person" which casts the net broader, whilst the (sustainable development) principles in the NEMA are relevant to "all organs of state", which therefore exclude "every person". Having said this, Gunningham's submission does not fit the parameters set in the NEMA.

How the DOC may transition from a general duty to a more specific one is by way of the specific environmental management acts (SEMAs), which regulate that specific medium (e.g., coast, air quality, protected areas etc.). This is evidenced in the published high court (appealed) decision of *Jacobs NO and Others v Hylton Grange (Pty) Ltd and Others* [2020] 2 All SA 89 (WCC). This case was about an offensive odour emanating from the appellant's farm; the presiding officer consulted section 28 of the NEMA as well as the corresponding enabling provisions of a SEMA, the NEM: Air Quality Act 39 of 2004 (NEMAQA) (paragraphs 87-88), which resembles the DOC-air quality nexus. In light

¹ "Everyone has a right to an environment that is not harmful to their health or wellbeing."

hereof, the presiding officer quoted section 35(2) of the NEMAQA, which provides “that the occupier of any premises must take all reasonable steps to prevent the emission of any offensive odour caused by any activity” (paragraph 88). Over and above this, it is the argument by the author that the polluter pays principle, preventative and precautionary principles are codified and draped in section 28 of the NEMA as the DOC.

Section 28(1)- *Duty of care and remediation of environmental damage (title heading)*- of the NEMA provides

(1) Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.

Within the theoretical framework of ER (as outlined above), the title heading of section 28 is the “*Duty of care and remediation of environmental damage*”, however, the content of section 28(1) refers to the “*degradation of the environment*”. Based on the title heading, it creates the impression that the content in the entirety of section 28 is about damage only, but section 28(1) deals with only one aspect (degradation) of ER. This creates an inconsistency with what the duty indicates (title heading) to address as opposed to the content provision, considering what 'damage' and 'degradation' mean separately.

Section 28(1) makes provision for the liability of persons causing 'significant pollution' or 'degradation of the environment'. Glazewski interpreted the former to mean a threshold level of significance that does not need to be particularly high when interpreting section 24 of the Constitution (2000: para 5.2.8.2). Furthermore, NEMA defines

'pollution' to mean any change in the environment caused by-

- (i) substances;
- (ii) radioactive or other waves; or
- (iii) noise, odours, dust or heat, emitted from any activity, including the storage or treatment of waste or substances, construction and the provision of services, whether engaged in by any person or an organ of state, where that change has an adverse effect on human health or well-being or the composition, resilience and productivity of natural or managed ecosystems, or on materials useful to people or will have such an effect in the future.

Having placed 'significant' before this extensive meaning of 'pollution' places a higher standard considering that pollution means 'any change' (slightest) as opposed to merely 'significance'. Why must the risk be “significant” before it is noted as qualifying for section 28? In the case of *Hichange Investments (Pty) Ltd v Cape Produce Company (Pty) Ltd t/a Pelts Products and Others* 2004 (2) SA 393 (E), the court commented that this must be considered in line with the constitutional rights to an environment conducive to health and well-being (para. 32). However, “human health or well-being” is repeated in the definition of “pollution”. Therefore, thinking is that the use of ‘significant’ is, seemingly, superfluous as pollution adequately covers the intention of the legislature with the DOC. 'Significant' further places a burden on the complainant to prove a level of pollution undefined.

The latter part of (iii) *supra*, it appears, has its roots in the UNFCCC under the definition

of 'adverse effects of climate change'. Degradation as defined in the theoretical framework has the same meaning as 'pollution', so what does 'environmental degradation' mean? Therefore, reading 'significant pollution or degradation of the environment' creates confusion and uncertainty. Thus, turning to the meaning of "degradation of the environment"- on the face of it- appears to be non-sensical next to the meaning of "pollution" through the lens of ER.

Section 28(3) provides unequivocally

(3) The measures required in terms of subsection (1) may include measures to-

- (a) investigate, assess and evaluate the impact on the environment;
- (b) inform and educate employees about the environmental risks of their work and the manner in which their tasks must be performed to avoid causing significant pollution or degradation of the environment;
- (c) cease, modify or control any act, activity or process causing the pollution or degradation;
- (d) contain or prevent the movement of pollutants or the cause of degradation; **(amended by NEMLA4 to remove the word "causant" and replace it with cause)**
- (e) eliminate any source of the pollution or degradation; or
- (f) remedy the effects of the pollution or degradation.

Without ticking the box of each subsection of section 28(3); section 28(3) (a) in the opinion of the author requires measuring the "impact on the environment" which would result in the inquirer answering whether their pollution resulted in degradation, damage, or destruction; or whether the one may lead to the other. Although there are tools to predict and assess ecological risk (Ecological Risk

Assessment/ National Biodiversity Assessment/ Freshwater Biodiversity Information System) (Lemine *et al*, 2022:92), section 28(3) provides a framework within which restoration, for example, must be pursued. Key to the latter is section 28(3)(f) which requires "measures to remedy the effects of the pollution or degradation", without supplying the necessary timeframe (Oosthuizen *et al*, 2018:178). However, it could be expected that, depending on the magnitude of the risk and the "process" component in the definition of ER, the measures taken are assessed on a case-by-case basis. The extent of the restoration must be assessed by a specialist in the field, backed by the administrative leg of government enforcing such with the applicable administrative enforcement mechanism. Regarding the ER, the 'remedy' gives scope for the 'close approximation' and must be understood to resemble this, unless there is no possible prospect for which cost recovery is the alternative [own emphasis], as explained next.

