

Two sides of the same coin? Towards a framework synthesis for the management of wetlands in South Africa

¿Dos caras de la misma
moneda? Una propuesta
para la gestión de los
humedales en Sudáfrica

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ABSTRACT

One of the critical drivers of wetland loss is the failure to manage such areas adequately. The definition of management may mean one thing in law and another in non-legal terms. This is the reality in South Africa, coupled with the fact that management within an environmental legislation context means different things. This brief provides a framework for a practical governance approach to what management can mean, offering a contribution that may be adopted by policymakers, in order to be implemented as a guideline by the relevant wetland institutions.

Keywords: *decision-makers, Ramsar Convention, wetland management, wetlands*

RESUMEN

Uno de los factores críticos de la pérdida de humedales es su falta de gestión adecuada. La gestión puede significar una cosa dentro de la ley y otra fuera de la ley. Esta es la realidad en Sudáfrica, sumada al hecho de que la gestión dentro de un contexto de legislación ambiental significa cosas diferentes. Este documento proporciona un marco para dar un enfoque práctico de gobernanza a lo que puede significar la gestión. Esta contribución puede ser adoptada por los formuladores de políticas para ser implementada como guía por las instituciones de humedales encargadas de cumplirlas.

Palabras clave: *tomadores de decisiones, convención de Ramsar, manejo de humedales, humedales*



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Introduction

With the recent report on the rate (three times faster than forests) at which wetlands are being lost (Available at <https://www.un.org/en/observances/world-wetlands-day>. Accessed on 1 March 2023), the statistics indicating their global decline are a cause for major concern, given the essential services that they provide. The categories of such services include support (as carbon sinks), provisioning (food and water sources, and as homes to specific species), regulating (of water quality), cultural, and one not mentioned with the same frequency, spiritual. The urgency of restoring, maintaining and enhancing nature's contribution to humanity through ecosystem functions and services was made clear with the publication of the Kunming-Montreal Global Biodiversity Framework, adopted on December 18 2022 by the Conference of the Parties (COP 15) to the Convention on Biological Diversity (CBD) (Available at <https://www.unep.org/un-biodiversity-conference-cop-15>). These services dovetail with many other international legal instruments; however, the primary international instrument regulating wetlands is the 1971 Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention).

There is no definition in the Ramsar Convention of the term «management». Management as an aspiration is featured in five of the articles of the Ramsar Convention, meaning that it must, therefore, be incorporated into domestic law. Here, too, management is (erroneously) conflated with the «conservation» of wetlands (Articles 2.6 and 6.2). Therefore, in the absence of a definition of, or guidelines for, the meaning of this aspiration within the context of wetlands, how can signatories, without raising any reservations with regard to the Ramsar Convention, achieve this aim? In this article, we maintain that a clear understanding of this aspiration or goal is critical, given its inclusion in the Ramsar Convention, while at the same time highlighting the current confusion as a factor in this resource's loss. Thus, our hypothesis is that there exists a critical need to explore a more tangible meaning in the context of practice and operations.

As a contracting party to the Ramsar Convention, South Africa is an example of this confusion stemming from multiple definitions for the term «management» in the context of wetland legislation. Also lacking is a clear understanding outside the legal framework of what this term can mean. Below, we address the discussion surrounding the defining of the term «management», and present a synthesis framework.

a) Definition of management beyond the legal understanding

Our observation is that several commentators' definitions share similar elements. For instance, Tonn (2008), referencing Mary Follet, defines the term as «the

art of getting things done through people». According to the International Labour Organization, management is "the complex of continuously coordinated activity using any undertaking administration/public or private service conducting its business" (Naidu and Rao, 2008). Jones and George (2018) suggest that «management is the process of planning, organizing, leading, and controlling human and other resources to achieve organizational goals in an efficient and effective manner».

Kaehler and Grundei (2019) define what they call integrative management as including people and non-people issues to achieve the unit's/organization's objectives, before going on to equate it with directing or leading. For their part, Nel and Alberts describe management as the «guiding of people or a process, rather than the leadership [...], it generally means the art and science of planning and organizing people, resources, processes and activities to achieve goals and objectives» (Nel and Alberts, 2018).

Thus, we see that the common thread revolves around people addressing certain things or achieving specific goals. With this in mind, in this study we lean towards the definition of management expressed by Nel and Alberts (2018), based on how its inclusive nature (people, resources, processes and activities) offers a broader spectrum of applications and the promotion of procedural or operational aspects.

b) Legal definition of management

In this section, we discuss the definition of management in the following documents: The 2008 National Environmental Management; the Integrated Coastal Management Act 24 (NEMICMA); the 2003 National Environmental Management: Protected Areas Act 57 (NEMPA); the 1988 National Water Act, 36 (NWA); the 1998 National Environmental Management Act 107 (NEMA), and its amended version from June 2022.

Turning to the Specific Environmental Management Acts (SEMA) that have a bearing on wetlands, Section 1 of the NEMICMA defines coastal management (within the coastal zone where wetlands may also be situated) as limited to meaning «the regulation, management, protection conservation and rehabilitation of the coastal environment» (Republic of South Africa, 2008). Section 1 of the NEMPA defines «management» as the «control, protection, conservation, maintenance and rehabilitation of protected areas» (Republic of South Africa, 2003). The NWA is a central legislative measure regulating the management of all water resources in South Africa. The NWA, while not defining management, *per se*, makes provision for water management strategies (Republic of South Africa, 1998). One such strategy is the establishment of a National Water Resources Strategy (NWRS), as expressed in the terms of Chapter 2 of the NWA. The former is a framework for the use, protection,

development, conservation, management and control of water resources in South Africa (Republic of South Africa, 1998. Chapter 2). The latest draft version (3) of the NWRS (published in July 2022) employs the term «management» to mean «the people who make decisions in an organization; the effect, impact and outcome of these decisions» (South African Department of Water and Sanitation, 2022). We argue that this meaning offers limited scope for what management can be, and we elaborate on this position below.

To summarize, the authors are of the opinion that the legislative framework for management is fruitless without the incorporation of the above, as it results in the creation of a (limited) substantive law. However, here we aim to synthesize the two forms of management and demonstrate how they can feature in policies and, when translated, how they work in practice.

Discussion: Towards a framework synthesis

The management definitions in the legislation cited above can be interpreted as the goals and objectives outlined at the end of the definition offered by Nel and Alberts [«*guiding of people or a process [...], organising people, resources, processes and activities to achieve goals and objectives*»], as the former (the legal definition) seemingly offers little on its own. «Protection», as cited in the NEMICMA and NEMPAA definitions of management, requires the contribution of other factors in order to manage wetlands. Consequently, what is required is a casting of the net beyond mere legislation, as this offers only an incomplete representation of what management entails. The legislative definitions do not allow for adequate accountability and transparency, or for the shortcomings of people, processes and resources. In this regard, in general, rehabilitation, protection and conservation still form an integral and crucial part of management processes, and should be incorporated—or at the very least reflected—in an effective definition of management.

A practical scenario, combining the various definitions of management, as referenced by Nel and Alberts (2018) and the legislation outlined above, would include consideration of (1) people for wetland protection/conservation/rehabilitation (Nel and Alberts, 2018); or (2) people, processes and activities (Nel and Alberts, 2018) for (3) wetland protection/conservation/rehabilitation [Nel and Alberts, 2018; legislation (NEMICMA and NEMPAA)]. This would encourage interdisciplinary research and bridge the gap between research, policy and practice (Brown *et al.*, 2019; Okamura, 2019). Such an approach has the potential to yield certain benefits in the context of South Africa's wetlands policy for 2024.

The legislation's intention to include management (Figure 1) in the definition of the «coastal management» responsibilities of the National Environmental