Section 28(4) empowers the Director General (DG), the provincial head of the department, or the municipal manager (municipal manager was added by NEMLA4) to instruct the person causing the pollution to perform activities as stipulated in section 28(4)(a)-(e).² Section 28(7) provides that failure to comply with section 28(4) empowers the DG, provincial head of department or municipal manager (municipal manager was added by NEMLA4) to take remedial measures as they deem fit or to approach the competent court for the requisite

² "(a) cease any activity, operation or undertaking; (b) investigate, evaluate and assess the impact of specific activities and report thereon; (c) commence taking specific measures before a given date; (d) diligently continue with those measures; and (e) complete those measures before a specific reasonable date."

relief. The inclusion of the municipal manager in these functions brings to life the crucial functions and powers (original and delegated) of municipalities in environmental enforcement. Section 28(8) sets out the various scenarios to cost recovery and encapsulates the polluter pays principle, which sits at the ER's heart as expressed elsewhere. However, cost recovery should be considered as an alternative to ER- work must be done as far as reasonably possible, but the possibility of recurrence must be monitored. Section 28(10) sets out the extent of the recovery costs to include labour, administration, and overhead costs, whilst section 28(11) apportions the liability to persons who have caused pollution if there is more than one that is liable.

Section 28(5) provides that the DG, provincial head of department or municipal manager when considering the period or measure *or both* [own emphasis] about the prescription in section 28(4)(a)-(e), must have regard to the following:

- (a) the principles set out in section 2;
- (b) the provisions of any adopted environmental management plan or environmental implementation plan;
- (c) the severity of any impact on the environment and the costs of the measures being considered;
- (d) any measures proposed by the person on whom measures are to be imposed;
- (e) the desirability of the State fulfilling its role as custodian holding the environment in public trust for the people; and [Para. (e) substituted by s. 12 (b) of Act 30 of 2013 (wef 18 December 2013).]
- (f) any other relevant factors.

Read with ER in mind, section 28(5)(f) breathes life into the argument by Higgs *et al.* (2018:432) which includes focusing on proxy variables as they reflect open-ended trajectories “where management choices must be made and must be explicit”. This provides

the state as the custodian room to adapt to changing conditions of climate and politics.

Young *et al* (2003) submit that the DOC obligation is a defined concept in legislation and those responsible for the administration of environmental resources decide what is reasonable [see section 28(1)] and opine that the courts would have to ultimately resolve the “reasonableness” aspect. An example of the former has been illustrated in *Jacobs NO and Others v Hylton Grange (Pty) Ltd and Others All SA 89 (WCC)* elsewhere above. The effect is that for the restoration of wetlands, one would have to consult the different pieces of legislation (making up the wetland legislation) in search of the DOC provision

to enforce it. This complicated task has been demonstrated in a situational analysis of wetland legislation for rehabilitation and restoration provisions done by Lemine & Kanyerere (2022:213-217). The sample of legislation they focus on in their work includes the National Water Act 36 of 1998, World Heritage Convention Act 49 of 1999, National Environmental Management: Integrated Coastal Management Act 24 of 2008, National Environmental Management: Biodiversity Act 10 of 2004, Conservation of Agricultural Resources Act 43 of 1983, National Environmental Management: Protected Areas Act 57 of 2003 and Mountain Catchment Areas Act 63 of 1970.

However, of later vintage is the publication of the *Draft White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity* on 8 July 2022, which appears to offer some leeway for ER, by including the restoration of ecological integrity in its mission (Gazette and Notice, 2022). However, it is the author's view that

“the DOC”³(Gazette and Notice, 2022) here limits its application to the full scope of ER too; and the addition of “all persons, organizations and organs of state” adds no value, it is a repeat of section 28(1). It, therefore, remains a toothless tool for the full embodiment of ER. However, Gann *et al.*

5. Conclusions and recommendations

There is a multitude of laws that support the ER in South Africa. Therefore, the effort of the body of law should support the full scope of ER. The research reveals that section 28 by itself creates confusion and does not provide the full scope of ER. ER, where it is due to pollution caused by another, can almost not occur if there is no DOC. DOC is central to securing the enforceability of ER. The problem is that if the national framework is

NEMA DOC, not only for the ER but also for other environmental goals. Imagine a litigant has caused destruction and strongly argues that they do not have a duty to restore destruction as there is no express or tacit provision. The recommendation here is that the title change from '*Duty of care and remediation of environmental damage*' to '*Duty of care and remediation of*

specific detail, as the reality may not be the same for all environmental media. Against this backdrop, the reference here is to what the theoretical framework expresses under an '*acceptable process*' and a '*reasonably close approximation of its condition prior to*'.

Although it is required that the framework act lays the foundation, the research reveals

(2019:4) submit that a robust framework (like the NEMA) is required to guide restoration projects toward achieving goals/aspirations, as opposed to piecemeal legislation (own emphasis).

not exemplary in laying the foundation to the full extent of ER, one cannot expect the different acts to provide piecemeal recognition. Furthermore, NEMLA4 does not necessarily offer adequate measures either.

To hold that the legislature did not think of ER would be inaccurate, considering the tail end of section 28 “rectify such pollution or degradation of the environment” and point (iii) of pollution definition is indicative of ER. The element of destruction must be incorporated into the

environmental damage, destruction and degradation'.

In achieving the goals of 2030 and 2050, it is the view of the author that they can be realised once the DOC is amended to include destruction (as it does not) to restore the environment that these goals are investing in. It cannot be expected that a framework act makes provision for

that the refinement of ER is within SEMAs and the related. For the sake of ER, the hope this will be achieved in the 2024 envisaged National Joint Wetlands Management Policy. Policymakers must take this into account when drafting this policy to advance strategies that may flow from it.

³ “All persons, organizations and organs of states have a duty of care to conserve and avoid biodiversity, anticipate and prevent irreversible loss of biodiversity and adopt a cautious approach in relation to any decisions taken in respect of biodiversity.”

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