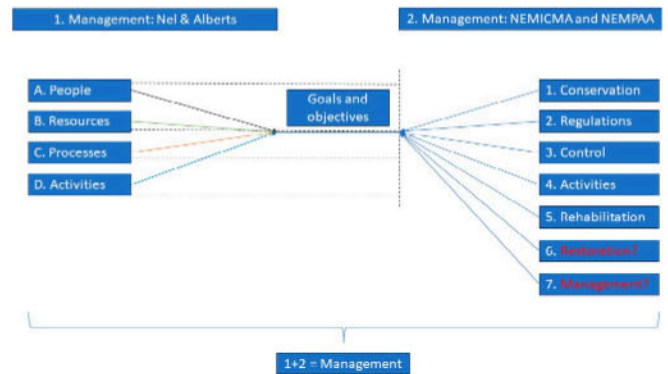


Figure 1. Management framework structure

Management: Integrated Coastal Management Act (NEMICMA) remains vague—perhaps it is an oversight, merely serving to create confusion, and should be removed. Furthermore, «restoration» (Figure 1) has not been included in the legislative framework outlined above, and could be added as a goal. Based on the science and the definitions included in the 2023 White Paper on the Conservation and Sustainable Use of South Africa's Biodiversity (South African Department of Environmental Affairs, 2023; hereinafter White Paper 2023), restoration and rehabilitation are separate processes that should not be engaged in interchangeably. Rehabilitation has been included as a definition in the latest amendment of the National Environmental Management Act (NEMA), and restoration is crucial for ensuring that wetlands do not disappear completely. Other legal scholars (Gardner, 2003; Hamman *et al.*, 2020) have stressed the importance of restoring wetlands through legal means, highlighting the need to incorporate such measures into legislative provisions. While such legislative provisions associated with restoration are contained in *ad hoc* SEMAs, the importance of restoration was highlighted under the slogan «*It's time for wetland restoration*», for World Wetlands Day 2023. There would appear to be a heavy reliance on sustainable development principles in Section 2 of the NEMA, in order to make sense of restoration enforcement measures (Lemine *et al.*, 2022). In its current form, management, as cited in the legislation, offers no substance for operation. An example of this recognition of the need to incorporate restoration measures has been briefly highlighted in the material published by Lemine *et al.* (2022). To clarify this, legislative reform is required.

The management framework shown in Figure 1 may serve in both singular and multiple forms. For example, a singular form could be *People* (A) with *Regulations* (2); while a multiple form might be *People* (A)+*Resources* (B)+*Activities* (D) with *Protection* (4), or *People* (A)+*Resources* (B)+*Activities* (D) with *Conservation* (1) +*Regulations* (2) +*Protection* (4). In addition, these frameworks need not be read only from left to right; they can also function when read from

right to left. For example, if an assessment is made that wetland rehabilitation is required, the question may be asked: «Who are the people, and what are the resources required?» The application of A+D with 2 could establish this scenario. The framework structure shown in Figure 1 illustrates the pathway by which the legislature can play a role in wetland management, and how such a role can guide the executive and judiciary branches of government.

In Figure 1, Goals 1 to 6 are the goals stakeholders or decision-makers should be aiming to achieve. While sustainable development is not listed as a goal, it should be viewed as an integral part of the processes or the result of the achievement. Clearly defined objectives must accompany stated goals. The authors are of the opinion that, in this sense, the legislative framework must serve as a guide, while objectives can be discerned from legislation as part of the goal. For example, Rehabilitation (Goal 5 in Figure 1) is defined as «the process of manual intervention where reparation of ecosystem processes, services and productivity is done through upgrading existing features and/or adding new features, not necessarily to its pre-existing condition» (South African Department of Environmental Affairs, 2023). Goal 6 in Figure 1 (Restoration) is defined as «the process of recovering an ecosystem that has been damaged, degraded or destroyed, through recreating missing features or characteristics, based upon physical or documentary evidence» (South African Department of Environmental Affairs, 2023). To summarise, the definitions of the goals «Restoration» and «Rehabilitation», as expressed in the 2023 White Paper, may serve as the objectives that institutions aim to achieve. These definitions are legally binding, and what better way to implement goals than through objectives that conform to the law and are informed by best

practice and science? However, as the science changes and ultimately amendments to the law are required, such developments may influence A-D in Figure 1, in terms of adaptive or integrated management, for example.

Conclusions and recommendations

This framework synthesis offers a guide for improving the *status quo* in the management of wetlands. It has the potential to serve as a prototype for development in our jurisdictions and in other environmental issues, as described above in the synthesis section. Clearly, 'management' as it is currently defined by law poses challenges and requires clarification. Who the 'people' included are, and what the specific 'activities' and 'processes' involved are, has not been addressed in this contribution, but the aim of this brief is not to provide a full exposition of these aspects.

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Conflict of interest

The authors have no conflicts of interest to declare.

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